

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 07/22/1993**



**State of Oregon
Department of
Environmental
Quality**

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Revised

A G E N D A

Revised

ENVIRONMENTAL QUALITY COMMISSION MEETING

July 22-23, 1993

DEQ Conference Room 3a

811 S. W. 6th Avenue

Portland, Oregon

Thursday, July 22, 1993: Work Session beginning at 1:00 p.m.

1. Work Session: Accomplishments & Status of Nonpoint Source Control Efforts in the Tualatin Watershed
 2. Work Session: Discussion of Proposed Federal Operating Permit Program Rules and Hazardous Air Pollutant Control Rules
-

Friday, July 23, 1993: 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.

- A. Approval of Minutes
- B. Approval of Tax Credits
- C. Rule Adoption: Amendments to the Rules for Hazardous Waste Disposal Facilities

- D. Anodizing Inc. New Source Review Variance Request
- E. Request for Commission Review of the Water Pollution Control Facilities (WPCF) Permit Issued to Guide Dogs for the Blind on June 9, 1993. **10:30 a.m.**
This item is scheduled for 10:30 a.m. and will be considered as close to that time as possible. Items listed later on the agenda may be taken ahead of this item if time permits.
- F. Tualatin River Watershed Nonpoint Source Management Implementation and Compliance Schedule and Order
- G. Information Item: Instream Water Rights
- H. Commission Members Reports (Oral)
- I. Director's Report (Oral)
- J. Report on Legislation (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 September 9-10, 1993, 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 (TDD) as soon as possible but at least 48 hours in advance of the meeting.

July 14, 1993

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: July 6, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director 
Subject: Agenda Item 1, July 22, 1993, EQC Work Session
Tualatin River Accomplishments and Challenges

Statement of Purpose

In 1988 the Commission adopted total maximum daily loads (TMDLs) for nutrients in the Tualatin River watershed. A compliance date of June 30, 1993 was set in the rule. In the months leading up to June 30, 1993 it became apparent that the TMDL for phosphorus would not be fully achieved even though sewage treatment plant (point source) control goals would be met. The remaining pollution reductions needed will need to come from area wide (nonpoint source, NPS) reductions. Several months ago, the Department and the other agencies responsible for implementing pollution control programs in the watershed began discussions on alternatives for action to address the approaching compliance date. During those discussions it became apparent that many things have been accomplished in the Tualatin River watershed since implementation of efforts began. A number of remaining challenges were also identified. Additional issues were raised by the public during public meetings and a hearing that were held in May and June respectively.

The purpose of this work session item is to provide the Commission an opportunity to discuss NPS accomplishments and significant challenges relating to efforts to reduce pollution loads, achieve total maximum daily loads (TMDLs), improve water quality, and comply with water quality standards in the Tualatin River watershed. The intent is to have representatives of the Department, the Designated Management Agencies (DMAs) involved at the local level, and other interests, available to discuss issues with the Commission and answer questions prior to the Commission taking action on a proposed new implementation/compliance schedule and order (Agenda Item F, July 23, 1993 EQC Meeting).

[†]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 1
July 22, 1993 Work Session
Page 2

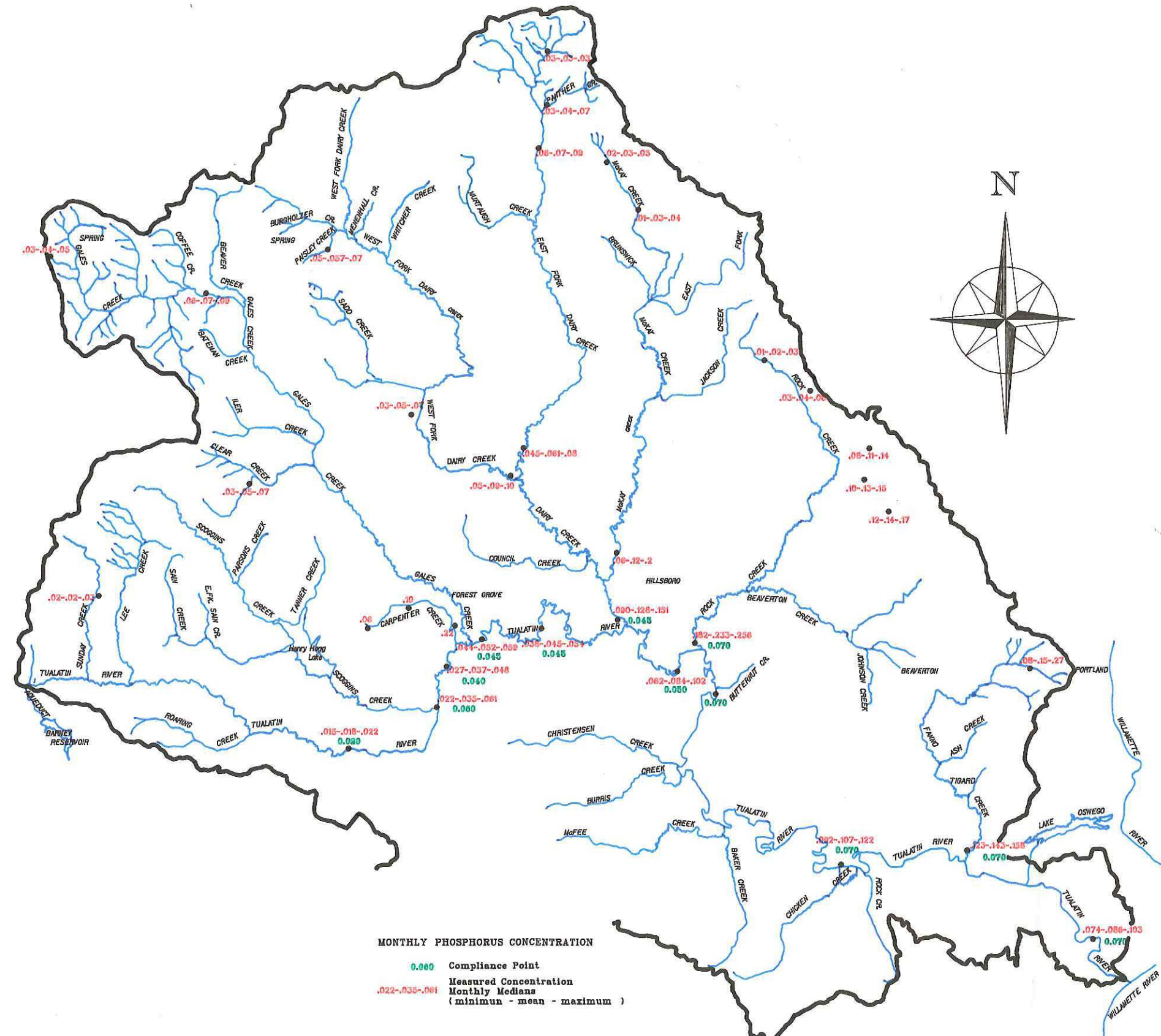
The discussions will be moderated by the Department and initiated by a panel made up of representatives of the Department, the DMAs, and the public. Panel members will briefly introduce topics and then allow for discussion by the Commission and other panel members. The agenda will be as follows:

Tualatin River Work Session

AGENDA

- | | |
|---------------|---|
| 10-15 minutes | Introduction and Brief Background (DEQ/EPA)
Water quality problems/program goals
TMDL process
Technical uncertainties |
| 15-20 minutes | NPS Accomplishments (DMAs/DEQ)
Urban
Forestry
Agriculture |
| 40-60 minutes | Remaining Challenges (DEQ/DMAs/Public)
Implementation Impediments
permits, water rights, funding
Development Issues
on-site stormwater treatment
erosion control
buffers
Rural Issues
Authorities, SB 1010
Rural roads |
| 15-20 minutes | Future Opportunities (DMA/Public/DEQ)
Where should we go from here?
DEQ wrap-up |

A review of Agenda Item F (July 23, 1993 action item) prior to this work session would be useful.



MONTHLY PHOSPHORUS CONCENTRATION

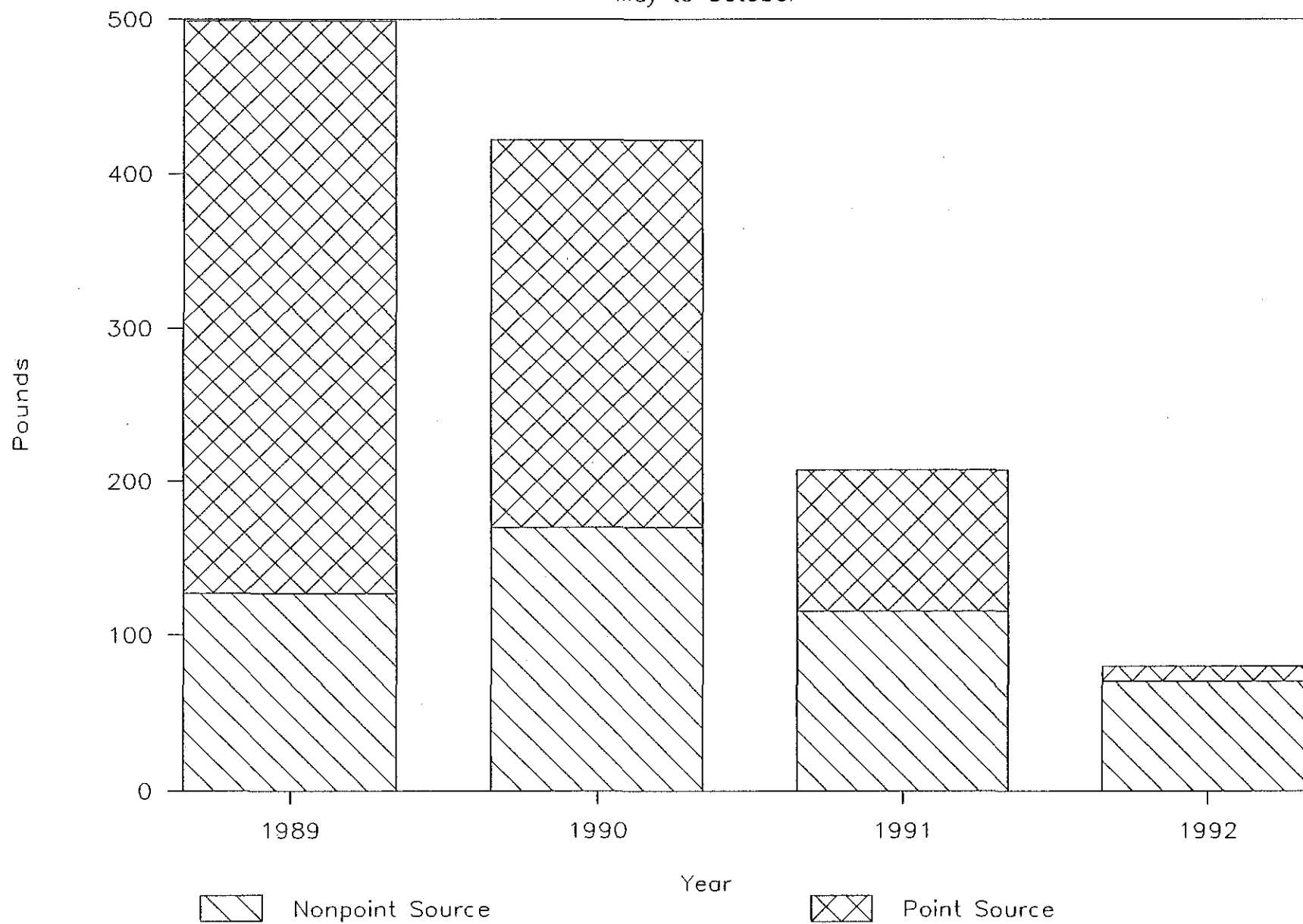
0.000 Compliance Point

Measured Concentration

Monthly Medians
(minimum - mean - maximum)

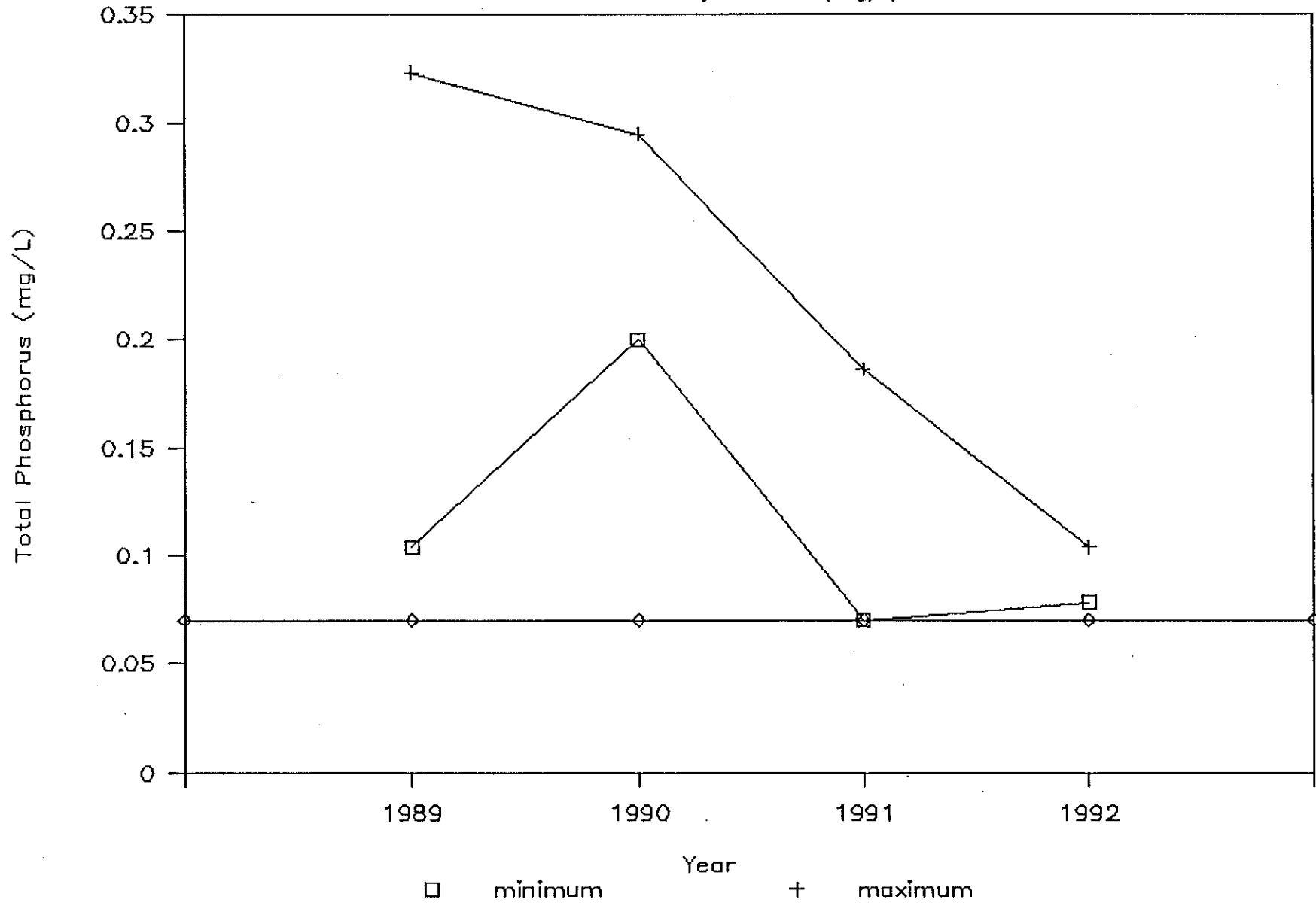
Total Phosphorus Load (median lb/day)

May to October

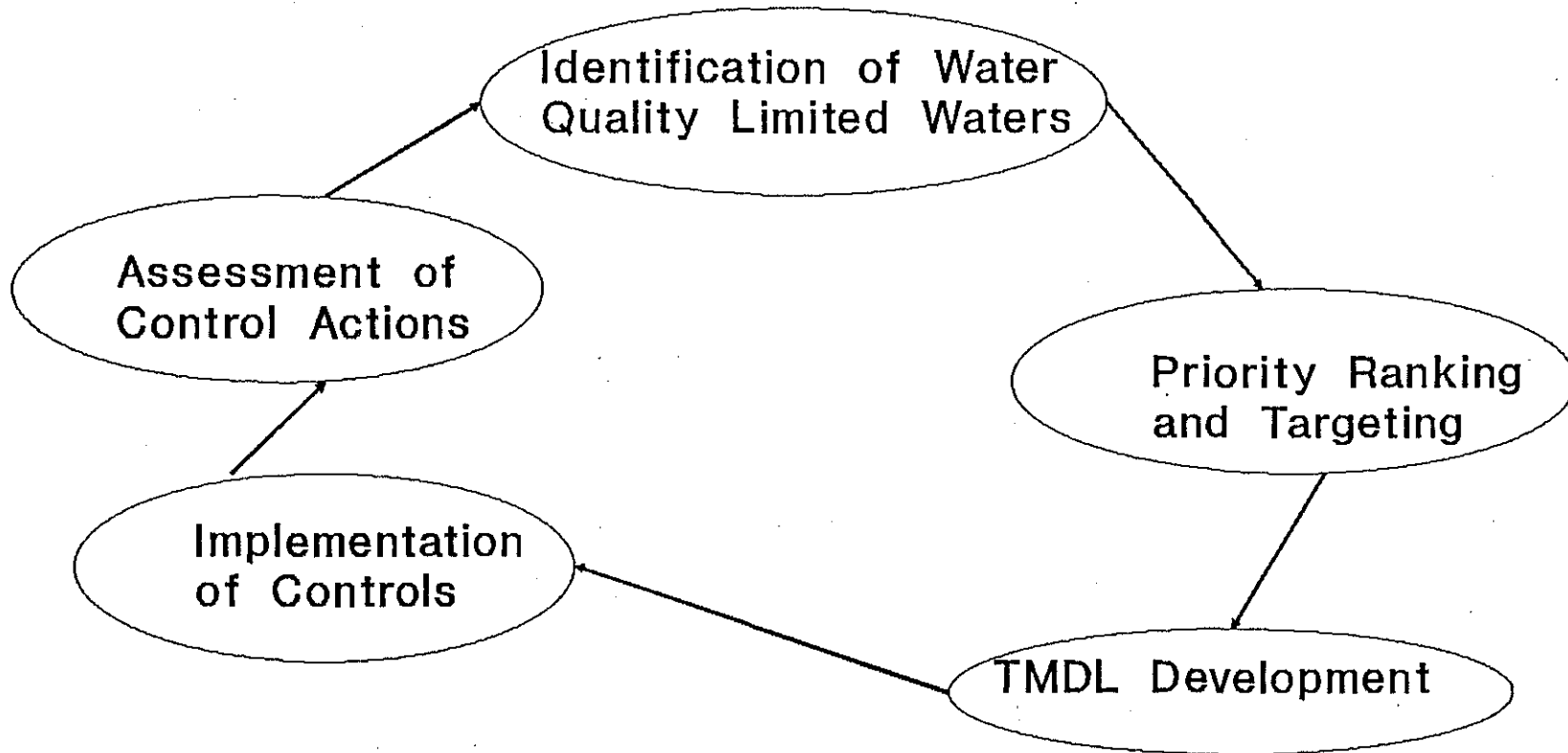


Stafford Road Total Phosphorus

Min-Max Monthly Median (mg/l)



Five Steps to the Water Quality Based Approach



OREGON DEPARTMENT OF FORESTRY
TUALATIN RIVER TMDL COMPLIANCE PROGRAM
Presentation to the Environmental Quality Commission
JULY 22, 1993

I. A Dynamic Forest Practices Program: Water Quality Management on Oregon's Private and State Forest Land.

1971 Oregon Forest Practices Act
1972 Initial Forest Practice Rules
1979 "208" Certification of rules as BMPs
1982 Landslide Prevention rules
1987 Forest Practices Act Amendments: HB 3396
1987 Riparian Management Area rules
1990 Board of Forestry Forum on Forest Practices
1991 Forest Practices Act Amendments: SB 1125
1993 Water Classification and Protection rules project
1993+ Forest Practices Strategic Plan Projects: Water Quality and Watershed Management Project; Monitoring Project; Studies - Forestry Effects on Anadromous Fisheries and Cumulative Effects; Stream Restoration Project; Landslide Prevention Project; Soil and Site Productivity Project; Application of Chemicals Project; Comprehensive Review of Remaining Rules Project

II. Response to Tualatin River Phosphorus TMDL: OSU Literature Study - "Phosphorus and Forest Streams: The Effects of Environmental Conditions and Management Activities".

Research has focused on sediment control. Few watershed-scale research programs have been undertaken to evaluate the relative success of sedimentation control forest practices in terms of in-stream phosphorus concentrations.

Forest harvesting case studies (BMP application unknown) generally show increased phosphorus concentrations to be relatively uncommon.

No systematic trend in downstream phosphorus concentrations has been noted in studies.

Phosphorus concentrations are highly variable. Standard deviations over several years in a given watershed may range to 50 ug/l or higher.

Background levels of total phosphorus found in studies of Pacific Northwest streams range from 5 to 90 ug/l.

III. Forestry's Water Sampling Program.

ODF began water sampling at three sites across the basin to determine phosphorus levels on forest land in 1989 and 1990.

With refined laboratory methods, monitoring was expanded in 1991 and 1992 to clarify the pattern of phosphorus concentrations in forest stream reaches across the basin.

ODF has collected 339 samples from forest streams since 1989. Testing expenditures by ODF for 1992 were approximately \$8,500. Laboratory work in 1989-91 was contributed by Unified Sewerage Agency.

IV. Forestry's Water Sampling Program Results.

P concentrations vary with time and among streams, but are fairly consistent longitudinally along forested reaches of each stream. P concentrations in headwater springs consistently show that groundwater is the major influence on P concentrations in forest streams.

Mean total P concentrations occur in three categories among the forested watersheds monitored (refer to attached map):

- a) 15-30 ug/l Upper Tualatin River, Lee Creek, West Fork Dairy Creek, Murtaugh Creek, upper East Fork Dairy, and McKay Creek;
- b) 40-55 ug/l Clear Creek and Gales Creek; and
- c) 55-65 ug/l Bateman Creek, Coffee Creek, Beaver Creek, Burgholzer Creek, Sadd Creek, and lower East Fork Dairy Creek.

P concentrations do not appear to correlate with recent clearcutting or the extent of forest harvesting in a stream's watershed.

Here are some examples. Harvesting within the last ten years occurs in all the 15-30 ug/l watersheds. Harvesting has not occurred recently in Gales Creek subbasin, which is in the 40-55 ug/l range. Very recent harvesting in the Coffee, Burgholzer, and McKay Creeks has not elevated P concentrations. All these streams have the same or higher P concentrations above recent harvesting and in spring water compared to P concentrations downstream of the clearcutting. Harvesting has not occurred recently in Sadd Creek and lower East Fork Dairy Creek, which are in the 55-65 ug/l category.

P concentrations show noticeable consistency with the underlying geologic rock units in the watersheds monitored. (Refer to attached graph of 1991's data compared to rock types.

Winter 1992 sampling following heavy precipitation shows turbidities ranging around 2 NTU's. Any substantial sediment loads from forest lands would register much higher.

P concentrations on forest land in the Tualatin River basin appear to be background levels determined largely by the underlying geology. Current forest management BMPs are effective in controlling sedimentation and associated P loadings.

IV. The Forest Practices Program: A system of BMPs complete with educational, prevention, and enforcement capabilities will continue functioning to protect water quality in the Tualatin River basin.

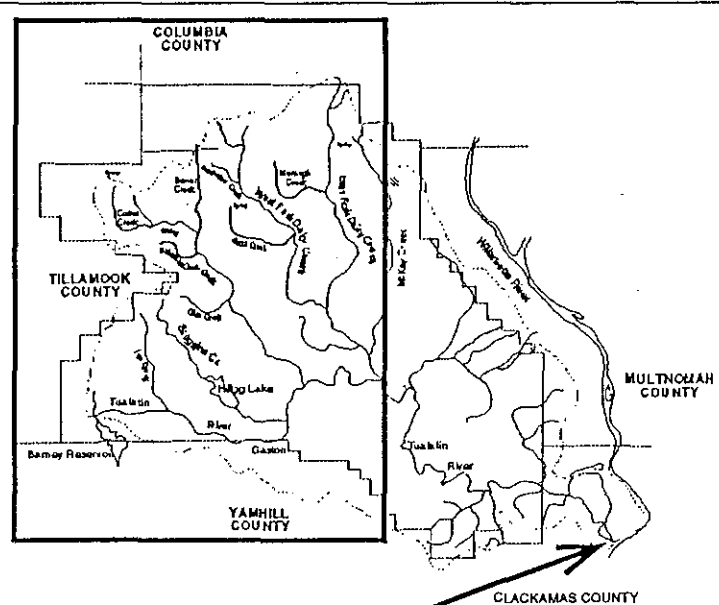
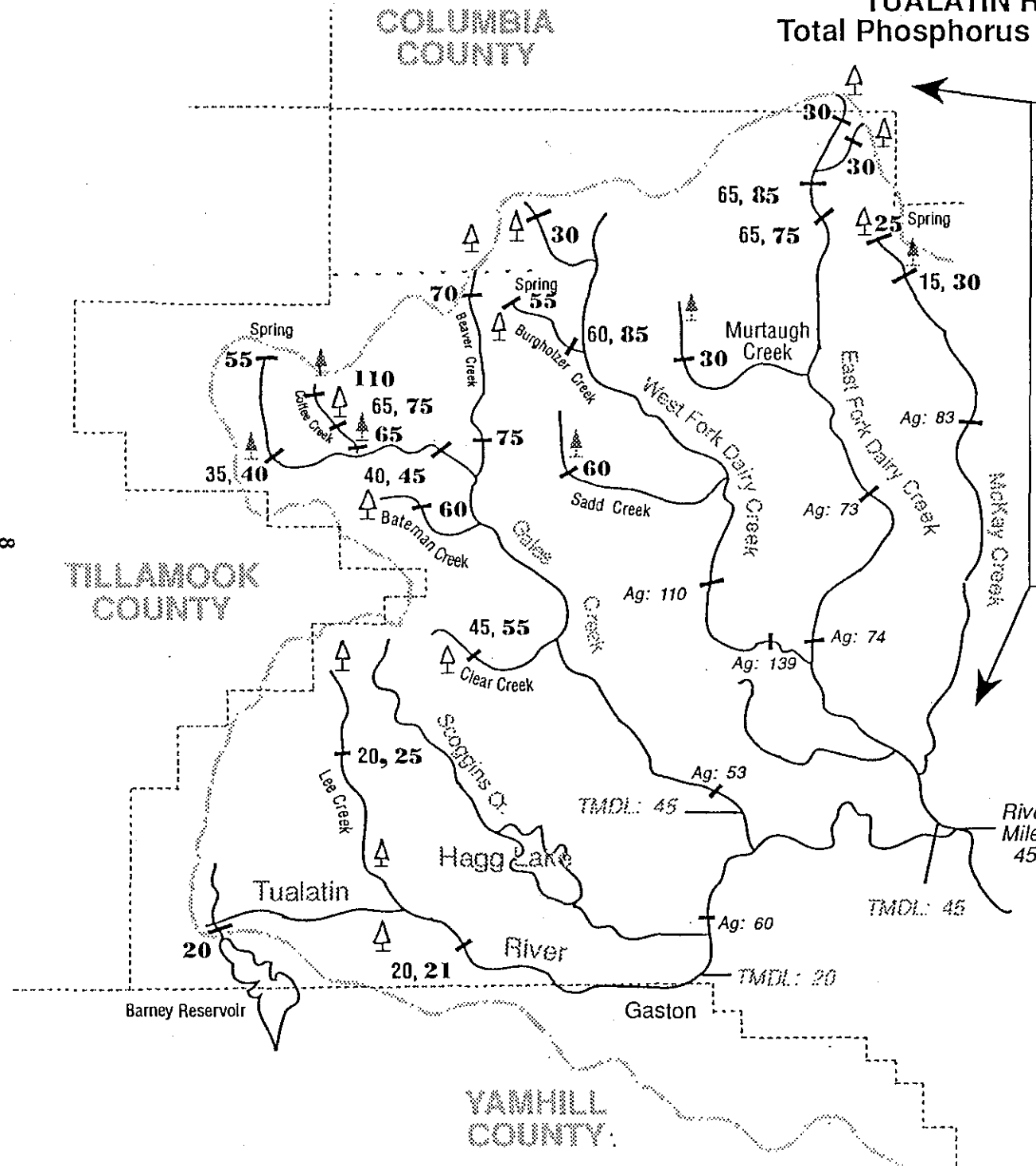
The Forest Grove District devotes approximately one FTE, a Forest Practices Forester, to administering the Forest Practices rules in the Tualatin River basin. Ongoing investments to maintain this program in the basin are about \$80,000 per year.

In greatly summarized form, the rules specify the following practices to protect water quality:

- * Keeping chemicals out of waters;
- * Keeping soil in stable locations, and out of streams;
- * Retaining near-natural water drainage paths around roads, landings, skid trails, and fire trails to maintain slope stability;
- * Retaining ground cover to filter overland water flows;
- * Protecting riparian management area vegetation around stream channels;
- * Protecting stream banks and beds from disturbance;
- * Limiting soil disturbance;
- * Stabilizing exposed soil surfaces by seeding, mulching, or riprapping;
- * Falling trees away from streams;
- * Maintaining a stable road surface;
- * Keeping activities above high water marks of streams; and
- * Keeping organic debris out of road and landing fills.

TUALATIN RIVER BASIN FOREST SITES

Total Phosphorus Monitoring Results 1991 and 1992



Basin-Wide
Total Maximum Daily Load (TMDL):
70 micrograms/liter

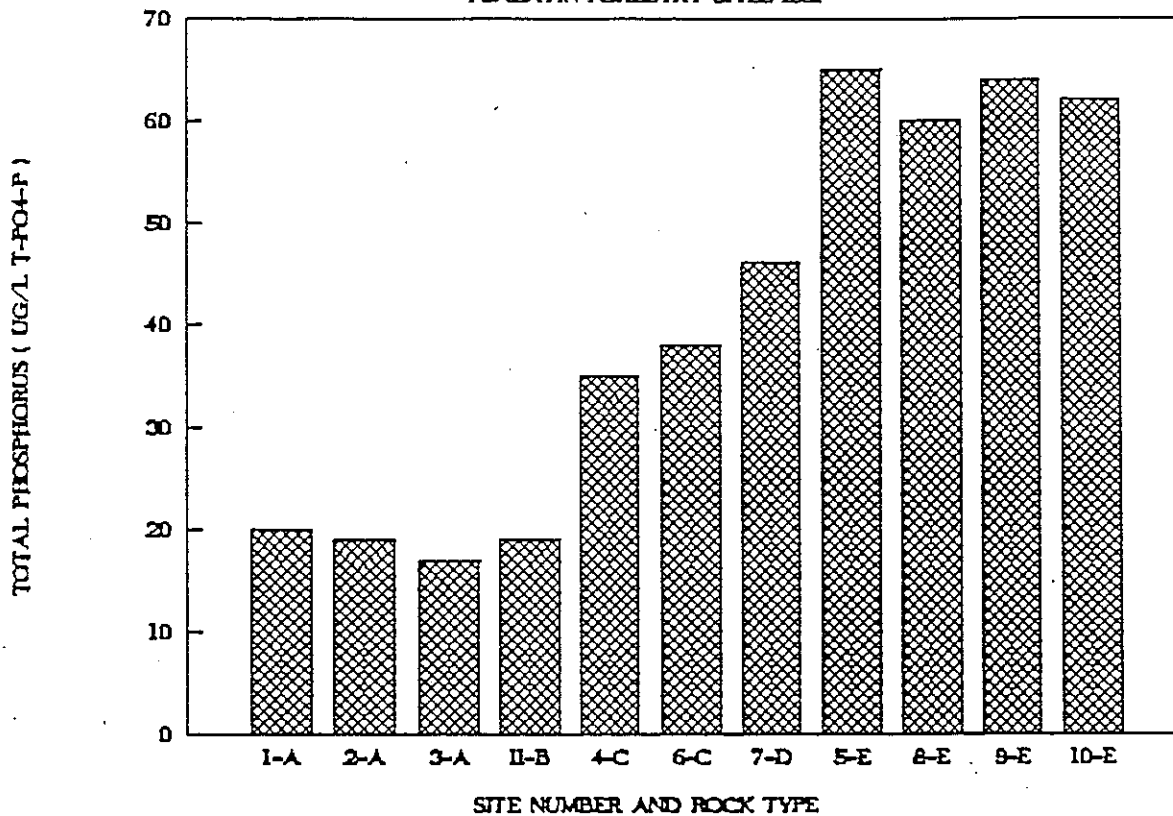
LEGEND

- 1991 Total Phosphorus (Forest)
- 1992 Total Phosphorus (Forest)
- Ag: - Total Phosphorus sampled by Department of Agriculture
- TMDL: - Total Maximum Daily Load Compliance Location
- △ - Some stands less than 10 years above site
- ▲ - Stands more than 10 years old above site

All Results in micrograms/liter (ug/l)

PRELIMINARY FINDINGS: GEOLOGY vs. T-PO4

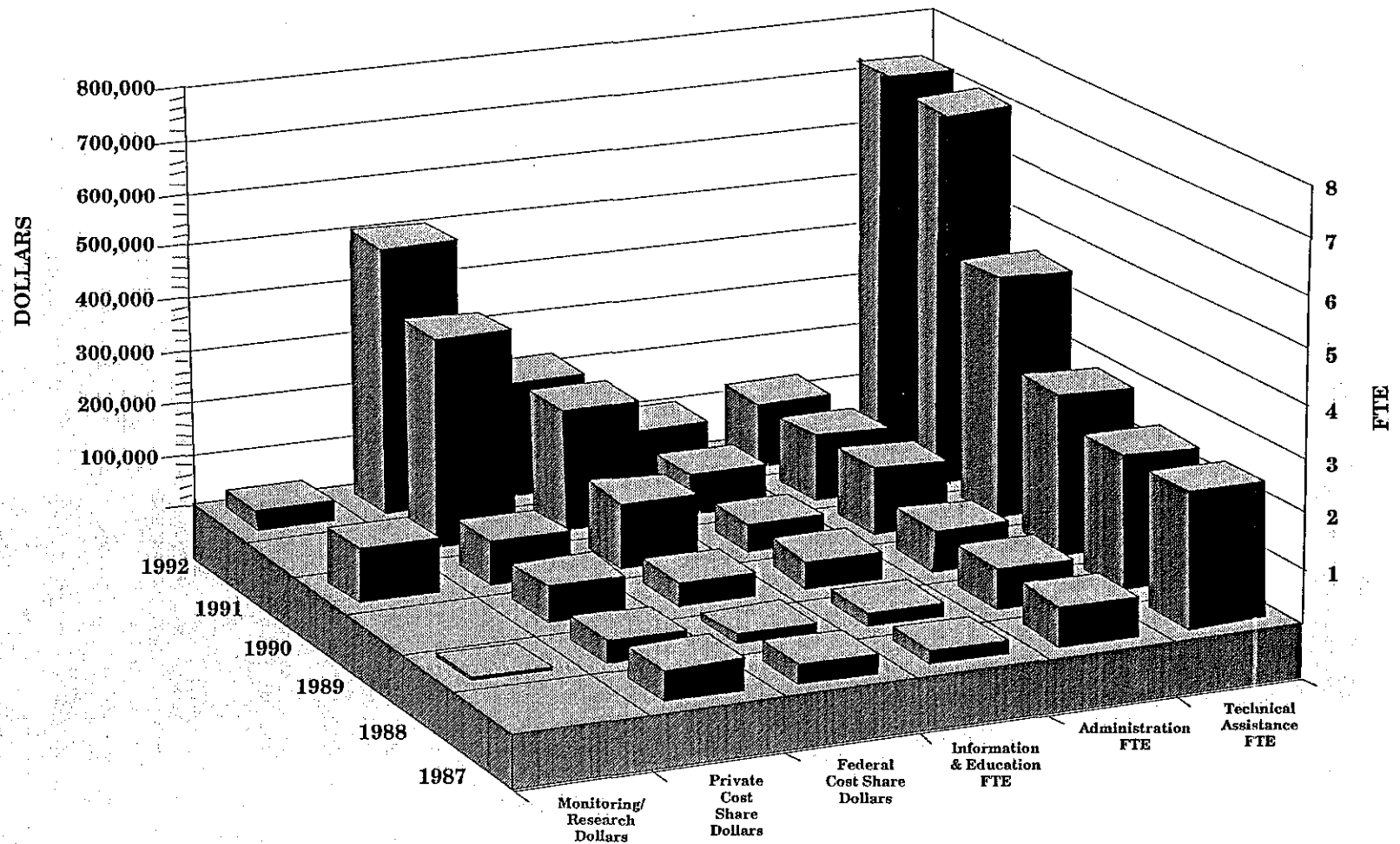
TUALATIN FORESTRY SITES 1961



PRELIMINARY FINDINGS FROM RECONNAISSANCE FIELD WORK

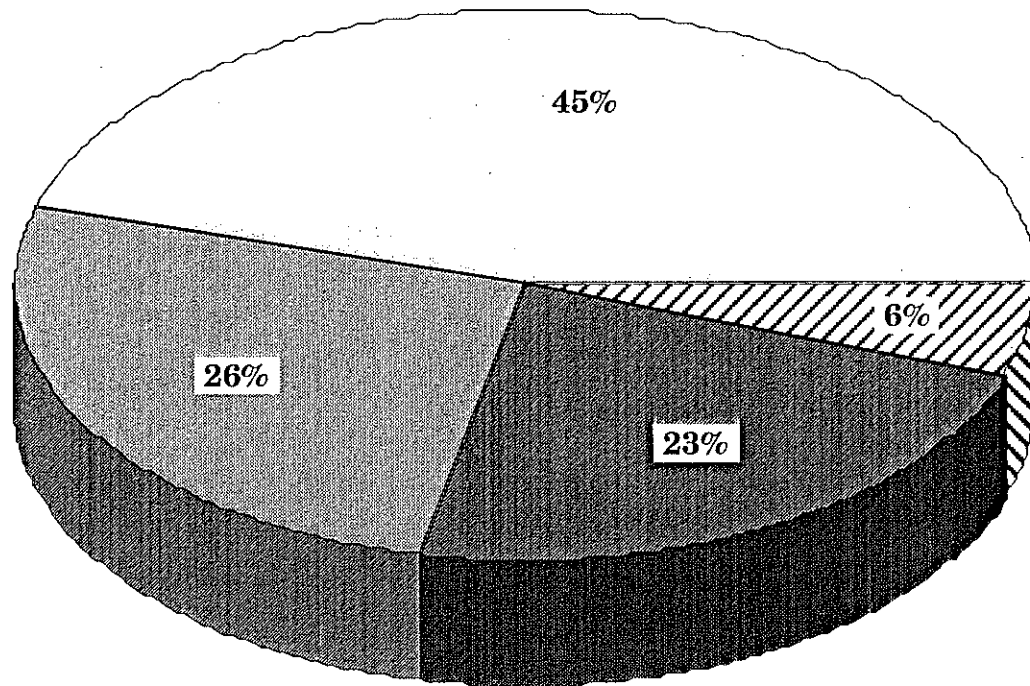
CODE	ROCK TYPE	TOTAL-P RANGE
A	BASALT: TERTIARY INTRUSIVE, MARINE (?)	17 - 19
B	BASALT: COLUMBIA RIVER	19
C	BASALT: TERRESTRIAL, TILLAMOOK VOLCANIC	35 - 38
D	BASALTIC SANDSTONE - SANDSTONE MIX: (Mapped as marine sediment. Field = basalt)	46
E	SEDIMENTARY: EOCENE SEQUENCE	60 - 65

Resources Allocated to Agricultural Water Quality Planning and Implementation in the Tualatin Basin



Tualatin Permitted CAFO Status, July 1993

53 Operations



 In Compliance

 Notice of Noncompliance Issued

 Stipulated Final Order Issued

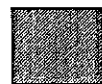
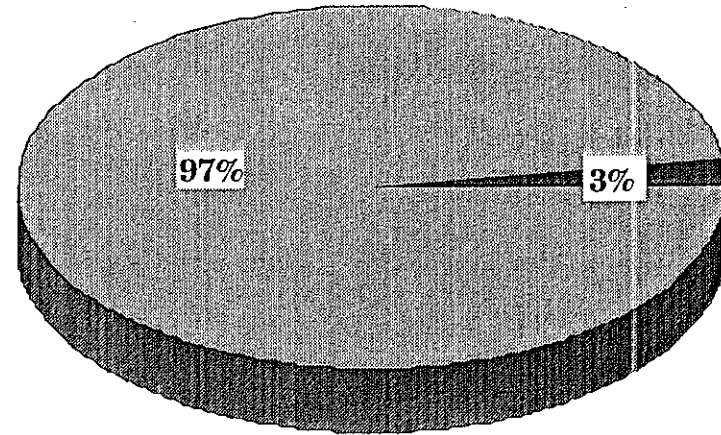
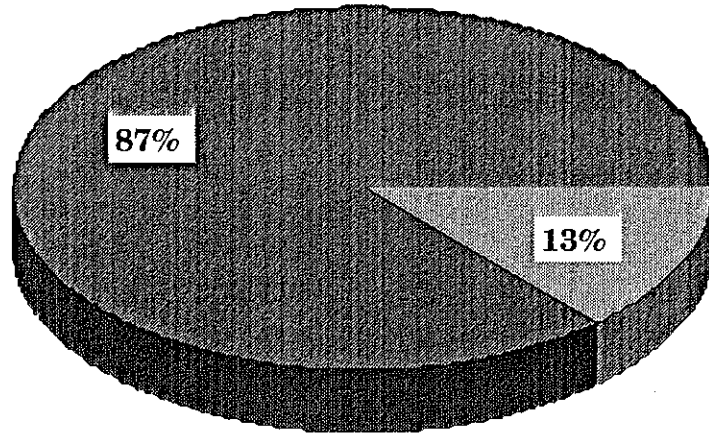
 Operation Out of Business

Tualatin Container Nursery Discharge Status

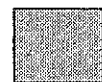
880 Acres

1991

1993



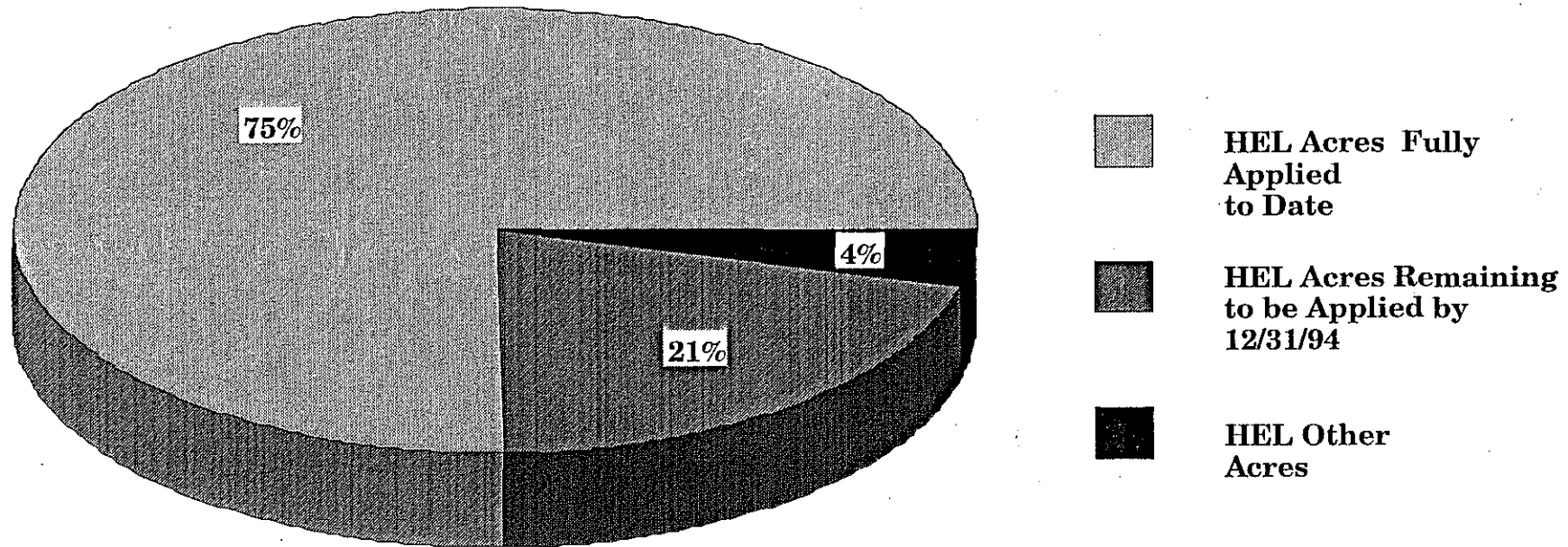
Discharge Acres



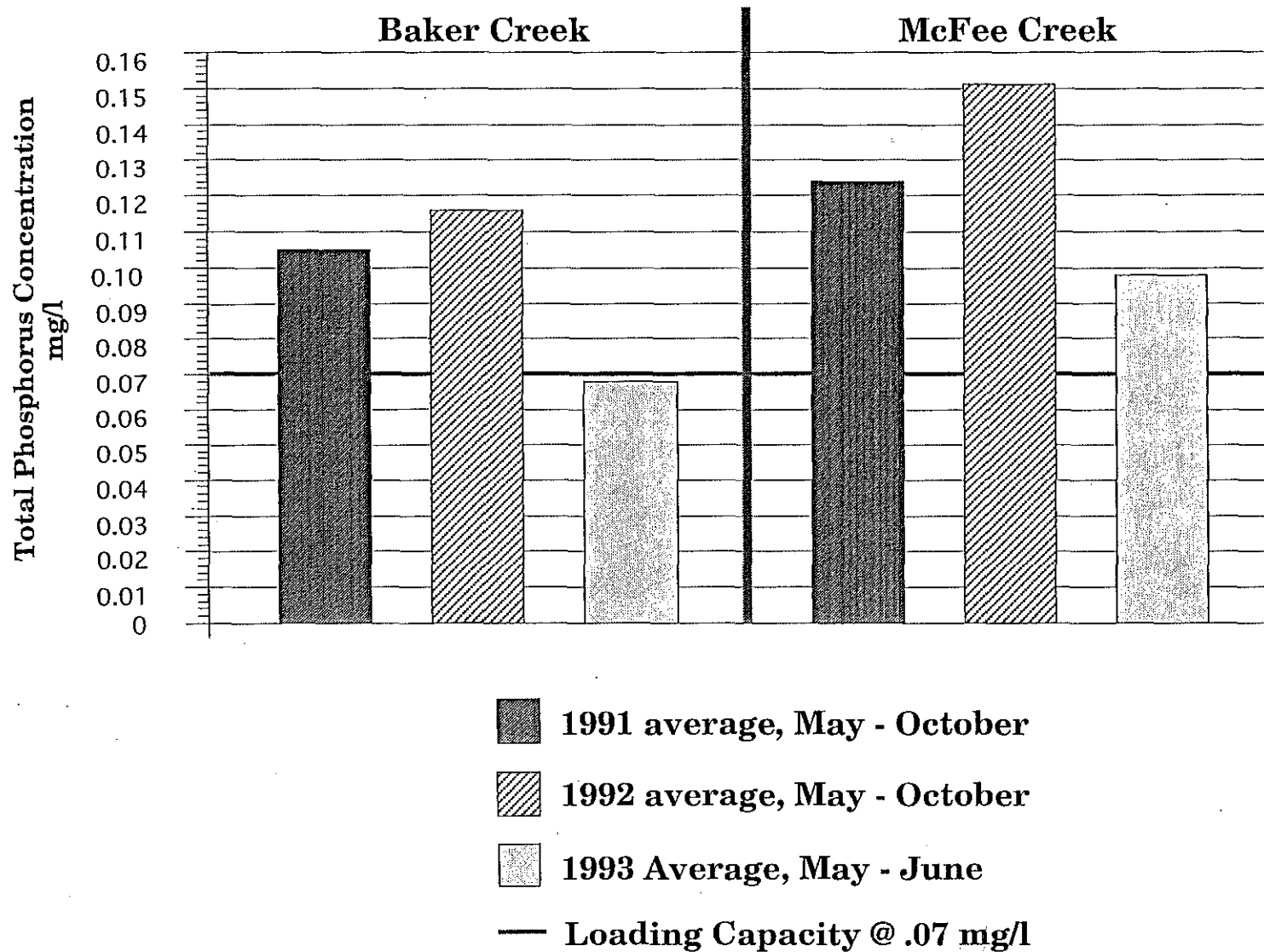
No Discharge Acres

Status of Required Erosion Control Practices on Highly Erodible Lands, Tualatin Basin

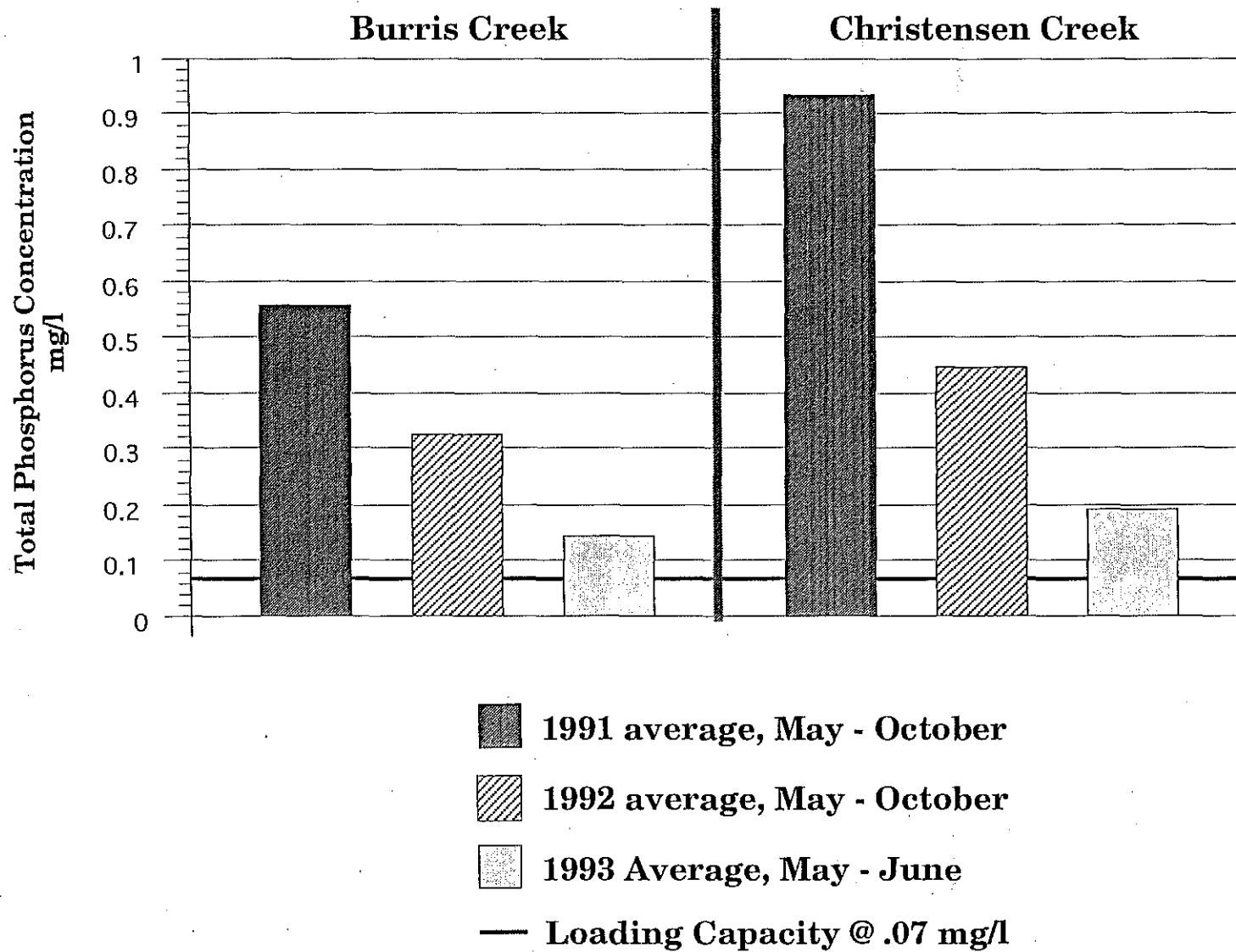
13,646 Acres



1991 - 1993 Total P Concentrations in Two Tualatin Tributaries



1991 - 1993 Total P Concentrations in Two Tributaries Undergoing Treatment



June workshop is for horse owners

**HORSE
AND
LAND USE
WORKSHOP**



JUNE 19, 1993

**Twilight tour explores
cover crop study at farms**

Small Grants Money
Awarded

*Cover Cropping Trial: Control of
Erosion and Potential Leaching of
Nitrates and Phosphates Following
Harvest of Vegetables.*

THE NEWS-TIMES, Wednesday, September 2, 1992

**Farmers invited to straw
mulching machine demo**

SEPTEMBER 18, 1992 CAPITAL PRESS

**Mechanical mulching system
debuts in Tualatin Basin**

PHOSPHORUS WORKSHOP
Monday, December 7, 1992

DECEMBER 11, 1992 CAPITAL PRESS

**Farmers go to school on
phosphorous impact**

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: July 6, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director *Fred Hansen*
Subject: Agenda Item 2, July 22, 1993, EQC Work Session

Proposed Air Quality Rulemaking - Federal Operating Permit Program

Statement of Purpose

In 1990 the Federal Clean Air Act was amended by Congress in order to expand and improve air quality programs as part of a comprehensive clean air strategy. The amendments included a program to significantly expand, and more effectively control, emissions of hazardous air pollutants from industrial sources (Title III) and the initiation of an operating permit program that is applicable to industrial sources nationwide (Title V). Title V requires each state to develop an operating permit program and submit it to the EPA for approval.

The proposed rules will enable the Department to implement the federal operating permit program, thus avoid mandatory federal sanctions and ultimate control of the industrial source program by the EPA. The proposed rules would require that certain procedures be followed, especially with respect to permitting and to determining compliance with underlying applicable and substantive requirements. Regulated sources would be required to take on more responsibility for being in compliance and for demonstrating their compliance status. Criteria pollutant emissions will be reduced indirectly through the added certainty about each source's requirements and the increased emphasis on compliance.

The proposed rules also contain new requirements for controlling emissions of hazardous air pollutants. As proposed, the program will increase the number of industrial sources required to control emissions and the number of industrial pollutants controlled. This will result in significant reductions of hazardous air pollutant emissions. Implementation of these rules fills a major gap in our current program and is a critical element of a federally approvable state program.

[†]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 2
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From January through May of this year the Air Quality Division has worked with the Industrial Source Advisory Committee to develop these rules. At the May 11th meeting the Committee supported the proposed rule package, and the proposed rules became available for public comment on May 17th. The Department then held an informational teleconference using the Oregon ED-NET system with downlink sites in Portland, Springfield, Medford, Bend and Pendleton. Public hearings were held in the same cities the last week of June and the first week of July, with the comment period closing on July 9th. The Advisory Committee will meet on July 15th to discuss the comments received and to make recommendations for the final rule package.

The purpose of this work session item is to provide the Commission an opportunity to discuss the new rules and rule amendments which are being proposed to implement the federal operating permit program required by the Federal Clean Air Act of 1990. These rules will be brought to the Commission for adoption at the September 1993 Commission meeting.

Staff will introduce topics and then allow for discussion by the Commission.

AGENDA

Federal Operating Permit Program

- I. Introduction - A brief background discussion of the purpose for the rulemaking and the process that has been followed.
- II. Program Scope - A discussion of the number and types of air pollution sources, and of the methods which will be used to regulate them, highlighting changes from the existing state program.
- III. Permitting Process - A discussion of new aspects of the permitting process highlighting significant issues raised during Advisory Committee meetings and the public comment period.
- IV. Hazardous Air Pollutant issues - A background discussion of the Title III program and significant issues raised during Advisory Committee meetings and the public comment period.
- V. Program Implementation - A brief discussion of the process for Federal approval, and of plans to implement the program.

Implementation Plan

- Permit Writer's Guidance
- Compliance Staff Guidance
- Guidance for Sources
- Data Systems Development
- Forms Development
- Funding, Staffing Adequacy

Timeline - Federal Operating Permit Program

June 1993: Rules proposed

Sept. 1993: Department proposes EQC adoption of rules

On or before
November 15,
1993: DEQ submits federal operating permit
program to EPA

Nov. 1994: EPA approves Oregon's federal operating
permit program

Timeline - Federal Operating Permit Program

1994 -

Nov. 1995: Permit applications due

Nov. 1995: First third of permits issued

Nov. 1996: Second third of permits issued

Nov. 1997: Third third of permits issued

Program Scope

All Major Sources - Based on "Potential to Emit"

- 100 tons per year
- Title I Nonattainment
(VOC, NO_x, PM₁₀, CO)
(none in Oregon)
- Air Toxics -- 10/25 tons per year

Program Scope

Other Sources, Regardless of Size

- Section 111 -- NSPS
- Section 112 -- Hazardous Air Pollutant (HAP)
- PSD / NSR
- Acid Rain
- Others Designated by DEQ

Program Scope

Deferrals & Permanent Exemptions

- Wood Heaters
- Asbestos Demolition / Renovation

Program Scope

Synthetic Minor Source Permit

- Source requests federally-enforceable limits
- State issues ACDP permit
- Supplemental fees

Program Scope

"Regulated Air Pollutant"

- Criteria pollutants
- Hazardous Air Pollutants (189)
- Subject to a standard under NSPS or NESHAP
- Accidental release pollutants
- Any other pollutant for which the source is major

**Comparison of Stationary Air Sources under the
Existing ACDP Program and the New Title V Program.**

Source Type	Number of Sources [†]	Regulated by Existing ACDP Program ^{††}	Proposed Regulation by Title V Program
Criteria Pollutant - Major Sources <i>(Actual emissions > 100 tons per year)</i>	150	Yes	Yes
Criteria Pollutant - Major Sources <i>(Potential emissions > 100 tons per year)</i>	50	Yes	Yes
Criteria Pollutant - non-Major Sources <i>(Potential emissions < 100 tons per year and more than minimal)</i>	400	Yes	No
Criteria Pollutant - Minimal Sources	530	Yes	No
Hazardous Air Pollutant - Major Sources <i>(Potential emissions \geq 10 or 25 tons per year)</i>	150	No	Yes
Hazardous Air Pollutant - non-Major Sources <i>(Potential emissions \leq 10 or 25 tons per year)</i>	1000s	No	No

[†] The number of sources for each source type is an estimate.

^{††} Sources not subject to Title V shall continue to be permitted under the existing Air Contaminant Discharge Permit Program, if applicable.

Key Differences Between the Existing Permitting Program and the New Title V Permitting Program

Key Program Elements	Existing ACDP Program [†]	Proposed Title V Permit Program
Permit application	Applicant supplies information used to develop appropriate permit conditions.	Increased burden on source to supply all information and regulated permit conditions. Department reviews completeness within 60 days.
Permit Shield (permit content rather than permit enforcement)	Not provided.	Provided if EQC determines that DEQ has adequate resources to implement.
EPA (and Affected State) Involvement	Indirect.	EPA reviews, may revise or veto; affected states also review.
Operational Flexibility	Worst case operating scenarios and emission trading.	Additional EPA-required flexibility provisions.
Compliance Demonstration	Burden shared by DEQ and sources.	Burden on sources. Semi-annual reports and certification by corporate official. Criminal liability.
Public Notice and Comment	On new permits and emission increases only.	On all new permits, renewals, and significant modifications.
Review of DEQ Determinations	EQC contested case, state and federal courts.	Additional procedure for public petition by citizens to EPA.

[†] Sources that are not subject to Title V shall continue to be permitted under the existing ACDP Program, if applicable.

Permitting Process

- Permit Requirements
 - Applicable Requirements
 - Alternative Operating Scenarios
 - Hazardous Air Pollutants
 - Insignificant Activities
 - Compliance Certification
 - Permit Shield
 - EPA/Affected State Review

Permitting Process

- Operational Flexibility / Permit Changes
 - Off-permit Changes
 - Section 502(b)(10) Changes
 - Minor Modifications
 - Reopenings

Permitting Process

- Compliance / Reporting
 - Semi-annual Compliance Certification
 - Certified Applications/Reports

Permitting Process

- Public Involvement
 - Notice on Renewals
 - 30 Days to Request a Hearing
 - Citizen Petition to EPA

Hazardous Air Pollutants

- Lists of pollutants
- Source categories
- Quantifying emissions

Maximum Achievable Control Technology

- Existing Sources
- New Sources
- Modifications
- Case-by-case

Residual Emissions

- Health Effects
- de minimis Levels
- Additional Controls

Area Sources

- Source Categories
- Generally Achievable Control Technology
- Permits

TABLE 1. CATEGORIES OF SOURCES OF HAZARDOUS AIR POLLUTANTS
AND REGULATION PROMULGATION SCHEDULE BY INDUSTRY GROUP

<u>INDUSTRY GROUP</u>	Schedule Date
Source Category ^a	
<u>FUEL COMBUSTION</u>	
Engine Test Facilities	11/15/00
Industrial Boilers ^b	11/15/00
Institutional/Commercial Boilers ^b	11/15/00
Process Heaters	11/15/00
Stationary Internal Combustion Engines ^b	11/15/97
Stationary Turbines ^b	11/15/97
<u>NON-FERROUS METALS PROCESSING</u>	
Primary Aluminum Production	11/15/97
Secondary Aluminum Production	11/15/97
Primary Copper Smelting	11/15/97
Primary Lead Smelting	11/15/97
Secondary Lead Smelting	11/15/94
Lead Acid Battery Manufacturing	11/15/00
Primary Magnesium Refining	11/15/00
<u>FERROUS METALS PROCESSING</u>	
Coke By-Product Plants	11/15/00
Coke Ovens:Charging,Top Side,Door Leak	12/31/92
Coke Ovens:Pushing, Quenching, and Battery Stacks	11/15/00
Ferroalloys Production	11/15/97
Integrated Iron and Steel Manufacturing	11/15/97
Non-Stainless Steel Manufacturing - Electric Arc Furnace (EAF) Operation	11/15/97
Stainless Steel Manufacturing - Electric Arc Furnace (EAF) Operation	11/15/97
Iron Foundries	11/15/97
Steel Foundries	11/15/97
Steel Pickling - HCl Process	11/15/97
<u>MINERAL PRODUCTS PROCESSING</u>	
Alumina Processing	11/15/00
Asphalt/Coal Tar Application - Metal Pipes	11/15/00
Asphalt Concrete Manufacturing	11/15/00
Asphalt Processing	11/15/00
Asphalt Roofing Manufacturing	11/15/00
Chromium Refractories Production	11/15/97
Clay Products Manufacturing	11/15/00
Lime Manufacturing	11/15/00
Mineral Wool Production	11/15/97
Portland Cement Manufacturing	11/15/97
Taconite Iron Ore Processing	11/15/00
Wool Fiberglass Manufacturing	11/15/97
<u>PETROLEUM AND NATURAL GAS PRODUCTION AND REFINING</u>	
Oil and Natural Gas Production	11/15/97
Petroleum Refineries - Catalytic Cracking (Fluid and other) Units, Catalytic Reforming Units, and Sulfur Plant Units	11/15/97
Petroleum Refineries - Other Sources Not Distinctly Listed	11/15/94
<u>LIQUIDS DISTRIBUTION</u>	
Gasoline Distribution (Stage 1)	11/15/94
Organic Liquids Distribution (Non-Gasoline)	11/15/00
<u>SURFACE COATING PROCESSES</u>	
Aerospace Industries	11/15/94

Auto and Light Duty Truck (Surface Coating)	11/15/97
Flat Wood Paneling (Surface Coating)	11/15/00
Large Appliance (Surface Coating)	11/15/00
Magnetic Tapes (Surface Coating)	11/15/94
Manufacture of Paints, Coatings, Adhesives	11/15/00
Metal Can (Surface Coating)	11/15/00
Metal Coil (Surface Coating)	11/15/00
Metal Furniture (Surface Coating)	11/15/00
Miscellaneous Metal Parts and Products (Surface Coating)	11/15/00
Paper and Other Webs (Surface Coating)	11/15/97
Plastic Parts and Products (Surface Coating)	11/15/00
Printing, Coating, and Dyeing of Fabrics	11/15/00
Printing/Publishing (Surface Coating)	11/15/94
Shipbuilding & Ship Repair (Surface Coating)	11/15/94
Wood Furniture (Surface Coating)	11/15/94
<u>WASTE TREATMENT AND DISPOSAL</u>	
Hazardous Waste Incineration	11/15/00
Municipal Landfills	11/15/97
Publicly Owned Treatment Works (POTW)	11/15/95
Sewage Sludge Incineration	11/15/97
Site Remediation	11/15/00
Solid Waste Treatment, Storage and Disposal Facilities (TSDF)	11/15/94
<u>AGRICULTURAL CHEMICALS PRODUCTION</u>	
2,4-D Salts and Esters Production	11/15/00
4-Chloro-2-Methylphenoxyacetic Acid Production	11/15/00
4,6-Dinitro-o-Cresol Production	11/15/00
Captan Production ^d	11/15/00
Captan Production ^d	11/15/00
Chloroneb Production	11/15/97
Chlorothalonil Production ^d	11/15/00
Dacthal (tm) Production ^d	11/15/00
Sodium Pentachlorophenate Production	11/15/00
Tordon (tm) Acid Production ^d	11/15/00
<u>FIBERS PRODUCTION PROCESSES</u>	
Acrylic Fibers/Modacrylic Fibers Production	11/15/97
Rayon Production	11/15/97
Spandex Production	11/15/00
<u>FOOD AND AGRICULTURE PROCESSES</u>	
Baker's Yeast Manufacturing	11/15/00
Cellulose Food Casing Manufacturing	11/15/00
Vegetable Oil Production	11/15/00
<u>PHARMACEUTICAL PRODUCTION PROCESSES</u>	
Pharmaceuticals Production ^d	11/15/97
<u>POLYMERS AND RESINS PRODUCTION</u>	
Acetal Resins Production	11/15/97
Acrylonitrile-Butadiene-Styrene Production	11/15/94
Alkyd Resins Production	11/15/00
Amino Resins Production	11/15/97
Boat Manufacturing	11/15/00
Butadiene-Furfural Copolymer (R-11) ^d	11/15/00
Butyl Rubber Production	11/15/94
Carboxymethylcellulose Production	11/15/97
Cellophane Production	11/15/97
Cellulose Ethers Production	11/15/00
Epichlorohydrin Elastomers Production	11/15/94
Epoxy Resins Production	11/15/94
Ethylene-Propylene Rubber Production	11/15/94
Flexible Polyurethane Foam Production	11/15/97
Hypalon (tm) Production ^d	11/15/94
Maleic Anhydride Copolymers Production	11/15/00

Methylcellulose Production	11/15/00
Methyl Methacrylate-Acrylonitrile-Butadiene- Styrene Production ^d	11/15/94
Methyl Methacrylate-Butadiene-Styrene Terpolymers Production ^d	11/15/94
Neoprene Production	11/15/94
Nitrile Butadiene Rubber Production	11/15/94
Non-Nylon Polyamides Production	11/15/94
Nylon 6 Production	11/15/97
Phenolic Resins Production	11/15/97
Polybutadiene Rubber Production ^d	11/15/94
Polycarbonates Production ^d	11/15/97
Polyester Resins Production	11/15/97
Polyethylene Terephthalate Production	11/15/94
Polymerized Vinylidene Chloride Production	11/15/00
Polymethyl Methacrylate Resins Production	11/15/97
Polystyrene Production	11/15/94
Polysulfide Rubber Production ^d	11/15/94
Polyvinyl Acetate Emulsions Production	11/15/97
Polyvinyl Alcohol Production	11/15/97
Polyvinyl Butyral Production	11/15/97
Polyvinyl Chloride & Copolymers Production	11/15/00
Reinforced Plastic Composites Production	11/15/97
Styrene-Acrylonitrile Production	11/15/94
Styrene-Butadiene Rubber & Latex Production ^d	11/15/94
<u>PRODUCTION OF INORGANIC CHEMICALS</u>	
Ammonium Sulfate Production - Caprolactam By-Product Plants	11/15/00
Antimony Oxides Manufacturing	11/15/00
Chlorine Production ^d	11/15/97
Chromium Chemicals Manufacturing	11/15/97
Cyanuric Chloride Production	11/15/97
Fume Silica Production	11/15/00
Hydrochloric Acid Production	11/15/97
Hydrogen Cyanide Production	11/15/97
Hydrogen Fluoride Production	11/15/97
Phosphate Fertilizers Production	11/15/97
Phosphoric Acid Manufacturing	11/15/97
Quaternary Ammonium Compounds Prod.	11/15/00
Sodium Cyanide Production	11/15/97
Uranium Hexafluoride Production	11/15/00
<u>PRODUCTION OF ORGANIC CHEMICALS</u>	
Synthetic Organic Chemical Manufacturing	11/15/92
<u>MISCELLANEOUS PROCESSES</u>	
Aerosol Can-Filling Facilities	11/15/97
Benzyltrimethylammonium Chloride Prod.	11/15/97
Butadiene Dimers Production	11/15/97
Carbonyl Sulfide Production	11/15/00
Chelating Agents Production	11/15/97
Chlorinated Paraffins Production ^d	11/15/00
Chromic Acid Anodizing	11/15/94
Commercial Dry Cleaning (Perchloroethylene) - Transfer Machines	11/15/92
Commercial Sterilization Facilities	11/15/94
Decorative Chromium Electroplating	11/15/94
Dodecanedioic Acid Production ^d	11/15/00
Dry Cleaners (Petroleum Solvent)	11/15/00
Ethylidene Norbornene Production ^d	11/15/00
Explosives Production	11/15/00
Halogenated Solvent Cleaners	11/15/94
Hard Chromium Electroplating	11/15/94

Hydrazine Production	11/15/97
Industrial Cleaning (Perchloroethylene)	
- Dry-to-dry machines	11/15/92
Industrial Dry Cleaning (Perchloroethylene)	
- Transfer Machines	11/15/92
Industrial Process Cooling Towers	11/15/94
OBPA/1,3-Diisocyanate Production ^d	11/15/00
Paint Stripper Users	11/15/00
Photographic Chemicals Production	11/15/97
Phthalate Plasticizers Production	11/15/00
Plywood/Particle Board Manufacturing	11/15/00
Polyether Polyols Production	11/15/97
Pulp and Paper Production	11/15/97
Rocket Engine Test Firing	11/15/00
Rubber Chemicals Manufacturing	11/15/97
Semiconductor Manufacturing	11/15/97
Symmetrical Tetrachloropyridine Production ^d	11/15/00
Tire Production	11/15/00
Wood Treatment	11/15/97
<u>CATEGORIES OF AREA SOURCES^c</u>	
Asbestos Processing	11/15/94
Chromic Acid Anodizing	11/15/94
Commercial Dry Cleaning (Perchloroethylene)	
- Transfer Machines	11/15/92
Commercial Dry Cleaning (Perchloroethylene)	
- Dry-to-Dry Machines	11/15/92
Commercial Sterilization Facilities	11/15/94
Decorative Chromium Electroplating	11/15/94
Halogenated Solvent Cleaners	11/15/94
Hard Chromium Electroplating	11/15/94

^a Only major sources within any category shall be subject to emission standards under Section 112 unless a finding is made of a threat of adverse effect to human health or the environment for the area sources in a category. All listed categories are exclusive of any specific operations or processes included under other categories that are listed separately.

^b Sources defined as electric utility steam generating units under Section 112(a)(8) shall not be subject to emission standards pending the findings of the study required under Section 112(n)(1).

^c A finding of threat of adverse effects to human health or the environment was made for each category of area sources listed above.

^d The HON, which is scheduled for promulgation by November 15, 1992, includes a negotiated standard for equipment leaks from the SO2MI category and 20 non-SO2MI categories (or subsets of these categories). The notice of agreement on negotiated regulation for equipment leaks (56 FR 9315; March 6, 1991) would apply to equipment handling specific chemicals for these categories or subsets of these categories. The specific processes affected within the categories are listed in Section XX.X0(c) of the March 6, 1991 notice.

Program Submittal

- Governor's Letter
- Attorney General's Opinion
- Air Quality Program Description
- Permitting Program Description

Program Submittal

- Copies of Regulations and Documentation
- Permit Fee Demonstration
- Compliance Tracking & Enforcement Description
- Acid Rain Program Commitment

Approved
Approved with Corrections

Minutes are not final until approved by the EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the Two Hundred and Twenty Ninth Meeting
June 10, 1993

Regular Meeting

The Environmental Quality Commission regular meeting was convened at 8:30 a.m. on Thursday, June 10, 1993, in Conference Room 3A, Oregon Department of Environmental Quality (DEQ), 811 S. W. Sixth Avenue in Portland, Oregon. The following commission members were present:

William Wessinger, Chair
Dr. Emery Castle, Vice Chair (arrived at approximately 12:00)
Henry Lorenzen, Commissioner
Linda McMahan, Commissioner
Carol Whipple, Commissioner

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

Note: Staff reports presented at this meeting, which contain the Department's recommendations, are on file in the Office of the Director, 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.

Chair Wessinger called the meeting to order.

A. Approval of Minutes.

Commissioner Whipple moved approval of the April 22, 1993, joint commission meeting minutes; Commissioner Lorenzen seconded the motion. Commissioner Whipple moved approval of the April 23, 1993, regular meeting minutes; Commissioner Lorenzen seconded the motion. The joint and regular commission meeting minutes were unanimously approved.

B. Approval of Tax Credits.

This staff report presented the analysis of pollution control facilities tax credit applications, and the Department's recommendation for Commission action. The following is a summary of the applications recommended for approval:

Application Number	Applicant	Description
TC 3764	Precision Castparts Corp.	Acid neutralization and control equipment for a hazardous wastewater treatment facility
TC 3919	Texaco Refining and Marketing, Inc.	Installation of five fiberglass underground storage tanks, fiberglass piping, spill containment basins, line leak detectors, in-tank gauges, float vent valves, overfill alarms and monitoring wells. Also, Stage I vapor recovery equipment and piping for Stage II vapor recovery.
TC 3945	Texaco Refining and Marketing, Inc.	Installation of five fiberglass underground storage tanks, fiberglass piping, spill containment basins, line leak detectors, in-tank gauges, float vent valves, overfill alarms and monitoring wells. Also, Stage I vapor recovery equipment and piping for Stage II vapor recovery.
TC 3947	Texaco Refining and Marketing, Inc.	Installation of five fiberglass underground storage tanks, fiberglass piping, spill containment basins, line leak detectors, in-tank gauges, float vent valves, overfill alarms and monitoring wells. Also, Stage I vapor recovery equipment and piping for Stage II vapor recovery.
TC 3978	Eastman Heating and Sheetmetal, Inc.	Refrigeration coolant recovery and recharge equipment.
TC 4003	Fly-By-Night Refrigeration	Refrigeration coolant recovery and recharge equipment

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Application Number	Applicant	Description
TC 4010	Vachter Spray Service, Inc.	24' x 74' x 150' truss-T grass seed storage building.
TC 4011	Cecil E. Roth	24' x 80' x 118' stick-on-stud, metal wall grass seed storage building.
TC 4015	C. W. Stuck	Automobile air conditioner coolant recovery and recycling equipment.
TC 4016	Dan and JoAnn Keeley	22' x 70' x 95' steel structure, galvanized sheeted grass seed storage building.
TC 4019	East Amazon Auto	Automobile air conditioner CFC substitute coolant recovery, recycling and recharge equipment.
TC 4021	J & S Farms	22' x 104' x 204' pole construction, metal clad grass seed storage building.
TC 4047	Beale Automotive Repair	Automobile air conditioner coolant recovery and recycling equipment.

Tax Credit Application Review Reports With Facility Costs Over \$250,000 :

Application Number	Applicant	Description
TC 3902	American Industrial Service	Dissolved Air Flotation (DAF) wastewater pretreatment facility.

Application Number	Applicant	Description
TC 3941	Precision Castparts Corp.	Water pollution control facility to comply with pollution standards for the discharge of radioactive thorium 232 into the sanitary sewer of Portland.
TC 3964	James River Paper Company, Inc.	Modifications to pulp and paper mill bleach plant and bleaching process to comply with water pollution standards for dioxin and AOX.

Action: Commissioner Lorenzen moved approval of the above-listed tax credit applications excluding TC-3964; Commissioner Whipple seconded the motion.

Commissioner Lorenzen asked if the modifications to the James River facility were made to meet federal standards. Director Hansen responded the modifications were made in part to meet federal requirements. The U. S. Environmental Protection Agency (EPA) established guidance for dioxin that DEQ and EQC used in adopting water quality standards. DEQ then made compliance with the dioxin standard a condition of the permit. Permit requirements for AOX are state requirements. Commissioner Lorenzen asked if cleanup of the river was driven in large part by the federal process. Director Hansen indicated there were many factors involved, both federal and state. For example, he noted that due to the multi-state condition of the river and number of pulp mills located there, the EPA established the Total Maximum Daily Load (TMDL) limits for dioxin in order to meet state standards.

Commissioner Lorenzen said that this tax credit was costing Oregon citizens \$7.5 million. Director Hansen said the facility would have qualified for tax credit even if the scope of the tax credit program had been narrowed as previously discussed.

Commissioner Whipple moved that TC-3964 be approved; Commissioner McMahan seconded the motion. The motion was unanimously approved (4-0).

C. Coastal Salmon Stock Status and Habitat Problems.

Jim Martin, Chief of the Fish Division, Oregon Department of Fish and Wildlife (ODFW), spoke to the Commission about the populations of salmon, steelhead and trout in coastal Oregon rivers that are at depressed levels and could possibly be listed under the federal Endangered Species Act. He said the state needs to develop and

implement a program of restoration activities specific to the requirements of salmonid populations. Mr. Martin stressed the need for state and federal cooperation, state initiative and public involvement. He said that non-point sources, sedimentation and temperature were all factors causing the decline of the coastal salmonid population. Mr. Martin's presentation included slides of healthy and affected coastal streams.

Mr. Martin said that shade requirements, beds free of sedimentation, movement away from requiring generic stream conditions, variable protection standards and a watershed plan involving state and federal agricultural and forestry agencies would help bring the salmon populations back to the coastal streams.

D. Rule Adoption: Amendments to Yard Debris Rule.

This agenda item proposed rules to remove a sunset date and to clarify other language in existing rules on yard debris collection and recycling. This rule is necessary to allow local governments to charge a fee for the collection of yard debris without being in violation of Oregon Revised Statutes (ORS) 459A.070. The changes are to remove the sunset clause which provides that the existing rule is effective only until June 1, 1993. The Department recommended the Commission adopt the rule amendments regarding collection charges for yard debris as presented in Attachment A of the staff report.

Action: Commissioner Whipple moved that the proposed amendments to the yard debris rule be approved; Commissioner Lorenzen seconded the motion. The motion was unanimously approved.

E. Rule Adoption: Effect of a Permit Rule.

This agenda item proposed to repeal and replace language in Oregon Administrative Rules (OAR) 340-45-080 (effect of a permit). The repeal was necessary because of issues raised in a petition to the Court of Appeals for a review of the rule. The Department also proposed to reword the language to clarify meaning and intent as well. The Department recommended the Commission repeal the language in OAR 340-45-080 and replace it with new language presented in Attachment A of the staff report.

Tom Lucas, Water Quality Division, gave a brief presentation about the essential features of the proposed rule amendments. He also noted changes made to the existing rule.

During discussion, several Commission members stated that the proposed rule was easier to understand than the rule adopted in July 1992. Additionally, members expressed more comfort with the proposed rule because it appeared to be more stringent than the prior rule. Commissioner Lorenzen expressed concern that Water Pollution Control Facility (WPCF) permits would not be covered by the "shield." Barbara Burton, Water Quality Division, responded that under the Clean Water Act, only National Pollutant Discharge Elimination System (NPDES) permits would be subject to third-party lawsuit provisions of the Act.

Chair Wessinger asked that the Department report to the Commission when these rules are used.

Action: Commissioner Lorenzen moved approval of the Department's recommendation to repeal the language in OAR 340-45-080 and replace it with new language presented in Attachment A of the staff report; Commissioner Whipple seconded the motion. The motion was unanimously approved.

F. Innovative Response Policy.

This agenda item was about the Innovative Response Policy which defines a process for the Department to apply rules differently from the EPA in situations where legal authority exists and where a broader environmental goal is served by taking such an approach. The Department recommended the Commission approve a statement of EQC policy as presented in Attachment A of the staff report.

Elana Stampfer, Director's Office, provided a brief overview of the policy. She indicated an advisory committee had been used to analyze the process and to help insure that reporting requirements are not too burdensome. Ms. Stampfer said the policy requires the Department to report to the Commission biennially on the number and types of innovative responses, on the expected benefits of the approach and on the evaluations of the decisions.

Commissioner McMahan asked about when this approach runs into compliance problems. She indicated that those types of circumstances could be risky. Commissioner Lorenzen expressed concern that high environmental cleanup costs may not return a high environmental benefit.

Action: Commissioner Lorenzen moved approval of the Department's recommendation; Commissioner McMahan seconded the motion. The motion was unanimously approved.

**G. Information Item: U. S. Environmental Protection Agency (EPA)
Polychlorinated Biphenyls (PCB) Grant Project.**

This informational item summarized the activities and preliminary findings of the PCB grant project. Through the project, the Hazardous and Solid Waste Division (HSW) determined if a need existed for greater state presence in PCB regulation. HSW examined how much PCB is still in use, how much PCB is entering the environment, what is the regulatory status of PCB in Oregon and what is EPA's current and future role in PCB oversight.

Staff provided the Commission with some background information, activities which have been conducted and the preliminary findings of the project. The findings include information which shows that PCB is still in use in 1993 and that it is still entering the environment. PCB is one of the most common chemicals on ECD's site list which includes chemical contamination of soil, water and sediment. The report ended with a list of questions which need to be resolved to finish the project and to determine if the agency should increase its involvement with the regulation of PCB.

The issues of concern to the Commission were:

1. What could the Department ask PCB users to do differently to prevent environmental contamination? Staff suggested encouragement for proper maintenance of PCB being used and proper PCB storage and disposal.
2. Where does the problem of PCB rank compared to the list of other environmental problems? Staff indicated that a clear answer to this question was not available.
3. What will be the decision making process to resolve the questions posed by staff? Staff indicated an advisory committee would be used.

H. Work Session: Recycling.

This item was the second of two work sessions on recycling. The purpose of the session was to provide a status update on the State Solid Waste Management Plan and to present local perspectives on solid waste management planning, recycling and illegal dumping.

Pat Vernon, Hazardous and Solid Waste Division, provided a brief overview of the current development of the Oregon Solid Waste Management Plan. She indicated the plan is required by statute, is important because of the changing solid waste

management system and includes policies and implementation strategies for source reduction, recycling, education, residual disposal and system-wide management. The plan will be before the Commission for approval in December of this year.

Ms. Vernon provided an overview of solid waste planning issues that are important to consider when conducting statewide or local planning. These included recycling, illegal dumping and local coordination of solid waste plans.

Local perspectives were provided by a panel consisting of Ms. Sarolta Sperry, Prairie City (recycling in rural Oregon); Robert Trachtenberg, Multnomah County (recent developments in illegal dumping); Pamela Kambur, Lincoln County (county-wide solid waste planning); and Sue Densmore, Rogue Disposal, Medford (inter-county solid waste planning).

PUBLIC FORUM

Karl Anuta, Citizens Against Pollution (CAP) and Northwest Environmental Defense Center (NEDC), spoke to the Commission about the Riverbend Landfill. Mr. Anuta said he disagreed with the approach taken by the Department to renew this landfill permit. Although the Department had required a series of conditions, he believed that those conditions should be met before the permit is issued. He said that studying the problems after permit issuance would not be beneficial. Mr. Anuta asked the Commission to require the Director and Department to consider the landfill expansion as a separate issue from the permit renewal.

Dr. Warren Westgarth told the Commission about the positive efforts of the new direction taken by the Department. He said that the way environmental issues are considered has changed. Dr. Westgarth commented that there is no longer division between environmental pollutants and stressed the need for cross-media development. He said that industry and environmental agencies can be partners if goalposts remain steady.

Bryon Harker, New West Gypsum, talked to the Commission about the new industry of dry wallboard recycling. He said a transfer station has been operating in Portland and that the industry does face competition. Mr. Harker said that instead of being recycling, wallboard was being dumped in landfills. He indicated that when drywall becomes wet, hydrogen sulfide is created. He referred to a Marion County landfill that had been accepting wallboard and that he believed degradation of water quality was occurring due to this disposal practice. Mr. Harker provided the Commission with a video tape about his company's operation.

Laurie Aunan, Oregon State Public Interest Research Group (OSPIRG), spoke to the Commission about the new issue arising around plastics recycling. She said that the plastics industry and others are trying to evade the plastics recycling law (Senate Bill 66).

Ms. Aunan indicated that there is pressure to exempt most plastic packaging from the law or to grant compliance date extensions. Additionally, she said, the American Plastics Council wants to classify the burning of plastics as recycling. She said that the 1991 plastics recycling law clearly requires recycling and burning does not qualify as recycling.

Ms. Aunan provided written testimony to the Commission which is made a part of this meeting record.

Karl Anuta, NEDC, again spoke to the Commission about departmental approaches. He commented on four issues as follows:

1. What and when does the Department require of a permit applicant? For instance, does the Department request information before a permit is issued or is the information requested as a permit condition?
2. The Department should include on public notices the complete compliance history of the source rather than just summarizing enforcement actions related to the applicant.
3. If a permit is issued, there must be a need for a permit, and there should be no need for the "permit as a shield" rule. He also suggested that the Department report to the Commission whenever citizens file the 60-day notice of intent to file a citizen suit.
4. The Department should just say no to certain permits and not develop and issue permits with extensive conditions.

Mr. Anuta also discussed water quality versus quantity issues. He cited the removal of effluent from Bear Creek as an example. He said the Department should advise the Department of Water Resources of streams where there should be no more withdrawals and that there should not be any more water rights granted on water quality limited (WQL) streams.

Director Hansen responded that if an applicant meets established rules, the Department must issue a permit. Conditions in the permit assure compliance. He added that instream water rights do exist on some total maximum daily load (TMDL) streams.

Chair Wessinger asked the Department to investigate the disposal of wallboard and to provide the Commission in the Director's Report with an update of the plastics recycling issues. He asked the Department to discuss the Riverbend Landfill issue.

Chuck Donaldson, HSW Division, spoke to the Commission about Riverbend's permit. He indicated that a permit had been issued in 1987 before legislation was enacted defining sites receiving more than 75,000 tons per year to be regional landfills. Director Hansen indicated that the expansion of the landfill which includes the addition of new cells must meet current requirements for regional landfills.

The Chair then announced that the meeting would recess for lunch. Before the recess, Director Hansen presented Tom Bispham, Administrator of the Regional Operations Division, with a 25-year service pin and thanked him for his efforts and dedication to environmental protection in Oregon.

I. Guest Presentation: Oregon Values and Beliefs Study.

Bill Wyatt, Oregon Business Council (OBC), presented a slide show and presentation about the Oregon Values and Beliefs Study conducted on behalf of the OBC by Decision Sciences, Inc. of Portland. Mr. Wyatt indicated that 1,361 Oregonians participated in the study. Participants in each of Oregon's 36 counties were interviewed face-to-face. Survey topics ranged from public issues to personal perceptions and beliefs. The study divided the state into four regions so that additional analysis could be conducted within each region. The study focused on four categories: personal values, personal activities, government services and community values. The study provides information of value to all levels of government as they develop and implement a broad range of public services, including environmental protection.

J. Information Item: Status Report on Permit Renewal for Pope & Talbot Pulp Mill at Halsey, Oregon.

The Pope & Talbot Pulp Mill in Halsey, Oregon, is a bleached-kraft pulp mill that produces 400 to 600 tons of air dried pulp per day. Wastewater generated during the manufacturing process is treated and discharged to the Willamette River at river mile 147.2. Pope & Talbot was last issued a NPDES permit on December 28, 1987, and the permit expired on December 31, 1992. Application for permit renewal was made by Pope & Talbot on July 14, 1992.

During the public notice period for the Pope & Talbot permit renewal, two informational meetings were held as well as two formal hearings. Fifty (50) people provided testimony during the hearings and over 200 written comments were received. A staff report was prepared that addressed all of the comments received by the Department. The issues of major importance and concern are summarized below:

1. Effluent Characteristics

There is a great deal of concern regarding the color and odor of the discharge. Odor problems have not been documented by the Department but the effluent is noticeable during low river flow due to the color. The Department and Pope & Talbot are nearing agreement on how this issue will be addressed.

2. Plant Expansion

Many of the comments stated that the total suspended solids limits were set too high and that the mill could expand and increase loading to the river without Department review or approval. The Department agrees in part with this concept, and the limits were adjusted downward.

3. Drinking Water Potability

Pope & Talbot discharges treated wastewater to the Willamette River at river mile 147.2. The City of Corvallis withdraws water from the Willamette for drinking water at river mile 134. The City of Corvallis and users of the drinking water system are very concerned about the quality of their drinking water. Since the Health Division and Department have not yet determined whether Pope & Talbot interferes with the drinking water potability of the Willamette River, the issue has been addressed in the proposed draft permit. A study is being required in the proposed permit to assist the Department and Health Division in determining whether this beneficial use is being impacted.

4. Oregon Administrative Rules, Chapter 340

During the informational meetings and formal hearings, there was a great deal of concern raised regarding the way OAR-340 sets different discharge limits for municipal versus industrial facilities. The general view was that both are discharged to the same river, and it is unfair to treat them differently.

There was also concern that the OAR water quality standards were not adequate with regard to color, odor, and nuisance or aesthetic impacts. It was recommended that specific measurable standards be adopted for these parameters.

The Department position regarding the above issues is that they are beyond the scope of this individual permit action. However, they may be appropriate to address in a broader context in a rule making process. The Hearings Officer Report also addresses these issues.

The Commission asked about the mill effluent color. Department staff answered that the color was from lignin. Director Hansen and staff provided the current Commission with a recap of the history of the color issue and past Commission actions regarding color and dioxin. The Commission was shown samples of effluent, river water above and below the outfall, and mixed river/effluent to indicate current conditions and anticipated future color levels after Pope & Talbot installs the oxygen delignification process.

Chair Wessinger asked to revisit the drinking water issue. Mike Downs, Water Quality Administrator, asked staff to explain the formation of trihalomethane (THM). Staff provided the following explanation: As part of the treatment process of the Willamette River water for drinking water users, the water is chlorinated to kill disease causing bacteria. During the chlorination process, organic compounds present in the river water can react with the chlorine and form chlorinated organic compounds, including THM. The City of Corvallis is regulated by the EPA for THM. The city is concerned that the pulp mill discharge may be causing an excessive formation of THM. A requirement has been added to the Pope & Talbot permit to conduct a study aimed at quantifying the amount of THM formation potential caused by the discharge. Study protocol and results will be reviewed by the Department and State Health Division.

The Commission asked if the drinking water issues were directly related to the effluent color. Staff responded that the treatment provided by the city does remove some color from the river water. However, the use of chlorine is not for bleaching out color but to kill unwanted bacteria. The formation of THM is from the reaction of chlorine with organic material. The level of formation potential due to the color alone is not known but should be determined by the required study.

Intended Future Actions

The Department stated that it intends to issue an NPDES permit to Pope & Talbot by mid-June. The Commission asked to be kept informed on this issue and notified when the permit was issued.

K. Commission Member Reports.

There were no Commission member reports.

L. Director's Report.

- **Ontario Asphalt:** Chair Wessinger has given DEQ the authorization to file a complaint in Malheur County Circuit Court against Ontario Asphalt & Concrete to compel compliance with OAC's air contaminant discharge permit (ACDP). The statutory authority for such a court action requires the EQC to initiate or endorse the action. OAC has a long history of violations of the three ACDPs issued to the facility. DEQ has taken numerous administrative enforcement actions against OAC since 1985, including eight civil penalty assessments. Based on this chronic noncompliance, DEQ is looking to judicial enforcement alternatives to force OAC to comply with its permits.
- **Tillamook National Estuary Program:** DEQ is receiving a \$150,000 grant from the EPA to start up the Tillamook National Estuary Program. The initial funds, authorized June 3, will be used to set up the office in Tillamook, hire staff, develop a project work plan that will include a public involvement process and data management and set up committee structure. The EPA program offers funding and other assistance to states and local governments to develop long-range plans for major estuaries. The EPA will contribute \$1.5 to \$2.5 million over the full four-year project.
- **Longview Oil Spill:** On June 3, a Japanese cargo vessel anchored at Longview, Washington, spilled approximately 3,000 gallons of #4 diesel oil into the Columbia River during fueling. A valve on the cargo ship had inadvertently been left open. The Coast Guard took charge of the spill and contracted with Riedel to begin cleanup. DEQ and Washington's Department of Ecology provided technical assistance. Although the oil travelled more than 15 miles downstream to the estuary, the coordinated efforts of state and federal agencies kept the fuel primarily in the shipping channel. Diesel did reach some Washington and Oregon beaches, but was diverted from sensitive ecological and wildlife areas such as the Lewis and Clark National Wildlife Refuge. No wildlife deaths have been reported; the cleanup continues.
- **Pollution Prevention and Technical Assistance Project (Ross & Assoc.):** DEQ is in the midst of a project to identify and interrelate current DEQ regulatory, pollution prevention and technical assistance efforts, and examine opportunities for DEQ to enhance its capacity to promote pollution prevention and deliver technical assistance in a more effective manner. One of the more challenging features of this project is to establish a common pollution prevention language that crosses all programs. To date, the project staff has inventoried current technical assistance activities and pollution prevention "signals" (e.g., bans,

mandates, etc.) within the agency and have developed an overlay of DEQ regulatory initiatives to illustrate the interrelationship of DEQ programs with specific pollution sources and problems in the state. The next step is focused research to develop recommendations for enhancing pollution prevention and improving coordination between programs. The project is expected to be completed by October.

- **Environmental Equity:** DEQ is beginning a project with the State Health Division to address the issue of "environmental equity." Environmental equity means that no group receives less environmental protection from the state than another group. There are regulations in place to prevent deliberate discrimination. The goal is to find out if unwittingly discrimination against certain groups is occurring in regulatory actions. For example, the standards for fish consumption are based on the average intake for the entire United States population. However, Native Americans consume many times the national average and are thus more susceptible to the contaminants. The Department will examine this as well as other potential problems in air, water and land issues. Community leaders will be involved, and an advisory committee will be formed within the next few months.
- **New Division Administrator:** Bruce Hammon has been appointed Division Administrator for the Western Region. Bruce is currently regional manager of the Eastern Region and has worked in various locations around the state during his 13-plus years with DEQ. He brings a wealth of experience in all of our environmental programs, a common sense approach to dealing thoroughly and effectively with a host of environmental problems and an open and responsive management style. Bruce will make the move from Pendleton in the next month or so.
- **Hearing Authorizations:**

Hazardous Waste Disposal Facilities: The proposed rulemaking includes three minor and noncontroversial items:

1. Change class three permit modification decisions at disposal facilities from the Commission to the Director or his designee.
2. Clarify that disposal facilities may use other financial assurance mechanisms for closure and post-closure care.

3. Adopt the federal Corrective Action Management Unit rule that will allow for expedited and efficient remediation at RCRA hazardous waste sites.

An advisory committee was involved in development of this proposed rule.

M. Status Report on Legislative Proposals.

Director Hansen reported on the Department's budget. He indicated that the budget had passed out of the House and that most public hearings had occurred before the Senate (Ways and Means Human Resources Subcommittee). He said that the division administrators' presentations had helped the budget move quickly.

Director Hansen said that the environmental crimes bill had passed the Senate and will go to the House for approval. Most other DEQ bills are moving. He indicated that the status of the tax credit and wellhead protection bills (both are dead) had not changed. Director Hansen spoke briefly about Senate Bill 66 (pyrolysis). He said that there still existed a question on the interpretation of the law; that is, whether incineration without oxygen with a byproduct of crude oil was material recovery or recycling.

There was no further business, and the meeting adjourned at 3:05 p.m.

Environmental Quality Commission

Rule Adoption Item

Action Item

Information Item

Agenda Item B
July 23, 1993 Meeting

Title:

Approval of Tax Credit Applications

Summary:

Attachment A of the staff report presents the Department's evaluation and recommendation for certification of 46 tax credit applications with a total facility cost of \$5,366,747.80, as follows:

- 16 Air Quality facilities with a total facility cost of \$2,413,556.38.
- 4 Coolant recycling machines totaling \$11,492.44.
- 7 Field Burning related applications recommended by the Department of Agriculture with a total facility cost of \$489,856.77.
- 1 Plastics recycling facility with a facility cost of \$6,270.21.
- 1 Solid Waste recovery system costing \$5,112.00.
- 1 Solid Waste Landfill related application with a total claimed facility cost of \$1,052,041.00.
- 4 Water Quality facilities with a total facility cost of \$145,010.
- 12 Underground Storage Tank facilities with a total facility cost of \$1,243,409.00.


Three of the applications have facility costs exceeding \$250,000; one is a Solid Waste Landfill facility, the other two are Air Quality related. These applications have been reviewed by independent contractors selected by the Department. The contractor review statements are provided with the application review reports. The landfill application, TC 3949 Finley Buttes Corporation, was received by the Department on December 30, 1992, and was therefore evaluated under the rules that pertained to solid waste landfill facilities prior to February 1, 1993, the effective date of the new approach to evaluating these types of facilities.

Attachment A also includes a proposal to revoke an existing tax credit, # 2953, currently held by James D. Bao and Thuy Thu Luong and to transfer the remaining value of the credit to D & D Gas, Inc., the current owner of the facility. Also, Smurfit Newsprint Corporation has requested an extension of time to file a tax credit application.

Department Recommendation:

- 1) Approve issuance of tax credit certificates for 46 applications as presented in Attachment A of the staff report.
- 2) Approve the transfer of pollution control tax credit certificate 2953 from James D. Bao and Thuy Thu Luong to D & D Gas, Inc.
- 3) Approve the request by Smurfit Newsprint Corporation for an extension of time to file a tax credit application.


Report Author


Division Administrator


Director

July 5, 1993

*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: July 6, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director *FH*
Subject: Agenda Item B, July 23, 1993 EQC Meetings
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 Number	Applicant	Description
TC 3613	Bonbright Oil Company	Water pollution control facility consisting of spill and overfill prevention devices, leak detectors, an oil/water separator and Stage II vapor recovery piping.
TC 3926	Sabroso Company	Water pollution control facility consisting of a concrete pad with catch basin, an oil separator tank and associated plumbing in an enclosed building
TC 3928	Chevron USA, Inc.	Four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment, overfill prevention, leak detection and Stage II vapor recovery piping.

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

Application Number	Applicant	Description
TC 3929	Chevron USA, Inc.	Four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment, overfill prevention, leak detection and Stage II vapor recovery piping.
TC 3930	Chevron USA, Inc.	Four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment, overfill prevention, leak detection and Stage II vapor recovery piping.
TC 3931	Chevron USA, Inc.	Four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment, overfill prevention, leak detection and Stage II vapor recovery piping.
TC 3932	Chevron USA, Inc.	Four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment, overfill prevention, leak detection and Stage II vapor recovery piping.
TC 3962	Darigold, Inc.	Water pollution control facility to treat and monitor the pH of its process wastewater.
TC 3967	Northern Engineering & Plastics Corp.	General Hydraulics Model 6030 baler for the reclamation of plastic products.
TC 4004	Carl Bivens Automotive	Automobile air conditioner coolant recovery and recycling equipment.
TC 4013	Gresham Transfer Company	Solid waste pollution control facility consisting of a vacuum and storage hopper system to recover and store dry commodity residue.

Application Number	Applicant	Description
TC 4026	Leathers Oil Company	Monitoring wells and an oil/water separator.
TC 4027	Leather Oil Company	Monitoring wells.
TC 4030	RKM, Inc.	22'x 132'x 144' pole construction, metal clad grass seed straw storage building.
TC 4031	Chevron USA, Inc.	Stage II vapor recovery balance type system consisting of OPW 211V nozzles, hoses, retrofit kits, breakaway safety valves, piping and miscellaneous equipment.
TC 4036	Chevron USA, Inc.	Four double wall fiberglass tanks and piping, spill containment basins, tank monitor, turbine leak detectors, overflow alarm, automatic shutoff valves, sumps and Stage II vapor recovery piping.
TC 4037	Chevron USA, Inc.	Stage II vapor recovery balance type system consisting of OPW 211V nozzles, hoses, adapters and miscellaneous equipment.
TC 4053	Roger Neuschwander	John Deere flail mower, model 27 (air pollution control equipment).
TC 4054	J. C. Jones Oil Company, Inc.	Epoxy tank lining and spill containment basins for three underground storage tanks.
TC 4055	J. C. Jones Oil Company, Inc.	Secondary containment for seven aboveground storage tanks.
TC 4058	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.

Application Number	Applicant	Description
TC 4059	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4060	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of OPW nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4061	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4062	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4063	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4064	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4065	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves, piping and miscellaneous equipment.

Application Number	Applicant	Description
TC 4070	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4071	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4072	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4073	Atlantic Richfield Company	Stage II vapor recovery balance type system consisting of Emco Wheaton nozzles, hoses, adapters, breakaway safety valves and miscellaneous equipment.
TC 4075	Atlantic Richfield Company	Four double wall fiberglass tanks and piping, spill containment basins, tank monitor, overflow alarm, sumps, and automatic shutoff valves at a newly constructed business.
TC 4078	Atlantic Richfield Company	Four double wall fiberglass tanks and piping, spill containment basins, tank monitor, sumps and automatic shutoff valves.
TC 4080	Floyd Smith	22'x 80'x 300 clear span, steel construction, metal clad grass seed straw storage building.
TC 4081	Edward Ferschweiler	22'x 60'x 100 stick-on-stud, metal clad grass seed straw storage building.

Application Number	Applicant	Description
TC 4084	Pacific Detroit Diesel-Allison, Inc.	Water pollution control facility consisting of a truck washing/degreasing pad with a zero-discharge wash water recycling system.
TC 4085	J.S.G., Inc.	GK Spray Buggy (air pollution control equipment).
TC 4086	Roger A. Ruckert	77 acre perforated pipe drainage tile installation (air pollution control facility).
TC 4087	Grunder Equipment Repair	Vehicle air conditioner coolant recovery and recycling equipment.
TC 4090	Sayer Farms	22'x 104'x 216' pole construction, metal clad grass seed straw storage building.
TC 4094	Chandler Enterprises, Inc.	Automobile air conditioner coolant recovery and recycling equipment.
TC 4096	Portland Service Station Supply	Air conditioner/refrigeration coolant recovery and recycling equipment.

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

Application Number	Applicant	Description
TC 3940	Precision Castparts Corp.	Air pollution control facility to control the emissions of ethyl-alcohol and glycol ethers consisting of a Reeco model VF-C thermal oxidizer, baghouse system modifications and support equipment.

Application Number	Applicant	Description
TC 3942	Precision Castparts Corp.	Air pollution control facility to control emissions of ethyl-alcohol and glycol ethers consisting of a Reeco model VF-C thermal oxidizer, baghouse system modifications and support equipment.
TC 3949	Finley Buttes Landfill Company	Solid waste pollution control facility consisting of a landfill liner and leachate collection system for one landfill cell.

Background

In addition to the approval of tax credit applications, the staff report includes a request to transfer certificate number 2953. Certificate number 2953 was issued by the Commission on December 11, 1992 to James D. Bao and Thuy T. Luong for a facility located at 6010 NE Killingsworth, Portland. On April 30, 1992, the property was sold to Stephen C. Allen, current owner of the property, more than a month before the receipt of the tax credit application by the DEQ on June 16, 1992. In as much as the recipient of the credit has not operated the facility for the purpose of preventing, controlling or reducing pollution since April 30, 1992, the date of the transfer of the property, we request that certificate 2953 be revoked and that a new certificate be issued to D & D Corporation, the management corporation designated by Mr. Allen to receive the tax credit certificate.

Also, Smurfit Newsprint Corporation has requested an extension to file a tax credit application. An explanation by Smurfit of the basis for the request is included in the staff report. The Department recommends that a six month extension be granted to the applicant.

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.
- o Proposed July 23, 1993 Pollution Control Tax Credit Totals:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>No. of Certificates</u>
Air Quality	\$ 2,413,556	16
CFC	11,492	4
Field Burning	489,857	7
Hazardous Waste	0	0
Noise	0	0
Plastics	6,270	1
Solid Waste - Recycling	5,112	1
Solid Waste- Landfills	1,052,041	1
Water Quality	145,010	4
Underground Storage Tanks	1,243,409	12
TOTAL	\$ 5,366,747	46

o 1993 Calendar Year Totals Through June 10, 1993:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>No. of Certificates</u>
Air Quality	\$ 835,198	6
CFC	71,787	25
Field Burning	1,742,581	21
Hazardous Waste	0	0
Noise	0	0
Plastics	6,660	1
Solid Waste - Recycling	1,384,399	9
Solid Waste - Landfills	4,964,981	3
Water Quality	19,124,202	11
Underground Storage Tanks	995,430	10
	<u>TOTAL \$ 29,125,238</u>	<u>86</u>

* These amounts represent the total facility costs. To calculate the actual dollars that can be applied as credit, the total facility cost is multiplied by the determined percent allocable of which the net credit is 50 percent of that amount.

Recommendation for Commission Action

It is recommended that the Commission approve certification for the tax credit applications as presented in Attachment A of the Department Staff Report, which includes field burning related applications recommended by the Department of Agriculture. The Department also recommends approval of the transfer of certificate number 2953 from James D. Bao and Thuy Thu Luong to D.& D. Gas, Inc. and the request by Smurfit Newsprint Corporation for an extension of time to file a tax credit application.

Intended Followup Actions

Notify applicants of Environmental Quality Commission actions.

Attachments

- A. Pollution Control Tax Credit Application Review Reports.

Memo To: Environmental Quality Commission
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July 23, 1993 Meeting
Page 10

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:

Jeff Sarris

Division:

Michael Pours

Report Prepared By: Charles Bianchi

Phone: 229-6149

Date Prepared: July 5, 1993

Charles Bianchi
TCJULY.EQC
July 5, 1993

State of Oregon
Department of Environmental Quality

Transfer of Pollution Control Facility Certificate

1. Certificate to be transferred from:

James D. Bao & Thuy Thu Luong
dba Station Mart
Star Route Box 834
Forest Grove, Oregon 97116

Certificate to be transferred to:

D & D Gas, Inc.
No. 10 Sixth Street
Suite 207
Astoria, Oregon 97103

2. Transfer Request

D & D Gas, Inc. requests that the Environmental Quality Commission approve the transfer of the certificate identified below from James D. Bao & Thuy Thu Luong to D & D Gas, Inc. The transfer is necessary because Mr. Stephen C. Allen, on behalf of D & D Gas, Inc., purchased the gas station and convenience store on which the pollution control facility is located, 6010 N.E. Killingsworth, Portland, from Mr. Bao and Ms. Luong on April 30, 1992. The pollution control facility certificate was issued to Mr. Bao and Ms. Luong on December 11, 1992.

3. Description of Certificate (Copy Attached)

<u>Certificate</u>	<u>Issuance Date</u>	<u>Certified Cost</u>
2953	12/11/92	\$85,443.00

80% allocable to pollution control.

4. Summation

Due to the sale of the claimed facility, D & D Gas, Inc. requests the Environmental Quality Commission to transfer tax credit certificate 2953 from James D Bao and Thuy Thu Luong dba Station Mart to D & D Gas, Inc..

5. Director's Recommendation

The Director recommends that the Environmental Quality Commission approve the transfer of the above identified certificate. The transfer is valid only for the remaining available tax relief for the certificate.

Charles Bianchi
229-6149
July 22, 1993

STATE OF OREGON
 DEPARTMENT OF ENVIRONMENTAL QUALITY
POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: 2953
 Date of Issue: 12/11/92
 Application No: T-3807

ISSUED TO: Station Mart
 Star Route Box 834
 Forest Grove, OR 97116

LOCATION OF POLLUTION CONTROL FACILITY:
 6010 NE Killingsworth
 Portland, OR

ATTENTION: James Bao

Fac. 8835

AS: LESSEE OWNER INDIV PARTNER CORP NON-PROFIT CO-OP

DESCRIPTION OF POLLUTION CONTROL FACILITY: Installation of three STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, monitoring wells, Stage I vapor recovery and automatic shutoff valves.

TYPE OF POLLUTION CONTROL FACILITY:
 AIR NOISE WATER SOLID WASTE HAZARDOUS WASTE USED OIL

DATE FACILITY COMPLETED: 9/10/90 PLACED INTO OPERATION: 9/10/90

ACTUAL COST OF POLLUTION CONTROL FACILITY: \$85,443.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 80%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.185, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statute of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed: William W. Wessinger (William W. Wessinger, Chairman)

Approved by the Environmental Quality Commission on the 11th day of December, 1992.

CERTIFICATE TRANSFER

From:

To:

Signed: _____ (William W. Wessinger, Chairman)

Approved by the Environmental Quality Commission on the ___ day of _____, 1992.



SMURFIT NEWSPRINT CORPORATION

DEPARTMENT OF ENVIRONMENTAL QUALITY
 Air Quality Control
 Date Received: 6/30/93
 Acknowledged By: J.M.

AN AFFILIATE OF JEFFERSON SMURFIT CORPORATION

427 Main Street
 Oregon City, OR 97045
 Telephone: 503-650-4211

June 29, 1993

Mr. Brian Fields
 Department of Environmental Quality
 811 SW Sixth Avenue
 Portland, Oregon 97204

Ref: NC #2532

Dear Mr. Fields:

An application for tax credit certification has been submitted for an electrostatic precipitator at our Newberg paper mill. Although submitted within two years of completion (early July, 1991), it must also be deemed complete by the DEQ within that period to comply with tax credit rules. Because there may not be sufficient time remaining for staff to determine completeness, you suggested that my June 3rd request for an extension of the two-year period should not be withdrawn (as suggested in my 6/18 application cover letter) but considered in effect to preserve the tax credit approval process for this facility. Please consider it in effect.

You indicated that in case the extension is needed, an explanation pursuant to OAR 340-16-020 (c) as to why the two-year application period could not be complied with would be needed to obtain EQC approval. That explanation follows:

As indicated in the application, the precipitator performance is outstanding in terms of removing hog fuel boiler particulate from flue gas -- it reduced emissions to less than 10% of what they had been with a wet scrubber in place. However, exceedences of plume opacity have occurred ever since unit start-up due to automatic shutdowns triggered when the flue gas oxygen concentration approaches combustion levels. The frequency of opacity exceedence has been reduced dramatically over the two-year period but is not zero.

In late 1992 a telephone inquiry was made to the DEQ by me to determine tax credit eligibility with the opacity exceedence problem. The response was that a unit in violation would not be eligible (November 9, 1992, B. Fields of DEQ) but that a one-year extension of the application time window could be requested. Smurfit decided to proceed with cost certification by an outside accounting firm early in 1992 and to continue efforts to reduce the occurrence frequency of the opacity exceedences. Our plan was to request the extension if we did not reach acceptable performance within the two-year period.

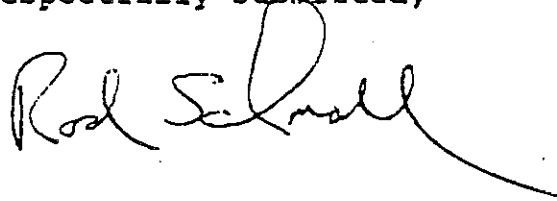
DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Control
Date Received: 6/30/93
Acknowledged By: JM

Because some exceedences were still occurring as June 1993 approached, we believed we were still not eligible for tax credit approval and on June 3rd requested an extension. Upon receipt of the request, the DEQ apprised us that based on recent compiled frequency data analyzed by the Salem DEQ office, the agency considers the unit to be in compliance pursuant to the excess emission rules (OAR 340-20-350 to 380).

Having a declaration of compliance, we decided to submit an application rather than seek an extension. Because the submittal was close to the end of the two-year period, satisfaction of the timeliness requirements (which include a DEQ declaration of its being complete) is jeopardized.

We hope this explains the rather simple reasons for delaying the application submittal. Please call if you have questions.

Respectfully submitted,



R.A. Schmall, Corporate
Environmental & Energy Services

cc: C. Bianchi
F. Skirvin

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bonbright Oil Company
PO Box 98
Pendleton, OR 97801

The applicant owns and operates a truck stop and service station at Highway I-84 and Exit 216.

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 piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill and overflow prevention devices, leak detection, an oil/water separator and Stage II vapor recovery piping.

Claimed facility cost \$ 43,032
(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 1, 1990 and placed into operation on August 23, 1990. The application for certification was submitted to the Department on August 16, 1991, within two years of the completion date. The processing of the application was delayed pending payment of permit fees for six facilities owned by Bonbright Oil.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is 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 eight bare steel tanks with no corrosion protection, no spill and overflow prevention or leak detection equipment.

The applicant installed:

- 1) For spill and overflow prevention - Spill containment basins, float vent valves and overflow alarms.
- 2) For leak detection - Tank monitoring system, line leak detectors and turbine leak detectors.

The applicant also installed Stage II vapor recovery piping.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found.

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 (\$43,032) 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 indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of pollution control.

- 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 or 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
Spill & Overfill Prevention:				
Spill containment basins	\$ 1,778	100	%	\$ 1,778
Float vent valves	54	100		54
Overfill alarms	424	100		424
Leak Detection:				
Tank monitoring system	7,980	90	(1)	7,182
Line leak detectors	851	100		851
Turbine leak detectors	253	100		253
Labor & materials	31,692	100		31,692
Total	\$ 43,032	98	%	\$ 42,234

- (2) The applicant's cost for a tank monitor 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 sole purpose of the claimed facility is 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 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$43,032 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3613.

Mary Lou Perry:ew

(503) 229-5731

June 15, 1993

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

1. Applicant

Sabroso Company
690 South Grape
Medford, OR 97501

The applicant owns and operates a fruit packing company in Medford, Oregon.

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

2. Description of Facility

The claimed facility consists of a concrete pad with catch basin, oil separator tank and associated plumbing system in an enclosed building.

Claimed Facility Cost: \$44,284
(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 statutory deadline in that construction of the facility was substantially completed on July 31, 1992, and the application for certification was submitted to the Department on December 14, 1992, within 2 years of substantial completion of the facility. The application was found to be complete on April 14, 1993

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 City of Medford to reduce a substantial quantity of water pollution. This reduction is accomplished by the use of treatment works for industrial waste as defined in ORS 468B.005.

The City of Medford is required to administer a pretreatment program as a condition of its National Pollutant Discharge Elimination System (NPDES) permit issued by the Department. The NPDES permit program was

established to achieve goals outlined in the federal Clean Water Act (CWA). Two primary goals of the CWA were to eliminate the discharge of pollutants by 1985 and achieve interim water quality level that would protect fish, shellfish and wildlife and to provide recreation in and on the water wherever attainable. The City of Medford pretreatment program as required in its NPDES permit has been approved by the Department.

Wastewater generated from washing of forklifts is discharged into a solid waste pit and then into an oil/water separator. The treated wastewater is discharged to the sanitary sewer system of the City of Medford. The discharge complies with the pretreatment requirements of the City of Medford.

The collected solids and oil are picked up by an independent oil recycler.

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 revenue generated from the facility, therefore, no return on the investment

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

The applicant has not identified and is not aware of alternative methods for achieving the same objective. It is the Department's determination that the proposed facility is an acceptable method for achieving the pollution control objective.

- 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 prevent a substantial quantity of water pollution and accomplishes this purpose by the disposal of 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 \$44,284 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3926.

WJP:bkb
x:\wjp\Sabroso.tcr
William J. Perry
(503) 378-8240
April 14, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc
2410 Camino Ramon
San Ramon, CA 94583

The applicant owns and operates a retail service station at 7600 Crater Lake Hwy., White City OR, facility no. 1274.

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 piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment, overflow prevention, leak detection and Stage II vapor recovery piping.

Claimed facility cost \$ 184,869 *
(Accountant's certification was provided)

* The Department concludes that the eligible facility cost for the project is \$168,246. This represents a difference of \$16,623 from the applicant's claimed cost of \$184,869 due to a determination by the Department that the cost of the breakaway valves was incorrectly listed by the applicant.

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 9, 1991 and placed into operation on November 10, 1991. The application for certification was submitted to the Department on December 16, 1992, within two years of the completion date. The application was determined complete and filed on April 30, 1993.

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. These tanks were removed.

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall fiberglass tanks and double wall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, overflow alarm and automatic shutoff valves.
- 3) For leak detection - In tank gauges and turbine leak detectors.

The applicant also installed 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 indicated that no 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 or 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.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>		<u>Amount Allocable</u>
Corrosion Protection:				
Double wall fiberglass tanks & fiberglass piping	\$ 52,893	69	% (1)	\$ 36,496
Spill & Overfill Prevention:				
Spill containment basins	1,408	100		1,408
Sumps	13,400	100		13,400
Automatic shutoff valves	2,824	100		2,824
Leak Detection:				
In tank gauges (includes overfill alarm)	8,500	90	(2)	7,650
Turbine leak detectors	2,570	100		2,570
Stage II vapor recovery	5,100	100		5,100
Labor & material	81,551	100		81,551
Total	\$ 168,246	90	%	\$ 150,999

- (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 \$52,893 and the bare steel system is \$16,285, the resulting portion of the eligible tank and piping cost allocable to pollution control is 69%.
- (2) The applicant's cost for a tank monitor 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 90%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$168,246 with 90% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3928.

Barbara Anderson:ew
(503) 229-5870
June 2, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
2410 Camino Ramon
San Ramon, CA 94583

The applicant owns and operates a service station at 527 SE 82nd, Portland OR 97216, facility no. 1323.

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 and Stage II vapor recovery piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, overfill prevention and leak detection.

Claimed facility cost \$ 149,186 *
(Accountant's certification was provided)

Percent allocable to pollution control 100%

* The Department concludes that the eligible facility cost for the project is \$147,586. This represents a difference of \$4,600 from the applicant's claimed cost of \$149,186 due to a determination by the Department that the cost of gas furnace conversion 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 May 31, 1991 and placed into operation on June 1, 1991. The application for certification was submitted to the Department on December 16, 1992, within two years of the completion date. The application was determined complete and filed on April 30, 1993.

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 bare steel underground storage tanks with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass underground storage tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins and float vent valves.
- 3) For leak detection - In tank gauges and turbine leak detectors.

The applicant also installed Stage I vapor recovery equipment and Stage II vapor recovery piping.

The applicant reported that soil testing was performed at the time of tank removal and contamination was found. It has been cleaned up.

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 indicated that no 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 or 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
Corrosion Protection:				
Fiberglass tanks & piping	\$ 56,324	73	% (1)	\$ 41,117
Spill & Overfill Prevention:				
Spill containment basins	1,408	100		1,408
Float vent valves	208	100		208
Leak Detection:				
In tank gauges	8,500	90	(2)	7,650
Turbine leak detectors	2,570	100		2,570
Labor & materials (includes Stage I & Stage II)	<u>75,576</u>	<u>100</u>		<u>75,576</u>
Total	\$ 147,586	87	%	\$ 128,529

- (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 \$56,324 and the bare steel system is \$15,489, the resulting portion of the eligible tank and piping cost allocable to pollution control is 73%.
- (2) The applicant's cost for a tank monitor 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 \$147,586 with 87% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3929.

Mary Lou Perry:ew
(503) 229-5731
May 12, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
2410 Camino Ramon
San Ramon, CA 94583

The applicant owns and operates a retail service station at 9150 SE Division, Portland OR, facility no. 1159.

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 piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four double wall fiberglass tanks and piping, spill containment basins, tank monitor, turbine leak detectors, overfill alarm, sumps, automatic shutoff valves and Stage II vapor recovery piping.

Claimed facility cost \$ 180,869
(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 2, 1991 and placed into operation on June 3, 1991. The application for certification was submitted to the Department on December 16, 1992, within two years of the completion date. The application was determined complete and filed on May 27, 1993.

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 Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall 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 monitor and turbine leak detectors.

The applicant also installed 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.

The Department concludes that the costs claimed by the applicant (\$180,869) 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 indicated that no 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 or 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.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>		<u>Amount Allocable</u>
Corrosion Protection:				
Double wall fiberglass tanks & piping	\$ 50,952	48	% (1)	\$ 24,457
Spill & Overfill Prevention:				
Spill containment basins	1,408	100		1,408
Sumps	6,183	100		6,183
Automatic shutoff valves	3,440	100		3,440
Leak Detection:				
Tank monitor (includes overfill alarm)	8,500	90	(2)	7,650
Turbine leak detectors	2,570	100		2,570
Stage II vapor recovery	3,200	100		3,200
Labor & materials	<u>104,616</u>	<u>100</u>		<u>104,616</u>
Total	\$ 180,869	85	%	\$ 153,524

- (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 \$50,952 and the bare steel system is \$24,629, the resulting portion of the eligible tank and piping cost allocable to pollution control is 48%.

- (2) The applicant's cost for a tank monitor 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 85%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$180,869 with 85% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3930.

Barbara Anderson:ew
(503) 229-5870
May 27, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc
2410 Camino Ramon
San Ramon, CA 94583

The applicant owns and operates a retail service station at 1260 NW Frontage Rd., Troutdale OR, facility no. 1064.

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 piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four double wall fiberglass clad underground storage tanks, double wall fiberglass piping, spill containment, overfill prevention, leak detection and Stage II vapor recovery piping.

Claimed facility cost \$ 146,517
(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 31, 1991 and placed into operation on August 1, 1991. The application for certification was submitted to the Department on December 16, 1992, within two years of the completion date. The application was determined complete and filed on April 30, 1993.

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 established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall fiberglass clad steel tanks and double wall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, overfill alarm and automatic shutoff valves.
- 3) For leak detection - Tank monitor and turbine leak detectors.

The applicant also installed 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.

The Department concludes that the costs claimed by the applicant (\$146,517) 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 indicated that no 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 or 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
Corrosion Protection:				
Double wall fiberglass clad tanks & fiberglass piping	\$ 56,839	51	% (1)	\$ 28,988
Spill & Overfill Prevention:				
Spill containment basins	1,400	100		1,400
Sumps	7,229	100		7,229
Automatic shutoff valves	3,440	100		3,440
Leak Detection:				
Tank monitor (includes overfill alarm)	8,500	90	(2)	7,650
Turbine leak detectors	2,570	100		2,570
Stage II vapor recovery	2,600	100		2,600
Labor & material	<u>63,939</u>	<u>100</u>		<u>63,939</u>
Total	\$ 146,517	80	%	\$ 117,816

- (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 \$56,839 and the bare steel system is \$27,732, the resulting portion of the eligible tank and piping cost allocable to pollution control is 51%.

- (2) The applicant's cost for a tank monitor 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 80%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$146,517 with 80% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3931.

Barbara Anderson:ew
(503) 229-5870
June 2, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
2410 Camino Ramon
San Ramon, CA 94583

The applicant owns and operates a service station at 4224 NE 122 Ave., Portland OR 97230, facility no. 1002.

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 and Stage II vapor recovery piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four double wall fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, overfill prevention and leak detection.

Claimed facility cost \$ 150,140
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

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

The facility was substantially completed on August 31, 1992 and placed into operation on September 1, 1992. The application for certification was submitted to the Department on December 16, 1992, within two years of the completion date. The application was determined complete and filed on April 30, 1993.

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 bare steel underground storage tanks with no corrosion protection and no spill and overfill prevention or leak detection equipment. These tanks were removed.

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Fiberglass tanks & piping.
- 2) For spill and overfill prevention - Spill containment basins and float vent valves.
- 3) For leak detection - In tank gauges and turbine leak detectors.

The applicant also installed Stage I vapor recovery equipment and Stage II vapor recovery piping.

The applicant reported that soil testing was performed at the time of tank removal and contamination was found. Cleanup is ongoing.

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 all of the costs claimed by the applicant (\$150,140) 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 indicated that no 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 or 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
Corrosion Protection:				
Fiberglass tanks & piping	\$ 53,883	71	% (1)	\$ 38,257
Spill & Overfill Prevention:				
Spill containment basins	1,609	100		1,609
Float vent valves	284	100		284
Leak Detection:				
In tank gauges	8,500	90	(2)	7,650
Turbine leak detectors	2,570	100		2,570
Labor & materials (Includes Stage I & Stage II vapor recovery piping)	83,294	100		83,294
Total	\$ 150,140	89	%	\$ 133,664

- (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 \$53,883 and the bare steel system is \$15,473, the resulting portion of the eligible tank and piping cost allocable to pollution control is 71%.
- (2) The applicant's cost for a tank monitor 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 \$150,140 with 89% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3932.

Mary Lou Perry:ew
(503) 229-5731
May 14, 1993

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

1. Applicant

Darigold, Inc.
Consumer Products Division
635 Elliott Ave. W.
Seattle, WA. 98119

The applicant owns and operates a facility that processes and distributes milk and cultured milk products in Portland, Oregon.

An application was made for a tax credit for a water pollution control facility.

2. Description of Facility

The applicant is requesting a tax credit for a water pollution control system designed to treat and monitor the pH of its process wastewater. The estimated useful life of the system is 10 years.

Darigold discharges process wastewater containing pollutants into the City of Portland's sanitary sewer system. The discharge of this wastewater is regulated under Wastewater Discharge Permit Number 405-002, issued by the City in June 1990 to Darigold. Under Schedule D of the permit, the applicant has been required to install a continuous pH monitoring system so that the wastewater can be pretreated for adjustment of the pH level prior to discharge into the sanitary sewer.

Since the Darigold plant covers a large area and includes several process wastewater discharges from different production areas, the pH monitoring system for the facility is somewhat complex. In the first part of the pH monitoring system, the floor drains from the cottage cheese kitchen, the milk processing plant, the ice cream production area, and wastewater from the CIP (clean in place) systems in the plant basement and receiving areas are piped into a bulk

MAY 20 1993

surge tank located in the plant basement. The bulk surge tank serves only as a collection point for the process wastewater, and no pH adjustments are made in the tank. Next, the wastewater is pumped from the bulk surge tank into the bulk storage tank located outside the production area.

The bulk storage tank has a control cabinet located at its easterly end with a pH controller, a chart recorder, a circulating pump, a pH probe, a level control, an electrically controlled dump valve, and a manually controllable gate valve. In addition, the storage tank has a manually controlled chemical buffer treatment pump located at its westerly end. If necessary, the controls on the bulk tank can be operated manually for proper pH adjustment.

The bulk storage tank receives and treats a large quantity of Darigold's process wastewater. The contents of the tank are monitored automatically by the pH controller so that the wastewater is released from the tank when the pH is determined to be within acceptable limits. The pH controller automatically closes the drain valve on the tank when the pH is not measured at an acceptable limit, or the level of wastewater in the tank is too low. Buffers, stored in 275-gallon portable tanks, are added manually to the process wastewater to adjust the pH when needed prior to discharge from the bulk storage tank into the collection system.

The second part of the pH monitoring system includes manual adjustment of wastewaters prior to their discharge into the sanitary sewer. Floor drains collect the wastewater discharged from process and/or washing activities from the bottling area, the receiving area, the silo room, the boiler room, and the plant basement. These drains are directly connected to the plant collection system. Darigold employees check and manually adjust the pH of these wastewaters before their release into the floor drain. Further, an oil/water separator has been installed at the end of the empty case dock at the plant to treat wastewaters generated by truck washing activities. The pH of the wastewater leaving the oil/water separator is checked and manually adjusted prior to discharge into the collection system.

The third part of the Darigold pH monitoring and treatment system includes the pH monitoring station that is located adjacent to the bulk storage tank. This station continuously monitors the pH of all of the wastewater leaving the plant's collection system and entering the City's sanitary sewer. Samples of the wastewater are pumped

to the station and monitored for limits. The pH station contains two chart recorders that record pH on both a 24-hour and a monthly basis, and a pH controller that provides a continuous reading of the pH and has an alarm set point.

The pH monitoring station continuously samples the wastewater discharged from Darigold, and an alarm is sounded throughout the plant when the pH is not within acceptable levels. Immediate action by plant personnel is required to correct any problem detected by the monitoring system.

The claimed pollution control facility consists of the following equipment:

- (1) the pH monitoring station, constructed from a wood storage shed package, to contain the monitoring equipment;
- (2) two chemical pumps located at the bulk storage tank for circulation and buffer addition;
- (3) two pH controllers, with one located at the pH monitoring station and the other located at the bulk storage tank;
- (4) three pH recorders, with two (a 24-hour and a monthly) located at the pH monitoring station and the other located at the bulk storage tank;
- (5) a submersible pump that pumps wastewater from the sanitary sewer into the pH monitoring station;
- (6) a stainless steel trench that connects the cottage cheese kitchen with the floor drain system and ultimately the bulk surge tank;
- (7) a concrete containment wall built around the bulk storage tank for containment and support;
- (8) two portable storage tanks, each with a capacity for holding 275 gallons, for containment of pH buffers; and
- (9) the oil/water separator.

Claimed Facility Cost: \$46,591.00

An Accountant's Certification was provided to support the claimed facility cost.

3. Procedural Requirements

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

The facility met statutory deadlines in that construction of the facility was substantially completed on July 31, 1992, and the application for certification was found to be complete on May 19, 1993, 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 City of Portland is required to administer a pretreatment program to satisfy conditions of its National Pollutant Discharge Elimination System (NPDES) permit, which is issued by the Department. The NPDES program was established to achieve goals outlined in the federal Clean Water Act. The two primary goals outlined in the Act were the elimination of pollutant discharges by 1985 and the achievement of an interim water quality level that would protect fish, shellfish, and wildlife while providing for recreation in and on the water wherever attainable. Towards satisfying these goals, the Department has established a series of water quality standards outlined in Division 41 of Chapter 340 of the OAR. Specifically, OAR 340-41-445 (2)(d) states that pH values shall not fall outside the ranges of 6.5 to 8.5 within the Willamette Basin, except for pH values for the Columbia River, which are limited to 7.0 to 8.5. The City of Portland required that Darigold install pollution controls for its wastewater discharge in response to the City's commitments under its Department-issued NPDES permit and, in general, the requirements of the Clean Water Act.

- 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 pH monitoring equipment was installed to allow for pretreatment of the process wastewaters that are discharged from Darigold into the City's sanitary sewer. No waste products are recovered or converted for sale or use in this process.

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

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

As noted above, the facility does not recover or convert waste products into a salable or usable commodity, and no income is derived from the operation of the water pollution control system. Therefore, the estimated annual percent return on the investment is zero.

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

The applicant indicated that another system was considered that was designed for dairy/food applications and completely treated all the process wastewater from the plant. The wastewater treatment system would adjust the pH of the discharge as well as achieve BOD/COD reduction. The cost of this system was \$393,550.00. The system provided additional treatment of the wastewater beyond the level required by the Darigold permit for discharging into the sanitary sewer. The applicant chose instead to investigate the operations at the plant and determine the best means of adjusting the pH levels within the process wastewater prior to discharge. Using equipment to document the pH and pretreat the wastewater (if needed) proved to be much less costly than the purchase and installation of the wastewater treatment system.

- 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. The average annual cost for operating the pH monitoring system has been estimated by Darigold staff to be \$13,778.00.

- 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 Department to prevent water pollution.
- c. The facility complies with DEQ statutes and rules, and the conditions of the City of Portland's Industrial Wastewater Discharge Permit, Number 405-002.
- 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 \$46,591.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3962.

Pamela Fink:PLF
TC-3962
(503) 229-6385 (x248)
May 19, 1993

State of Oregon
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Northern Engineering & Plastics Corp.
Northern Plastics Company
1902 New Butler Road
New Castle, PA 16120

The applicant owns and operates a plastic manufacturing facility at Portland, Oregon.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

Claimed Investment Cost: \$6,270.21 consisting of:

General Hydraulics Baler, Model 6030 for the packaging of waste plastic from a manufacturing process. The waste plastic is baled and sold to other companies for use in manufacture of reclaimed plastic products.

A set of invoices 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 filed January 26, 1993. The 30-day prior notice requirement was waived on January 26, 1993.
- b. The request for preliminary certification was approved on January 26, 1993, before the application for final certification was made.
- c. The investment was made on February 4, 1993, prior to June 30, 1995.

- d. The request for final certification was submitted on April 14, 1993 and was filed complete on May 7, 1993.

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 baler is to package recyclable plastic waste for resale to other plastic companies.

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

The applicant indicated that they knew of no alternative method which is as economical and effective to handle the recyclable plastic for resale.

- 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.

There are no other factors to consider in establishing the actual cost of the investment properly allocable to reclaiming and recycling plastic material.

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

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$6,270.21 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-3967.

WRB:wrb
wp51\tax\tc3967.sta
(503) 229-5934
June 10, 1993

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

1. Applicant

Carl Bivens Automotive
2530 NE Second Street
Bend, Oregon 97701

The applicant owns and operates an automotive repair establishment in Bend, Oregon.

Application was made for tax credit for an air pollution control facility which is leased by the applicant. Applicant has provided authorization from the lessor to receive tax credit certification.

2. Description of Facility

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: \$2,785.00
(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 May 12, 1992. The facility was placed into operation on May 12, 1992. The application for final certification was submitted to the Department on March 5, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 14, 1993.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by

capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

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, J1990 and J1991, 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 percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$10.00/pound. The applicant estimated an annual coolant recovery rate of 50 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant chose an accepted method for preventing the release of automobile air conditioning coolant into the atmosphere.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

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

There are no other factors to consider in establishing the 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 Department 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 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2,785.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4004.

BKF:AQ
MISC\AH71774A
June 15, 1993

STATE OF OREGON
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Gresham Transfer
12008 N. E. Inverness Drive
Portland, Oregon 97220

The applicant owns and operates a trucking company which transports bulk commodities. Application was made for tax credit for a solid waste pollution control facility.

2. Description of Facility

The facility is a vacuum and storage hopper system to recover and store residue from bulk trailers after product delivery. All bulk material recovered is returned to the original generator so it can be used for its intended purpose. The vacuum system replaced a wet wash system which resulted in loss of material and a potential waste disposal problem.

Claimed facility cost: \$ 5,112.00

Copies of invoices were provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

- a. Installation of the facility was started on September, 26, 1993.
- b. The facility was placed into operation on June 1, 1992.
- c. The application for tax credit was submitted to the Department on March 16, 1993, within two years of substantial completion of the facility.
- d. The application was found to be technically complete and was filed on May 5, 1993.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the claimed facility is to reduce a substantial quantity of solid waste through recycling.
- b. Eligible Cost Findings

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

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

This factor is applicable because the material processed by the facility is recovered and returned to the manufacture for reuse as a commodity.

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

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

The applicant is recovering residue of bulk dry commodities from bulk transport trailers. The recovered material is returned, at no charge, to the manufacture for reuse. There is no income from the recovery of this material. The cost of operation of the vacuum system is equivalent to the cost of a wet wash system which would not allow recovery of the dry powders. The pollution control facility was not considered to be an integral part of the applicant's business. The average annual cash flow for this activity is negative and this activity is subsidized by other business activities. As a result, using Table 1, OAR 340-16-030, the return on investment is 0% and the percent allocable is 100%.

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

The applicant has not identified and is not aware of alternative methods for achieving the same material recovery objective. It is the Department's determination that the proposed facility is an acceptable method of achieving the material recovery objective.

- 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 associated with the purchase or use of this facility.

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

There are no other factors to consider in establishing the actual cost of the facility properly allocable to material recovery from solid waste.

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 reduce a substantial quantity of solid waste through recycling.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$5,112.00 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application No. T-4013.

WRB:wrb
wp51\tax\tc4013RR.STA
(503)229-5934
June 10, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Leathers Oil Co.
22300 SE Stark
Gresham, OR 97030

The applicant owns and operates a retail station and cardlock at 1202 Oregon Ave., Burns OR, facility no. 3223.

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 monitoring wells and an oil/water separator.

Claimed facility cost \$ 32,009
(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 1, 1992 and placed into operation on October 1, 1992. The application for certification was submitted to the Department on April 9, 1993, within two years of the completion date. The application was determined complete and filed on June 14, 1993.

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 and water. This is accomplished by preventing releases into soil or water. 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 bare steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For leak detection - Monitoring wells.

The applicant also installed an oil/water separator.

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 (\$32,009) 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 indicated that no 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 or 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.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Leak Detection: Monitoring wells	\$ 2,423	100 %	\$ 2,423
Oil/Water separator	23,294	100	23,294
Labor & materials	<u>6,292</u>	<u>100</u>	<u>6,292</u>
Total	\$ 32,009	100 %	\$ 32,009

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 and water. This is accomplished by preventing releases in soil or water. 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 \$32,009 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4026.

Barbara Anderson:ew
(503) 229-5870
May 24, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Leathers Oil Co.
22300 SE Stark
Gresham, OR 97030

The applicant owns and operates a retail station at 801 W. 3rd, Prineville OR, facility no. 4288.

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 monitoring wells.

Claimed facility cost \$ 18,107
(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 September 1, 1991 and placed into operation on September 1, 1991. The application for certification was submitted to the Department on April 9, 1993, within two years of the completion date. The application was determined complete and filed on June 14, 1993.

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 and water. This is accomplished by preventing releases into soil or water. 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 bare steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For leak detection - Monitoring wells.

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 (\$18,107) 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 indicated that no 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 or 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
Leak Detection: Monitoring wells	\$ 16,907	100 %		\$ 16,907
Labor & materials	1,200	100		1,200
Total	\$ 18,107	100 %		\$ 18,107

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 and water. This is accomplished by preventing releases in soil or water. 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 \$18,107 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4027.

Barbara Anderson:ew
(503) 229-5870
May 24, 1993

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

RKM, Inc.
5360 Anaconda Drive
Salem, Oregon 97310

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 22' x 132' x 144', pole construction, metal clad, grass seed straw storage shed, located at 10814 Silver Falls Highway S., Aumsville, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$86,446
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant has 145 acres of perennial grass seed under cultivation. He also listed seven neighbor growers with 580 acres of perennial grass seed under cultivation. The applicant and his neighbors open field burned as much of their acreage as the weather and smoke management program permitted through the 1990 season.

The applicant and neighbors began contracting with a custom baler to remove the straw in lieu of open field burning beginning with the 1991 season. The applicant and neighbors gave the straw to the custom baler for the straw removal services.

The custom baler advised the applicant and his neighbors that to ensure prompt and timely removal of the straw they would need to provide storage for the straw to protect it from the weather. The applicant and neighbors determined that one storage facility would be more economical than eight smaller buildings. Therefore, the applicant built the facility to accommodate his straw and the neighbor's straw.

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 19, 1992. The application for final certification was found to be complete on May 5, 1993. The application was submitted 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 the inclement weather.

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

The actual cost of claimed facility (\$86,446) divided by the average annual cash flow (\$11,150) equals a return on investment factor of 7.753. Using Table 1 of OAR 340-16-030 for a life of 30 years, the annual percent return on investment is 12.5%. Using the annual percent return of 12.5% and the reference annual percent return of 17%, 26% is allocable to pollution control.

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 26%.

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 26%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$86,446, with 26% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4030.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792

jb:bm4030
May 6, 1993

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
2410 Camino Ramon
San Ramon, California 94583

The applicant owns and operates a gasoline sales and service station in Wilsonville, Oregon.

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

2. Description of Facility

The claimed facility is a stage II vapor recovery balance type system. The applicant documented costs for OPW 211V nozzles, vapor control hoses, retrofit kits, breakaway safety valves, additional miscellaneous equipment, and installation. Costs are also claimed for the installation of underground vapor control piping. The facility prevents the escape of gasoline vapors into the atmosphere. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$42,035.02

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on March 4, 1992. The facility was placed into operation on March 5, 1992. The application for final certification was received by the Department on April 16, 1993, within two years of substantial completion of the facility. The application was found to be complete on May 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$42,035.02 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4031.

BKF:aq
MISC\AH71769A

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc
2410 Camino Ramon
San Ramon, CA 94583

The applicant owns and operates a retail service station at 1111 Mohawk Blvd., Springfield OR, facility no. 1053.

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 piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four double wall fiberglass tanks and piping, spill containment basins, tank monitor, turbine leak detectors, overflow alarm, automatic shutoff valves, sumps and Stage II vapor recovery piping.

Claimed facility cost \$ 192,692 *
(Accountant's certification was provided)

* The Department concludes that the eligible facility cost for the project is \$187,692. This represents a difference of \$5,000 from the applicant's claimed cost of \$192,692 due to a determination by the Department that the cost of conversion to natural gas 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 November 23, 1992 and placed into operation on November 24, 1992. The application for certification was submitted to the Department on April 16, 1993, within two years of the completion date. The application was determined complete and filed on June 2, 1993.

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 overflow prevention or leak detection equipment.

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall 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 monitor and turbine leak detectors.

The applicant also installed 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 indicated that no 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 or 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.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>		<u>Amount Allocable</u>
Corrosion Protection:				
Double wall fiberglass tanks & piping	\$ 61,054	51	% (1)	\$ 31,138
Spill & Overfill Prevention:				
Spill containment basins	1,439	100		1,439
Sumps	12,244	100		12,244
Automatic shutoff valves	3,303	100		3,303
Leak Detection:				
Tank monitor	15,500	90	(2)	13,950
Turbine leak detectors	3,100	100		3,100
Stage II vapor recovery	2,750	100		2,750
Labor & material	<u>88,302</u>	<u>100</u>		<u>88,302</u>
Total	\$ 187,692	83	%	\$ 156,226

- (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 \$61,054 and the bare steel system is \$29,865, the resulting portion of the eligible tank and piping cost allocable to pollution control is 51%.
- (2) The applicant's cost for a tank monitor 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 83%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$187,692 with 83% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4036.

Barbara Anderson:ew
(503) 229-5870
June 11, 1993

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
2410 Camino Ramon
San Ramon, California 94583

The applicant owns and operates a gasoline sales and service station in Troutdale, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for OPW 211V nozzles, vapor control hoses, adapters, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$15,045.36

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on November 30, 1992. The facility was placed into operation on December 1, 1992. The application for final certification was received by the Department on April 16, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$15,045.36 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4037.

BKF:aq
MISC\AH71769B

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Roger Neuschwander
31983 Harris Drive
Harrisburg, Oregon 97446

The applicant owns and operates a grass seed farm operation in Linn 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 used John Deere flail mower, model 27, located at 31983 Harris Drive, Harrisburg, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$3,200
(The applicant provided copies of the retail purchase order.)

3. Description of farm operation plan to reduce open field burning

The applicant has 576 perennial and 199 annual grass seed acres under cultivation. The applicant has gradually reduced his open field burning acreage to less than 200 acres annually.

In annual grass seed fields the applicant plows the straw residue under. In perennial grass seed fields the applicant has the straw removed by baling.

The applicant purchased the flail mower to chop the straw on annual fields so that it decomposes more efficiently and the field can be plowed without plugging the plow with the long straw. The applicant also chops the stubble in baled perennial grass seed fields to help cleanse the field and stimulate regrowth.

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 April 15, 1993. The application was submitted on May 3, 1993, and the application for final certification was found to be complete on May 21, 1993. The application was submitted within two years of substantial purchase 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 promotes the conversion of a waste product (straw) into a usable commodity by providing the means to chop straw which assists decomposition and stimulates regrowth.

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 purchased 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 \$3,200, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4053.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792

jb:bm4053
May 21, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

J. C. Jones Oil Company, Inc.
PO Box 429
Salem, OR 97308

The applicant owns and operates a service station at 508 NE Santiam Hwy., Mill City OR, facility no. 5179.

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 tank lining and spill containment basins on three USTs.

Claimed facility cost \$ 22,332
(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 16, 1992 and placed into operation on December 16, 1992. The application for certification was submitted to the Department on May 3, 1993, within two years of the completion date. The application was determined complete and filed on June 14, 1993.

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 and water. This is accomplished by preventing releases into soil or water. 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 (three holding motor fuel, one empty and one used oil) with no corrosion protection and no spill and overflow prevention or leak detection equipment.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Epoxy tank lining.
- 2) For spill and overflow prevention - Spill containment basins.

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 (\$22,332) 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 indicated that tank replacement was 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 or 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
Corrosion Protection:			
Epoxy tank lining (includes labor)	\$ 21,432	100 %	\$ 21,432
Spill & Overfill Prevention:			
Spill containment basins	900	100	900
Total	\$ 22,332	100 %	\$ 22,332

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 and water. This is accomplished by preventing releases in soil or water. 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 \$22,332 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4054.

Barbara Anderson:ew

(503) 229-5870

May 12, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

J. C. Jones Oil Company, Inc.
PO Box 429
Salem, OR 97308

The applicant owns and operates a bulk fuel plant at 650 15th St. SE, Salem OR, facility no. 8921.

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 seven aboveground storage tanks.

Claimed facility cost \$ 10,694
(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 December 17, 1992 and placed into operation on December 17, 1992. The application for certification was submitted to the Department on May 3, 1993, within two years of the completion date. The application was determined complete and filed on June 14, 1993.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to prevent pollution of soil and water. This is accomplished by preventing releases into soil or water. 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."

In accordance with federal law, the applicant installed secondary containment.

Based on information currently available, the applicant is in compliance with federal law in that a Spill Prevention Control and Countermeasure (SPCC) plan is on file at the facility.

The Department concludes that the costs claimed by the applicant (\$10,694) 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 also considered a fiberglass seal over area covered by concrete. 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 or 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.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Secondary Containment: Labor & materials	\$ 10,694	100 %	\$ 10,694
Total	\$ 10,694	100 %	\$ 10,694

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 sole purpose of the claimed facility is to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. 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 \$10,694 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4055.

Barbara Anderson:ew
(503) 229-5870
May 24, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Portland, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$12,789.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on April 4, 1992. The facility was placed into operation on April 4, 1992. The application for final certification was received by the Department on April 28, 1993 within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$12,789.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4058.

BKF:aq
MISC\AH71769C

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Portland, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$14,841.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on March 21, 1992. The facility was placed into operation on March 21, 1992. The application for final certification was received by the Department on April 28, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$14,841 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4059.

BKF:aq
MISC\AH71769D

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Beaverton, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$15,404.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on April 9, 1992. The facility was placed into operation on April 9, 1992. The application for final certification was submitted to the Department on April 28, 1992 within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$15,404.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4060.

BKF:aq
MISC\AH71769E

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Portland, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$15,647.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on April 29, 1992. The facility was placed into operation on April 29, 1992. The application for final certification was received by the Department on April 28, 1993 within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$15,647.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4061.

BKF:aq
MISC\AH71769F

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Gresham, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$16,008.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on May 1, 1992. The facility was placed into operation on May 1, 1992. The application for final certification was received by the Department on April 28, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$16,008.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4062.

BKF:aq
MISC\AH71769G

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

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Portland, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), vapor control hoses, retrofit kits, breakaway safety valves, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$21,054.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on April 5, 1992. The facility was placed into operation on April 5, 1992. The application for final certification was received by the Department on April 28, 1993 within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$21,054.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4063.

BKF:aq
MISC\AH71769H

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

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Beaverton, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), vapor control hoses, retrofit kits, breakaway safety valves, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$22,406.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on April 5, 1992. The facility was placed into operation on April 5, 1992. The application for final certification was received by the Department on April 28, 1993 within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$22,406.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4064.

BKF:aq
MISC\AH71769I

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Portland, Oregon.

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

2. Description of Facility

The claimed facility is a stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. Costs are also claimed for the installation of underground vapor control piping. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$23,623.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on April 29, 1992. The facility was placed into operation on April 29, 1992. The application for final certification was received by the Department on April 28, 1993 within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$23,623.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4065.

BKF:aq
MISC\AH71769J

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Oregon City, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$11,076.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on March 21, 1992. The facility was placed into operation on March 21, 1992. The application for final certification was received by the Department on May 7, 1993 within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$11,076.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4070.

BKF:aq
MISC\AH71769L

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Portland, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$13,902.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on March 14, 1992. The facility was placed into operation on March 14, 1992. The application for final certification was received by the Department on May 3, 1992, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$13,902.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4071.

BKF:aq
MISC\AH71769M

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Tigard, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), retrofit kits, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$15,719.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on March 29, 1992. The facility was placed into operation on March 29, 1992. The application for final certification was received by the Department on May 7, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$15,719.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4072.

BKF:aq
MISC\AH71769N

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
Arco Products Company
17315 Studebaker Road
Cerritos, California 90701-1488

The applicant owns and operates a gasoline sales and service station in Gladstone, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The applicant documented costs for Emco Wheaton nozzles (model numbers A4005 and A4015), vapor control hoses, retrofit kits, breakaway safety valves, additional miscellaneous equipment, and installation. The facility reduces the emissions of gasoline vapors into the atmosphere.

Claimed Facility Cost: . \$22,315.00

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on March 24, 1992. The facility was placed into operation on March 24, 1992. The application for final certification was received by the Department on May 7, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1993.

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 prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-110. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The applicant installed Department approved vapor recovery gasoline dispensing nozzles. Individual service stations will be inspected by the Department in the future. Inspections will document that the resistance to flow of vapor within the stage II system is less than 0.95 inches of water. Stations which do not comply at the time of the inspections will be required to take steps to reduce the vapor flow resistance to below 0.95 inches of water. Remediation efforts will be ineligible for pollution control facility tax credit certification.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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 recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

- 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.

Stage II vapor control balance systems reduce the emissions of gasoline vapors to the atmosphere at a lower cost than alternate systems.

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

The applicant indicated there were 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 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 these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$22,315.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4073.

BKF:aq
MISC\AH717690

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
17315 Studebaker Rd.
Cerritos, CA 90701-1488

The applicant owns and operates a service station at 3521 SW Gateway, Springfield OR, facility no. 10675.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four double wall fiberglass tanks and piping, spill containment basins, tank monitor, overfill alarm, sumps and automatic shutoff valves at a newly constructed business.

Claimed facility cost \$ 68,436 *
(Accountant's certification was provided)

- * The Department concludes that the eligible facility cost for the project is \$55,127. This represents a difference of \$13,309 from the applicant's claimed cost of \$68,436 due to a determination by the Department that the cost of installing tanks and piping in a newly constructed business 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 April 17, 1992 and placed into operation on April 17, 1992. The application for certification was submitted to the Department on May 7, 1993, within two years of the completion date. The application was determined complete and filed on June 1, 1993.

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 and water. This is accomplished by preventing releases into soil or water. 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 newly constructed facility. There is no prior condition to report.

To respond to requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins, overflow alarm, sumps and automatic shutoff valves.
- 3) For leak detection - Tank monitor.

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 method chosen to be the most efficient and 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 or 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.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>		<u>Amount Allocable</u>
Corrosion Protection:				
Double wall fiberglass tanks & piping	\$ 31,166	34	% (1)	\$ 10,596
Spill & Overfill Prevention:				
Spill containment basins	2,025	100		2,025
Sumps	1,732	100		1,732
Overfill alarm	1,995	100		1,995
Automatic shutoff valves	2,064	100		2,064
Leak Detection:				
Tank monitor	4,062	90	(2)	3,656
Labor & materials	12,083	100		12,083
Total	\$ 55,127	62	%	\$ 34,151

- (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 \$31,166 and the bare steel system is \$20,695, the resulting portion of the eligible tank and piping cost allocable to pollution control is 34%.

- (2) The applicant's cost for a tank monitor 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 and water. This is accomplished by preventing releases in soil or water. 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 62%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$55,127 with 62% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4075.

Barbara Anderson:ew
(503) 229-5870
June 1, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
17315 Studebaker Rd.
Cerritos, CA 90701-1488

The applicant owns and operates a service station at 2380 Hwy 66, Ashland OR, facility no. 3986.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four double wall fiberglass tanks and piping, spill containment basins, tank monitor, sumps and automatic shutoff valves.

Claimed facility cost \$ 91,752
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on March 6, 1992 and placed into operation on March 6, 1992. The application for certification was submitted to the Department on May 7, 1993, within two years of the completion date. The application was determined complete and filed on June 14, 1993.

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 and water. This is accomplished by preventing releases into soil or water. 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 requirements established 12-22-88, the applicant installed:

- 1) For corrosion protection - Double wall fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps and automatic shutoff valves.
- 3) For leak detection - Tank monitor.

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 (\$91,752) 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 indicated that no 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 or 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.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>		<u>Amount Allocable</u>
Corrosion Protection:				
Double wall fiberglass tanks & piping	\$ 32,834	36	% (1)	\$ 11,820
Spill & Overfill Prevention:				
Spill containment basins	2,025	100		2,025
Sumps	1,732	100		1,732
Automatic shutoff valves	625	100		625
Leak Detection:				
Tank monitor	3,022	90	(2)	2,720
Labor & material	<u>51,514</u>	<u>100</u>		<u>51,514</u>
Total	\$ 91,752	77	%	\$ 70,436

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$32,834 and the bare steel system is \$21,097, the resulting portion of the eligible tank and piping cost allocable to pollution control is 36%.
- (2) The applicant's cost for a tank monitor 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 and water. This is accomplished by preventing releases in soil or water. 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 \$91,752 with 77% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4078.

Barbara Anderson:ew
(503) 229-5870
May 24, 1993

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Floyd Smith
30383 Peoria 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 a 22' x 80' x 300', clear span, steel construction, metal clad, grass seed straw storage building, located at 30736 Peoria Road, Shedd, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$138,113.57
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant has 950 perennial acres and 60 annual acres under grass seed cultivation. Over the last five years the applicant has methodically phased out open field burning. The applicant's alternative to open field burning includes flail chopping and plowing down the straw in his annual fields and baling the straw off his perennial fields prior to flail chopping the stubble.

The straw is baled off the applicant's fields by a custom baler in return for the straw and storage to protect it from inclement weather. The phase out of open field burning increased the acreage baled off requiring additional storage for the straw.

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 May 1, 1993. The application for final certification was found to be complete on May 13, 1993. The application was submitted 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 \$5,000 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 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 \$138,113.57, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4080.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792

jb:bm4080
May 13, 1993

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Edward Ferschweiler
6070 State Highway 219
Gervais, Oregon 97026

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 22' x 60' x 100' stick on stud, metal clad, grass seed straw storage building, located at 6070 State Highway 219, Gervais, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$48,408
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant has 285 acres of perennial grass seed under cultivation. Prior to 1990, the applicant open field burned as many of his acres as the smoke management program and weather permitted.

In 1990, the applicant had the straw baled off by a custom baler. The applicant has been doing his own baling since 1990 and selling the straw to an exporter.

The exporter has informed the applicant that the straw will not be taken in future years unless it is kept dry in a storage building. To maintain the market for his straw and avoid open field burning and stack burning, the applicant built the storage facility.

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 May 4, 1993. The application for final certification was found to be complete on May 17, 1993. The application was submitted 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 (\$48,408) divided by the average annual cash flow (\$2,066) equals a return on investment factor of 23.43. Using Table 1 of OAR 340-16-030 for a life of 25 years, the annual percent return on investment is .50%. Using the annual percent return of .50% and the reference annual percent return of 17%, 97% is allocable to pollution control.

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 \$22,872 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 97%.

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 97%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$48,408, with 97% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4081.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792

jb:bm4081
May 14, 1993

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

1. Applicant

Pacific Detroit Diesel-Allison, Inc.
5061 N. Lagoon Avenue
Portland, Oregon 97217

The applicant owns a diesel truck maintenance and repair facility at 5940 N. Basin Avenue, in Portland, Oregon.

Application was made for tax credit for a water pollution control facility. The water pollution control facility was installed by the applicant/property owner, and is used by the business on site.

2. Description of Facility

Department staff inspected the claimed facility on June 2, 1993. The claimed facility consists of a truck washing/degreasing pad with a zero-discharge wash water recycling system. Wash water is collected in a sump and pumped to a water treatment system. The wash water is treated to remove oil, grease and other contaminants. The treated wash water is then reused, and recovered oils are collected for recycling. There is no discharge of wastewater from this facility.

The washing/degreasing equipment was not claimed as part of the claimed facility.

Claimed Facility Cost: \$43,441
(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 statutory deadline in that construction of the facility was substantially completed in April, 1992, and the application for certification was found to be complete on June 2 1993, 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 an industrial wastewater discharge by recycling and reusing the wastewater.
- 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 claimed facility produces no income, therefore the annual percent return on the investment in the facility is 0%.

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

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

The applicant considered connecting the wash pad sump to the City of Portland sanitary sewer. This option would have been more expensive and was rejected.

- 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 increases in costs as a result of the claimed facility.

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to prevent a substantial quantity of water pollution. This prevention is accomplished by the elimination of an industrial wastewater discharge by recycling and reusing the wastewater.
- 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 \$43,441 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4084.

(George F. Davis):(GFD)
(TC-4084)
(503) (229-6385 x 242)
(June 2, 1993)

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

J.S.G. Inc.
32200 Quail Run
Tangent OR 97389

The applicant owns and operates a grass seed farm operation in Linn 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 GK Manufactured Spray Buggy, located at 32200 Quail Run, Tangent, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$73,334.04
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 3500 perennial grass seed acres under cultivation. Over the past five years, the applicant has removed approximately 2000 acres from open field burning. On their farm the grass seed straw is raked, baled, and removed from the fields. Following the baling process the applicant uses a Rear's Stack Pak to vacuum the remaining straw and volunteer seeds off the fields. The loaves of vacuumed straw and seeds are placed field-side for composting.

The decrease in open field burning has increased the need to chemically control weed populations and created the need to compost straw piles in the shortest time possible. Open field burning administrative rule revisions adopted this year prohibit stack burning of loaves from the Rear's Stack Pak.

Without fire, annual bluegrass, a weed species has become harder to control. The GK Spray Buggy was designed to pin-point small areas within fields in need of specific chemicals to control weed populations with minimum applications.

The GK Spray Buggy booms have been designed to reach over the height of the straw loaves to allow application of liquid nitrogen that assists in a more rapid decomposition. The loaves take up acres of productive farmland. As of yet, the compost has no retail market value so the occupied ground needs to be returned to production as quickly as possible.

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 4, 1992. The application was submitted on May 19, 1993 and the application for final certification was found to be complete on May 24, 1993. The application was submitted within two years of substantial purchase 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 promotes the conversion of a waste product (straw) into a usable commodity by providing the means to effectively apply liquid nitrogen to straw loaves assisting rapid decomposition.

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

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

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

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

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

There is an increase in operating costs of \$2,924.67 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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

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 purchased 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 \$73,334.04, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4085.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792

jb:bm4085
May 26, 1993

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Roger A. Ruckert
33776 Ridge Drive
Tangent OR 97389

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 77 acre perforated pipe drainage tile installation, located one mile east of homestead address on NW corner of Ridge Drive and Parker Road intersection in Tangent, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$38,854.16
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant has 700 acres of perennial and annual grass seed under cultivation. In the past, the applicant open field burned as much of this acreage as the smoke management program and weather permitted. The applicant has gradually reduced his use of open field burning to approximately 100 acres annually.

This drainage tile installation further reduces his use of open field burning by 77 acres as the underground perforated plastic tile drains the surface water resulting in a longer growing season, dryer and warmer soil, and deeper root penetration. These benefits allow alternative crops and cessation of open field burning.

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 October 1, 1992. The application for final certification was found to be complete on May 26, 1993. The application was submitted 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 installations 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. This facility provides better drainage to the soil allowing crop rotations.

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

Oregon State University Extension "Enterprise Budgets" indicate that crops (red clover, white clover, grains and other legumes) supported by the soil drainage are of no economic advantage or disadvantage to the applicant.

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 \$38,854.16, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4086.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792

jb:bm4086
May 26, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Grunder Equipment Repair
405 N. Main
Tillamook, Oregon 97141

The applicant owns and operates a diesel truck repair garage in Tillamook, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

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 five years.

Claimed Facility Cost: \$2,157.90
(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 August 21, 1991. The facility was placed into operation on September 15, 1991. The application for final certification was submitted to the Department on May 25, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 15, 1993.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as

defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

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, J1990 and J1991, 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 percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the income to applicant of virgin coolant at \$9.50/pound. The applicant estimated an annual coolant recovery rate of 20 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant chose an accepted method for preventing the release of automobile air conditioning coolant into the atmosphere.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

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

There are no other factors to consider in establishing the 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 Department 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 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2,158.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4087.

BKF:AQ
MISC\AH71774B
June 15, 1993

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Sayer Farms
37177 Highway 228
Brownsville OR 97327

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 22' x 104' x 216' pole construction, metal clad, grass seed straw storage building, located 3.5 miles west of Brownsville and .25 miles south of Highway 228. The land and buildings are owned by the applicant.

Claimed facility cost: \$101,501
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant has 1,325 acres under perennial grass seed cultivation and 840 acres under annual grass seed cultivation. The applicant has reduced open field burning from approximately 1000 acres annually to approximately 300 acres annually by baling off the bulk straw and flail chopping and plowing under the remaining stubble.

The applicant trades the straw to a custom baler for the straw removal services. The applicant provides the storage building that protects the baled straw from inclement weather to insure the continued services of the custom baler. All the straw cannot be shipped during the summer months and storage space is mandatory during the wet winter months.

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 15, 1991. The application for final certification was found to be complete on June 4, 1993. The application was submitted 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 the inclement weather.

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

The actual cost of claimed facility (\$101,501) divided by the average annual cash flow (\$5,372) equals a return on investment factor of 18.894. Using Table 1 of OAR 340-16-030 for a life of 20 years, the annual percent return on investment is .50%. Using the annual percent return of .50% and the reference annual percent return of 17%, 97% is allocable to pollution control.

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 annual cash flow of \$5,732 to reflect possible storage fee payments although payment of storage fees to the growers fluctuate erratically with the straw

market. The annual cash flow was 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 97%.

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 97%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$101,501, with 97% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4090.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792

jb:bm4090
June 4, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chandler Enterprises
dba Auto Doctor
2524 SE Division
Portland, Oregon 97202

The applicant owns and operates an automobile repair establishment in Portland, Oregon.

Application was made for tax credit for an air pollution control facility which is leased by the applicant. Applicant has provided authorization from the lessor to receive tax credit certification.

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. In addition, the machine returns air conditioner coolant to the air conditioning equipment. 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 seven years.

Claimed Facility Cost: \$4,623.54
(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 September 28, 1992. The facility was placed into operation on October 28, 1992. The application for final certification was submitted to the Department on May 27, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 15, 1993.

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 functions of this machine serve 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 percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$8.78/pound. The applicant estimated an annual coolant recovery rate of 60 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant chose an accepted method for preventing the release of automobile air conditioning coolant into the atmosphere.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

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

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 85%.

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 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 85%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$4,624.00 with 85% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4094.

BKF:AQ
MISC\AH71774C
June 15, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Portland Service Station Supply
737 NE 25th
Portland, Oregon 97232

The applicant owns and operates an air conditioner repair establishment in Portland, 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 air conditioner or commercial refrigerant 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: \$1,926.22
(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 April 8, 1993. The facility was placed into operation on April 8, 1993. The application for final certification was submitted to the Department on June 9, 1993, within two years of substantial completion of the facility. The application was found to be complete on June 15, 1993.

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 Environmental Protection Agency to reduce air pollution. This reduction is accomplished by capturing and/or recycling air

contaminants, as defined in ORS 468.275. The requirement is to comply with Section 608 of the 1990 Clean Air Act Amendments. Section 608 prohibits the venting of a Class I or Class II ozone depleting substance in the course of maintaining, servicing, repairing, or disposing of an appliance or industrial process refrigeration.

The EPA has specified standards equipment manufactured before January 1, 1993 would have to meet to be grandfathered under the EPA's planned regulations. The standards require the equipment be capable of achieving a vacuum able to sustain either four or twenty-five inches of Mercury. High pressure equipment will need to sustain a four inch vacuum. Low pressure equipment will need to sustain a twenty-five inch vacuum. The claimed facility meets these standards.

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 machine serves one purpose. It prevents the release of spent refrigerant to the environment, thereby meeting EPA regulations requiring capture of this air contaminant.

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

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$9.75/pound. The applicant estimated an annual coolant recovery rate of 30 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant chose an accepted method for preventing the release of automobile air conditioning coolant into the atmosphere.

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

There are savings from the facility to recover and/or reuse coolant. The applicant may use the recovered coolant in the equipment it was removed from. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to an industrial coolant purification center. In this case the savings to the applicant are tied to the sales price of recovered coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

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

There are no other factors to consider in establishing the 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 EPA to reduce air pollution.
- c. The facility complies with Department standards 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 \$1,926.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4096.

BKF:AQ
MISC\AH71774D
June 15, 1993

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Precision Castparts Corp.
LSBO Facility
4600 SE Harney Drive
Portland, OR 97206

The applicant owns and operates an investing metal casting plant in Portland, Oregon.

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

2. Description of Facility

The claimed facility controls the emissions of ethyl-alcohol and glycol ethers to the atmosphere. The facility consists of a Reeco model VF-C thermal oxidizer, baghouse system modifications, and support equipment.

Claimed Facility Cost: \$1,125,801.45

The applicant claimed costs for installing slurry pot lids and process deduster equipment. This equipment makes an insignificant contribution to both the principal purpose of meeting a Department requirement to control pollution. The slurry pot lids conserve binder used in the slurry if they are used effectively. The Department developed specific control requirements for the applicant's investing process. Installation of this equipment was not necessary for the baghouse or thermal oxidizer to function efficiently. The accounting review contracted by the Department determined the variable frequency drive makes an insignificant contribution of pollution control. The applicant claimed costs for spare parts. Costs incurred for spare parts are not allocable to pollution control. This is in accordance with OAR 340-16-025 (3(d)&(g)),

Ineligible claimed facility costs:

Slurry pot lids:	\$24,148.54
Spare parts:	\$5,068.00
Variable Frequency Drive:	\$15,900.00

Adjusted facility costs: \$1,080,684.90

The applicant estimates the useful life of the facility to be ten years.

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Installation of the facility was substantially completed on August 1, 1991 and placed into operation on August 5, 1991. The application for final certification was submitted to the Department on December 22, 1992, within two years of substantial completion of the facility. The application was found to be complete on April 15, 1993.

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. The air contaminant Discharge Permit for this source, 26-1867 Addendum #1 requires the applicant to control Volatile Organic Compound (VOC) emissions. This is in accordance with OAR Chapter 340, Division 22, rule 104, sections 4 through 6. The emissions reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The claimed facility controls the VOC emitted by the evaporation of the binder used in the ceramic shell investing process. The binder, ethyl-alcohol and glycol ether, is mixed with sand to form a slurry. The investing process involves dipping wax replicas of parts into slurry and showering with sand to form ceramic shells. Molten steel is poured into the shells to form casted steel parts in another section of the plant. Sources of the emissions include the slurry, the shell drying area, and the binder make up room.

The LSBO investing process has the potential to emit 345 tons/year of VOC. OAR 340-22-104 (5) requires VOC sources with a potential to emit over 100 tons/year for which no categorical Reasonably

Available Control Technology (RACT) requirements exist to have RACT requirements developed on a case by case basis. The Department determined RACT for the LSBO plant to be an overall 90% emissions reduction, and specifically a 95% capture efficiency in the investing room. The claimed facility was tested on February 19, 1993 by a Department approved consultant. The tests, which Department staff observed, showed the capture efficiency to be 100% and destruction efficiency to be 91%. The Department determined the facility makes a satisfactory contribution to total plant site RACT VOC emissions reductions.

The claimed facility consists of a Reeco model VF-C thermal oxidizer and modifications of the pre-existing baghouse system. Installation of the facility required foundations, electrical materials and labor, natural gas utilities, monitoring equipment, and structural modifications.

The Department required verification of a minimum of 200 cfm air flow into the investing room at an opening located adjacent to the backup investing process to ensure 95% capture efficiency. A hot wire anemometer air gage was installed for this purpose. The required air flow in the investing room was accomplished by adding intakes vents and extending ducting to the primary investing area and binder make up room.

The investing room air is vented through the baghouse system to the thermal oxidizer. The pre-existing baghouse system was reconfigured to accommodate the thermal oxidizer. The size, noise, and heat generated by the thermal oxidizer require it be located outside the building. The investing baghouse was moved adjacent to the thermal oxidizer and ducting was extended to the new location. A 40" diameter fan was fitted to the baghouse so it could deliver sufficient static air pressure to the thermal oxidizer. The thermal oxidizer incinerates an average of 91% the VOC fumes in a series of chambers heated to approximately 1500 degrees Fahrenheit.

The pre-existing baghouse system captured particulate generated in both the investing room and the shell grinding area, which is located outside the investing room. Emissions control for the shell grinding area was removed from the investing area

baghouse system. A baghouse dedicated to the shell grinding area emissions was installed.

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.

The applicant indicated carbon adsorption & recovery of VOC vapors was considered. The applicant rejected this option because they determined it had a lower capture efficiency, higher initial cost and higher operating costs.

- 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 \$147,921.00 annually.

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

- a) The eligible facility costs have been determined to be \$1,080,684.90 after adjusting for distinct portions of the facility which do not have the principal purpose of pollution control. This is discussed in section 2 of this report.
- b) The Environmental Quality Commission has directed that tax credit applications at or above \$250,000.00 go through an additional Departmental accounting review, to determine if costs were properly allocated. This review was performed under contract with the Department by the accounting firm of Symonds, Evans & Larson.

Other than costs related to the variable frequency drive, 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 actual cost of the facility properly allocable to pollution control as determined by using this factor or these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.
- c. The facility complies with DEQ statutes and rules, and permit conditions.
- d. An independent accounting firm under contract with the Department has concluded that no further review procedures be performed on TC-3940 (see attachment).
- e. The portion of the adjusted 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 \$1,080,685.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3940.

BKF:
RPT\AH71831
April 22, 1993

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 Precision Castparts Corp.'s (the Company's) Pollution Control Tax Credit Application No. 3940 (the Application) filed with the State of Oregon, Department of Environmental Quality (DEQ) for the Air Pollution Control Facility in Portland, Oregon (the Facility). The Application has a claimed Facility cost of \$1,096,585 (as adjusted by the DEQ). 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 reviewed certain documents which support the Application.
3. We discussed the Application, the Statutes and OAR's with certain DEQ personnel, including Charles Bianchi and Brian Fields.
4. We discussed certain components of the Application with Kim Bloise, Melissa Marshall and John Zagelow of the Company.
5. We toured the Facility with Ms. Bloise and Mr. Zagelow.
6. We requested that Ms. Marshall and Mr. Zagelow 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) The Company derives no income or cost savings from operating the Facility.
- d) In accordance with ORS Section 468.155(2)(e), the Facility is not a "replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued. . ."
- e) All supply costs included in the Application related to the installation of the Facility and did not include ongoing operating supplies.
- f) All internal labor costs included in the Application related directly to the installation of the Facility and were not related to maintenance and repairs.
- g) No previously existing equipment was sold as a result of the installation of the Facility.
- h) If the Company had not paid \$15,900 to Regenerative Environmental Equipment Co., Inc. (Reeco) as a "price control cost" in order to "hold the price" of the Reeco portion of the Facility through January 5, 1991, the ultimate price paid to Reeco would have exceeded the amounts related to Reeco included in the Application.
- i) The \$800 paid to Newell's Painting was for protection of equipment and not for aesthetic purposes.
- j) All amounts included in the Application relate to the Facility at the Company's Large Structural Business Operation and do not include any costs related to a similar facility at the Company's Small Structural Business Operation.

Findings:

1. through 5.

No matters came to our attention that caused us to believe that the Application should be adjusted, except for \$15,900 in costs related to the variable frequency drive, which provides an insignificant contribution to pollution control. As a result, the amended allowable costs for the Application should be reduced to \$1,080,685.

6. Ms. Marshall and Mr. Zagelow 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. 3940 with respect to its Air Pollution Control Facility in Portland, Oregon and should not be used for any other purpose.

Symonds, Evans & Larson

June 21, 1993

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

1. Applicant

Precision Castparts Corp.
SSBO Facility
4600 SE Harney Drive
Portland, OR 97206

The applicant owns and operates an investing metal casting plant in Portland, Oregon.

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

2. Description of Facility

The claimed facility controls the emissions of ethyl-alcohol and glycol ethers to the atmosphere. The facility consists of a Reeco model VF-C thermal oxidizer and support equipment.

Claimed Facility Cost: \$1,086,907.00

The accounting review contracted by the Department determined the variable frequency drive makes an insignificant contribution of pollution control.

Variable Frequency Drive: \$15,900.00

Adjusted facility costs: \$1,071,007.00

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 June 4, 1991 and placed into operation on June 4, 1991. The application for final certification was submitted to the Department on December 22, 1992,

within two years of substantial completion of the facility. The application was found to be complete on May 3, 1993.

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. The air contaminant Discharge Permit for this source, 03-2674, requires the applicant to control Volatile Organic Compounds (VOC) emissions. This is in accordance with OAR Chapter 340, Division 20, rule 240. The emissions reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The claimed facility controls the VOC emitted by the evaporation of the binder used in the ceramic shell investing process. The binder, ethyl-alcohol and glycol ether, is mixed with sand to form a slurry. The investing process involves dipping wax replicas of parts into slurry and showering with sand to form ceramic shells. Molten steel is poured into the shells to form casted steel parts in another section of the plant. Sources of the emissions include the slurry, the shell drying area, and binder make up room.

The SSBO investing process has the potential to emit 267 tons/year of VOC. OAR 340-20-240 requires new major sources with a potential to emit over 40 tons/year of VOC to achieve the Lowest Achievable Emissions Rate (LAER). The claimed facility was tested on February 19, 1993 by a Department approved consultant. The tests showed destruction efficiency to be 100%. The Department determined the facility makes a satisfactory contribution to total plant site LAER VOC emissions reductions.

The claimed facility consists of a Reeco model VF-C thermal oxidizer and ducting. Installation of the facility required electrical materials and labor, monitoring equipment, structural modifications, and a foundation for the thermal oxidizer. A section of perforated ducting collects the investing room air, which contains

VOC. The emissions are drawn into the newly installed ducting which passes from the investing room through the foundry to the thermal oxidizer. The thermal oxidizer incinerates the VOC fumes in a series of chambers heated to approximately 1500 degrees Fahrenheit.

To insure a 95% capture efficiency was achieved the Department required the investing room be a "total enclosure" as defined in 40 CFR 60.711 and that all openings be "natural draft openings" as defined in 40 CFR 60.713. The induced air flow from the thermal oxidizer fan creates a negative pressure. In addition to drawing investing room air into the thermal oxidizer duct system, this negative pressure pulls air into the investing room through all openings. The applicant demonstrates compliance with 40 CFR 60.713 using a differential pressure gage which confirms a negative static air pressure is maintained in the investing room. The applicant sealed the investing room and installed automatic doors with air curtains. These steps comply with 40 CFR 60.711 by making the investing room a total enclosure.

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.

The applicant indicated carbon adsorption & recovery of VOC vapors was considered. The applicant rejected this option because they determined it had a lower capture efficiency, higher initial cost and higher operating costs.

- 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 \$56,864.00 annually.

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

- a) The eligible facility costs have been determined to be \$1,071,077.00 after adjusting for a distinct portion of the facility which does not have a principal purpose of pollution control. This is discussed in section 2 of this report.
- b) The Environmental Quality Commission has directed that tax credit applications at or above \$250,000.00 go through an additional Departmental accounting review, to determine if costs were properly allocated. This review was performed under contract with the Department by the accounting firm of Symonds, Evans & Larson.

Other than costs related to the variable frequency drive, 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 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 Department to control air pollution.
- c. The facility complies with DEQ statutes and rules and permit conditions.
- d. An independent accounting firm under contract with the Department has concluded that no further review procedures be performed on TC-3942 (see attachment).
- e. The portion of the adjusted 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 \$1,071,007.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3942.

BKF
RPT\AH71832
May 3, 1991

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 Precision Castparts Corp.'s (the Company's) Pollution Control Tax Credit Application No. 3942 (the Application) filed with the State of Oregon, Department of Environmental Quality (DEQ) for the Air Pollution Control Facility in Portland, Oregon (the Facility). The Application has a claimed Facility cost of \$1,086,907. 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 reviewed certain documents which support the Application.
3. We discussed the Application, the Statutes and OAR's with certain DEQ personnel, including Charles Bianchi and Brian Fields.
4. We discussed certain components of the Application with Kim Bloise, Melissa Marshall and Dale McLouth of the Company.
5. We toured the Facility with Ms. Bloise and Mr. McLouth.
6. We requested that Ms. Marshall and Mr. McLouth 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) The Company derives no income or cost savings from operating the Facility.

SYMONDS, EVANS & LARSON

CERTIFIED PUBLIC ACCOUNTANTS

- d) In accordance with ORS Section 468.155(2)(e), the Facility is not a "replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued. . ."
- e) All supply costs included in the Application related to the installation of the Facility and did not include ongoing operating supplies.
- f) All internal labor costs included in the Application related directly to the installation of the Facility and were not related to maintenance and repairs.
- g) No previously existing equipment was sold as a result of the installation of the Facility.
- h) The \$23,130 paid to Careco was necessary to upgrade the Company's software and hardware in order to properly operate the Facility's thermal oxidizer and fan system.
- i) The \$2,700 paid to Newell's Painting was for protection of equipment and not for aesthetic purposes.
- j) All amounts included in the Application relate to the Facility at the Company's Small Structural Business Operation (SSBO) and do not include any costs related to a similar facility at the Company's Large Structural Business Operation (LSBO). More specifically, the amounts paid to Regenerative Environmental Equipment Co., Inc. (Reeco) included in the Application do not include the "price control cost" paid to "hold the price" of the Reeco portion of the LSBO facility through January 5, 1991.

Findings:

1. through 5.

No matters came to our attention that caused us to believe that the Application should be adjusted, except for \$15,900 in costs related to the variable frequency drive, which provides an insignificant contribution to pollution control. As a result, the amended allowable costs for the Application should be reduced to \$1,071,007.

6. Ms. Marshall and Mr. McLouth 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. 3942 with respect to its Air Pollution Control Facility in Portland, Oregon and should not be used for any other purpose.

Symonds, Evans & Larson

June 21, 1993

STATE OF OREGON
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Finley Buttes Limited Partnership
dba/Finley Buttes Landfill Company
Management Environmental National of Oregon, Inc.
PO Box 61726
Vancouver, WA 98661

The applicant owns and operates a solid waste landfill in Boardman, Oregon. Application was made for tax credit for a solid waste pollution control facility.

2. Description of Facility

The facility is a landfill liner and leachate collection system for one landfill cell.

The landfill liners and leachate collection system in the two cells, from bottom to top include a leak detection system consisting of a HDPE liner, sand, and pipes covered by a geotextile filter; a two-foot layer of selected native soil mixed with water and bentonite processed through a pug mill and placed on the cell floor in four compacted lifts; a 60 mil HDPE liner membrane; a protective cover of geotextile fabric; a network of six inch leachate collection pipes placed in one foot of round drain rock, a second protective geotextile fabric cover; and one foot working cover of native soil.

Claimed facility cost : \$1,052,041

An Accountant's Certification was provided. A cost allocation review of this application by an independent contractor identified no non-allowable costs claimed by the applicant.

3. Procedural Requirements

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

The Facility met statutory deadlines in that construction of the facility was begun on July 20, 1992, substantially completed by November 4, 1992 and placed into operation on December 11, 1992. The application was submitted to the Department December 30, 1992, within two years of substantial completion of the facility. The application was found to be technically complete on February 9, 1993.

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 (DEQ) and the federal Environmental Protection Agency (EPA), to prevent ground water pollution. The requirement is to comply with OAR 340-61, 40 CFR 258.40, and DEQ Solid Waste Permit number 394.

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.

None, the facility does not recover or convert waste products, (leachate) 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 because the applicant claims there is no income derived from the liner or leachate collection system.

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

There are no alternatives, the liner and leachate collection system are specified requirements of DEQ Solid Waste Permit number 394.

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 realized from the installation of the facility.

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

a) The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional accounting review to determine if costs were properly allocated. This review was performed under contract by the accounting firm of Coopers and Lybrand. The cost allocation review of this application has identified no issues to be resolved and no non-allowable costs that were claimed.

b) There are no other factors to be considered 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 Department and federal Environmental Protection Agency to prevent ground water pollution.
- c. The facility complies with DEQ statutes and permit conditions.
- d. An independent accounting firm under contract with the Department has concluded that no further procedures need be preformed.
- e. 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 \$1,052,041 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application No. T 3949.

WRB:wrb
wp51\tax\tc3949rr.sta
(503)229-5934
June 10, 1993

Environmental Quality Commission
811 S.W. Sixth Ave.
Portland, Oregon 97204

At your request, we have performed certain agreed upon procedures with respect to Finley Buttes Landfill Company's (the Company) Pollution control Tax Credit Application No. 3949 regarding the Finley Buttes Landfill Facility in Morrow County, Oregon (the Facility). The aggregate claimed Facility costs on the Application was \$1,052,041. The following agreed upon procedures and related finding are as follows:

1. We read the Application, Oregon Revised Statutes on Pollution Control Facilities Tax Credits-Sections 468.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits-Sections 340-16-005 through 340-16-050 (OARs).
2. We discussed the Application and Statutes with Jim Weisgerber, Controller, Bryan Johnson and Joy Hutchins, Engineering Consultants, of the Company and Bruce Bloch of Henton & Company, C.P.A., the Company's accountant.
3. We inquired as to whether there were any direct or indirect Company costs charged to the Facility costs claimed in the Application. We were informed that no such costs were charged. Based on our review of supporting documentation discussed in item No. 4 below, there does not appear to be any direct or indirect Company costs claimed in the Application.
4. We reviewed supporting documentation for 100% of the amount claimed on the Application through review of vendor invoices. All costs which were reviewed supporting the Application appeared to be from third party vendors.

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. 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.

JUN - 4 1993

Environmental Quality Commission
May 12, 1993
Page Two

This report is solely for the use of the State of Oregon Environmental Quality Commission and the DEQ in evaluating the Company's Pollution Control Tax Credit Application and should not be used for any other purpose.

Very truly yours,

Coopers & Lybrand

Portland, Oregon
May 12, 1993

Environmental Quality Commission

- Rule Adoption Item
 Action Item
 Information Item

Agenda Item C
July 23, 1993 Meeting

Title:

Rulemaking Regarding Hazardous Waste Disposal Facilities

Summary:

There are three proposed changes:

1. Amend class three permit modification rules for hazardous waste disposal sites to change final decision authority from the Commission to the DEQ Director or designee.
2. Amend the financial assurance rules to clarify that permittees of hazardous waste disposal facilities may choose other financial mechanisms rather than just one, equivalent to the federal hazardous waste program.
3. Adopt the federal RCRA Corrective Action Management Unit [CAMU] rule to improve the effectiveness of cleanups at hazardous waste facilities.

Department Recommendation:

Adopt the rules regarding hazardous waste disposal facilities as presented in Appendix A of the staff report.

Frederick Moore
Report Author

Stephanie Hallock
Division Administrator

Bill Ham
Director


7/2/93

†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: July 6, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director 
Subject: Agenda Item C, July 23, 1993 EQC Meeting

Rulemaking Regarding Hazardous Waste Disposal Facilities

Background

On May 7, 1993, the Director authorized the Hazardous and Solid Waste Division to proceed to a rulemaking hearing on proposed rules or amendments regarding hazardous waste disposal sites. Briefly, the rules or amendments would: 1. — delegate decision-making for class three permit modifications for disposal sites to the Director or Director's designee; 2. — allow for different closure and post-closure financial mechanisms as does the federal program; and 3. — adopt the federal Corrective Action Management Unit [CAMU] rule.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on June 1, 1993. Notice was mailed to the mailing list of those persons who have asked to be notified of rulemaking actions, and to a mailing list of persons known by the Department to be potentially affected by or interested in the proposed rulemaking action on May 14, 1993.

A Public Hearing was held on June 16, 1993 at 1:00 pm in Room 10A, DEQ Headquarters with Dave St. Louis, manager of the Hazardous Waste Reduction and Permitting Section, serving as Presiding Officer. The Presiding Officer's Report (Attachment C) summarizes the oral testimony presented at the hearing.

Written comment was received through June 17, 1993. 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 E). Based upon that evaluation, modifications to the initial rulemaking proposal are being recommended

[†]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 C
July 23, 1993 Meeting
Page 2

by the Department. Based on input from the Advisory Committee meeting, gender changes are being made to the proposed financial assurance rulemaking detailed in Attachment F. There are no other changes from the initial rulemaking proposal.

The following sections summarize the issues that this proposed rulemaking action is intended to address, the authority to address the issues, 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, a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

Issues this Proposed Rulemaking Action is Intended to Address

The regulation of hazardous waste treatment, storage and disposal facilities (TSDs), including corrective action at these facilities, are some of the most extensive of EPA hazardous waste rules. The Department has identified three rule changes that will streamline the regulation of these facilities and reduce state overlap with the federal program.

Relationship to Federal and Adjacent State Rules

These three rules are identical to the Federal requirements.

Adjacent states are authorized for the base RCRA program and will have similar requirements. The one notable exception is the Corrective Action Management Unit rule, which due to its recent promulgation, it is expected that Oregon will be one of the first states to adopt it. Due to the fact that EPA can administer this rule state-to-state, Oregon adoption will not cause any intra-state concerns.

Authority to Address the Issue

ORS 466.020(1), ORS 466.020(2) and ORS 466.020(7).

Memo To: Environmental Quality Commission
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Page 3

Process for Development of the Rulemaking Proposal (including alternatives considered)

The class three permit modification rulemaking is proposed to alleviate the burden of the Commission review of technical and non-policy permit modifications such as the recent modification of the Chemical Waste Management Arlington facility permit reviewed by the Commission on March 5, 1993. There are three types of permit modifications: Class one which keep the permit current with routine changes, class two which generally deal with types and quantities of hazardous wastes, technological advancements, or changes in the regulations and, class three which alter the facility or its operation.

The financial assurance rulemaking is proposed to make the state rule consistent with the federal rule, and the CAMU rule is proposed for adoption due to its use in facilitating cleanup at RCRA sites and being part of Oregon's RCRA authorization activities.

The Department reviewed alternatives to adopting these rules with the Hazardous Waste/Toxics Use Reduction Advisory Committee on May 11, 1993, at Portland State University. (Attachment F) Four members and two interested persons attended. All members present either approved or had no comment about the class three modification and financial assurance rules. One member from OSPRIG had a reservation about the CAMU rule but has not offered any comment. The rest of the members either approved or offered no comment regarding the CAMU rule.

No workshops or informal meetings were held. However, on May 13, 1993, the three proposed rules were included as part of a general discussion between the Department and the environment committee of the Association of Oregon Industries [AOI]. No comments regarding these three proposed rules or amendments were expressed by an AOI member.

A public hearing was held on June 16, 1993. Only one person testified. The testimony supported CAMU rule adoption.

Four written comments were submitted. All written comments supported the proposed rulemakings.

Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.

The three proposed hazardous waste disposal rules were discussed by the Presiding Officer at the public hearing. For the first two proposed rules, the class three permit modification delegation and the use of various financial assurance mechanisms, it was detailed how currently the regulations are worded and what the proposed language would allow. These two amended rules would make the Oregon regulation more closely resemble the federal rules.

The CAMU rule was discussed explaining that Oregon typically adopts all federal hazardous waste rules, and in this case adoption was being expedited because the CAMU rule would allow more timely and effective cleanup at RCRA hazardous waste sites.

Summary of Significant Public Comment and Changes Proposed in Response

No comments in opposition to the proposed rules were received. In fact, minimal interest in the rules was expressed. The few oral and written comments received supported the rulemaking, except for one Advisory Committee member who abstained in supporting the CAMU rule. The committee member wanted to review more of the rule until expressing a definite opinion, but since then no comment was submitted.

Because no suggestions were submitted, there are no changes from the initial proposed rules, except for the gender changes for the financial assurance rulemaking.

Summary of How the Proposed Rule Will Work and How it Will be Implemented

The permit modification rule and financial assurance proposed rules will only apply to the Chemical Waste Management Arlington facility and potentially to post-closure permits. Public implementation or outreach will not be necessary.

The CAMU rule can apply to sites undergoing remediation that RCRA hazardous waste facilities as defined in federal and state rules. Outreach to the interested public has already been generally provided by EPA when the CAMU was federally promulgated. The Department will use normal in-house information sharing to inform staff on how the CAMU is to be implemented.

Recommendation for Commission Action

It is recommended that the Commission adopt the rules/rule amendments regarding the three hazardous waste disposal rules as presented in Attachment A of the Department Staff Report.

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
- C. Presiding Officer's Report on Public Hearing
- D. List of Written Comments Received
- E. Department's Evaluation of Public Comment
- F. Advisory Committee Membership and Report
- G. Rule Implementation Plan
- H. Environmental Fact Sheet — EPA Issues Final Rules for Corrective Action Management Units and Temporary Units [EPA530-F-93-001]

Reference Documents (available upon request)

- Written Comments Received
- Letter from Donald A. Haagensen [attorney] to Roy Brower [Oregon DEQ] regarding Requirements in OAR 340-104-143 and 340-104-145 for Use of Trust Fund in Establishing Financial Assurance for Closure and Post-Closure for Hazardous Waste Disposal Facility. August 4, 1992

Approved:

Section:

Wade L. Smith

Division:

Stephanie Hallock

Report Prepared By: Fredrick Moore

Phone: 229-6991

Date Prepared: June 23, 1993

For the Class Three Permit Modification Rulemaking:

Modifications or revocation and reissuance of permits.

340-105-041

- (1) The phrase " or except when Division 120 applies" is added to the end of and made part of the provision in 40 CFR 270.41(c).
- (2) The duties of the "Director" as described in 40 CFR 270.42 ~~(a) and (b)~~ shall be assumed by the Director or the Director's designee of the Department of Environmental Quality ~~for Class 1 and Class 2 treatment, storage, or disposal facility permit modifications and Class 3 treatment or storage facility permit modifications~~ unless the Commission must make the decision in accordance with ORS 466.025 or 466.055.

For the Financial Assurance at Hazardous Waste Disposal Sites
Rulemaking:

Financial Assurance for Facility Closure.

340-104-143

- (1) This rule amends the requirements of 40 CFR 264.143.
- (2) An owner or operator of a disposal facility ~~must~~ may choose a cash bond as specified in ORS 466.150(6) or other equivalent financial assurance as the option specified in 40 CFR 264.143(a) to 264.143(h).
- (3) (a) If an owner or operator uses the trust fund option specified in 40 CFR 264.143(a) to establish financial assurance for closure of the facility, he the owner or operator must also comply with subsection (3)(b) of this rule.

(b) During the period the current closure cost estimate (CE) exceeds the current value of the trust fund (CV), the owner or operator must also establish supplemental financial assurance in the amount CE-CV by choosing one of the options specified in 40 CFR 264.143(b) to 264.143(f).
- (4) The phrase "...term of the initial RCRA permit..." in the first sentence of 40 CFR 264.143(a)(3) is deleted and replaced with the phrase "...initial 10 years the facility is permitted under Divisions 105 and 106..."
- (5) The phrase "...in one or more States" in the last sentence of 40 CFR 264.143(e)(1) is deleted and replaced with the phrase "in Oregon."
- (6) The phrase "Except as may be required by 40 CFR 264.143(f)(10)," is added to the beginning of the first sentence of 40 CFR 264.143(f)(1).
- (7) The phrase "An owner or operator that has a parent corporation may only meet ..." replaces the phrase "An owner or operator may meet" in the first sentence of 40 CFR 264.143(f)(10).

Financial Assurance for Post-Closure Care.

340-104-145

- (1) This rule amends the requirements of 40 CFR 264.145.
- (2) (a) The owner or operator of a disposal facility ~~must~~ may choose a cash bond as specified in ORS 466.150(6) or other equivalent financial assurance as the option specified in 40 CFR 264.145(a) through (h).
- (b) The owner or operator of a treatment or storage facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility and must choose one of the options specified in 40 CFR 264.145(a) through (h).
- (3) (a) If an owner or operator uses the trust fund option specified in 40 CFR 264.145(a) to establish financial assurance for post-closure care of a facility, he the owner or operator must also comply with subsection (3)(b) of this rule.
- (b) During the period the current post-closure cost estimate (CE) exceeds the current value of the trust fund (CV), the owner or operator must also establish supplemental financial assurance in the amount CE-CV by choosing one of the options specified in 40 CFR 264.145(b) to 264.145(f).
- (4) The phrase "Except as may be required by 40 CFR 264.145(f)(11)," is added to the beginning of the first sentence of 40 CFR 264.145(f)(1).
- (5) The phrase "An owner or operator that has a parent corporation may only meet ..." replaces the phrase "An owner or operator may meet ..." in the first sentence of 40 CFR 264.145(f)(11).

For the Corrective Action Mangement Unit [CAMU] rulemaking:

**Adoption of United States Environmental Protection Agency
Hazardous Waste Regulations.**

340-100-002

- (1) Except as otherwise modified or specified by OAR Chapter 340, Divisions 100 to 106, 109 and 120, the rules and regulations governing the management of hazardous waste, including its generation, transportation, treatment, storage, recycling and disposal, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Parts 260 to 266, 268, 270 and Subpart A of 124, 58 FR 8658, February 16, 1993, and amendments thereto promulgated through July 1, 1992, except for 57 FR 7628, March 3, 1992, are adopted by reference and prescribed by the Commission to be observed by all persons subject to ORS 466.005 to 466.080, and 466.090 to 466.215.

NOTICE OF PROPOSED RULEMAKING HEARING(Rulemaking Statements and Statement of Fiscal Impact **must** accompany this form.)**AGENCY:** Department of Environmental Quality, Hazardous and Solid Waste Division

The above named agency gives notice of hearing.

HEARING TO BE HELD:

DATE:	TIME:	LOCATION:
June 16, 1993	1:00 pm	Room 10A, DEQ Headquarters [Executive Building], 811 SW 6 th Avenue, Portland, Oregon

Hearings Officer: Dave St. Louis

Pursuant to the Statutory Authority of ORS 466.020(2) [class three modification], ORS 466.020(1) [financial assurance], and ORS 466.020 (7) [CAMU], the following action is proposed:

ADOPT: CAMU rule by reference and by amending OAR 340-100-002**AMEND:** OAR 340-105-041 [class three modifications]
OAR 340-104-143 and 340-105-145 [financial assurance]**REPEAL:** N/A Prior Notice Given; Hearing Requested by Interested persons No Prior Notice Given**SUMMARY:**


This proposal includes three separate noncontroversial rulemakings for hazardous waste disposal facility regulations. These three proposals would 1) change class three permit modification decision making from the Commission to the Director or Director's designee, 2) revise a current Oregon Administrative Rule to clarify that other financial assurance mechanisms, rather than just one, may be used at hazardous waste disposal sites and 3) adopt the recently promulgated federal Corrective Action Management Unit [CAMU] rule to efficiently address remediation at RCRA sites.

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments received by June 17, 1993. will also be considered. Written comments should be sent to and copies of the proposed rulemaking may be obtained from:

AGENCY: Department of Environmental Quality
ADDRESS: Hazardous and Solid Waste Division
811 S. W. 6th Avenue
Portland, Oregon 97204

ATTN: Fredrick Moore

PHONE: (503) 229-6991 or Toll Free 1-800-452-4011

 5/7/93
Signature Date

file a:\threerul\threerul.bul

A CHANCE TO COMMENT ON...

Rulemaking Regarding Hazardous Waste Disposal Facilities

Date Issued: May 14, 1993
Public Hearing: June 16, 1993
Comments Due: June 17, 1993

**WHO IS
AFFECTED:**

Hazardous waste disposal facilities, including all hazardous waste storage, treatment, or disposal facilities subject to corrective action.

**WHAT IS
PROPOSED:**

There are three proposed changes: 1. Amend class three permit modification rules for hazardous waste disposal sites to change final decision authority from the Commission to the DEQ Director or designee. 2. Amend the financial assurance rules to clarify that permittees of hazardous waste disposal facilities may choose other financial mechanisms rather than just one, equivalent to the federal hazardous waste program. 3. Adopt the federal RCRA Corrective Action Management Unit [CAMU] rule to improve the effectiveness of cleanups at hazardous waste facilities.

**WHAT ARE THE
HIGHLIGHTS:**

The class three permit modification rule change would allow DEQ's Director or designee to make the final decision instead of the Commission, whose duties usually are rule adoptions, policy setting and issuance of orders. These modification decisions are technical in nature and therefore more suitable for DEQ action.

The financial assurance rule amendment would address an ambiguity in the Oregon rules. The rules currently suggest that hazardous waste disposal facilities must use a trust fund for financial assurance. Amending this rule would clarify that other means of financial assurance can be used, and such amendment would make the rule consistent with ORS statute and federal regulations that are already adopted.

Adoption of the recently promulgated federal Corrective Action Management Unit [CAMU] rule would serve to allow DEQ remediation



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

11/1/86

- 1 -

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.

decisions at hazardous waste management facilities to be more effectively and efficiently implemented. Also, adoption of the CAMU rule aids DEQ's application to seek corrective action authorization for corrective action from EPA. Such authorization would make DEQ the primary implementer of RCRA hazardous waste cleanups.

**HOW TO
COMMENT:**

Public Hearings to provide information and receive public comment are scheduled as follows:

June 16, 1993, 1:00 pm in Room 10A at DEQ Headquarters located at 811 SW 6th Avenue, Portland, Oregon.

Written comments must be received by 5:00 p.m. on June 17, 1993 at the following address:

Department of Environmental Quality
Hazardous and Solid Waste Division
811 S. W. 6th Avenue
Portland, Oregon, 97204

Attention: Fredrick Moore

A copy of the Proposed Rule may be reviewed at the above address. A copy may be obtained from the Department by calling the Hazardous and Solid Waste Division at 229-5913 or calling within 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:

Please advise Sylvia Herrley, DEQ Public Affairs, 229-5317 (voice/229-6993 (TDD), if you need special accommodations due to a disability.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
Three Rulemakings Regarding Hazardous Waste Disposal Facilities

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 466.020(1), ORS 466.020(2) and ORS 466.020(7)

2. Need for the Rule

1. Due to the technical and straightforward nature, both the Commission and the Department have professed that class three permit modification decisions at hazardous waste disposal facilities are better suited to Department review and issuance by the Director or Director's designee, rather than by the Commission.

2. A rule change is necessary to address an ambiguity in the financial assurance rules for hazardous waste disposal facilities. Removal of the ambiguity would cause easier inspections and serve to cause more accurate and implementable future hazardous waste disposal permit application submittal and review, and make the state program more equivalent to the federal program.

3. Adoption of the federal Corrective Action Management Unit [CAMU] rule would allow DEQ to more effectively and efficiently address remediation of past practices at hazardous waste sites and aid DEQ's efforts in seeking corrective action authorization from EPA as the primary implementer of RCRA hazardous waste site cleanups.

3. Principal Documents Relied Upon in this Rulemaking

Federal Register: Rulemaking for Corrective Action Management Units [58 FR Vol. 58, No. 29, 8658, February 16, 1993]

August 4, 1992. Letter from Donald A. Haagensen [Cable, Huston, Benedict, Haagensen & Ferris] to Roy Brower [Oregon DEQ] regarding Requirements in OAR 340-104-143 and 340-104-145 for Use of Trust Fund in Establishing Financial Assurance for Closure and Post-Closure for Hazardous Waste Disposal Facility.

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State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
Hazardous Waste Disposal Facilities

Fiscal and Economic Impact Statement

Introduction

Fiscal Impact of Class Three Modification for Hazardous Waste Disposal Rulemaking: This rule change will result in more expedient processing of modification requests which could result in unidentified savings for disposal facilities.

Fiscal Impact of Financial Assurance Rulemaking: This rulemaking clarifies current Department implementation and therefore does not fiscally affect either Oregon's hazardous waste disposal facilities or anyone else.

Fiscal Impact of Adopting Federal Corrective Action Management Unit Rulemaking: This federal rule regulation promulgated in accordance with the Hazardous and Solid Waste Act [HSWA] and is therefore currently in effect in Oregon. Adoption of this rule will not create an economic impact on either state agencies, units of local government or the public, including small and large businesses.

General Public

Not affected by any of the rule.

Small Business

None

Large Business

None

Local Governments

None

State Agencies

None

Assumptions

The CAMU rule fiscal impact relied on the EPA analysis found in the Federal Register [58 FR No. 29 8681 February 16, 1993]. We assume it to be true and accurate.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
Hazardous Waste Disposal Facilities

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

The proposed rulemaking includes three minor and noncontroversial items. Two rulemakings will change current Oregon Administrative Rules and the other rulemaking will adopt a recently promulgated federal regulation. The rulemakings are summarized below:

1. Modify OAR 340-105-041 to change class three permit modification decisions at disposal facilities from the Commission to the Director or his designee.
2. Modify OAR 340-104-143 and 340-104-145 to clarify that disposal facilities may use other financial assurance mechanisms for closure and post-closure care.
3. Adopt the federal Corrective Action Management Unit [CAMU] rule that will allow for expedited and efficient remediation at RCRA hazardous waste sites.

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 X

a. If yes, identify existing program/rule/activity:

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. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.**

The class three permit modification rulemaking changes administrative processing and will not result in new land use effects.

The financial assurance rulemaking clarifies DEQ's current implementation of hazardous waste statutes and rules and will not result in new land use effects.

The adoption of the federal CAMU rule will have no direct effect on land use because it is already implemented by EPA. However, if the CAMU rule were to involve land use in some unforeseen manner, DEQ would rely on the permitting and land use coordination regulations. These regulations require public notification that goes to both the general public and appropriate federal, state and local agencies, and approval from the land use jurisdiction. For orders (not permits) that are issued for hazardous waste cleanup, DEQ policy institutes proper public and governmental notification and outreach.

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.**

Stephanie Hallock
Division

Suzanne Taylor
Intergovernmental Coord.

5/6/93
Date

State of Oregon
Department of Environmental Quality

Memorandum

Date: June 18, 1993

To: Environmental Quality Commission

From: Dave St Louis

Subject: Presiding Officer's Report for Rulemaking Hearing
Hearing Date and Time: June 16, 1993, 1:00 to 3:00 pm
Hearing Location: Room 10A, 811 SW 6th Avenue
Portland, Oregon

Title of Proposal: Rulemaking Regarding Hazardous Waste Disposal Facilities

The rulemaking hearing on the above-titled proposal was convened at 1:00 pm. Members of the public present were asked to sign the attendance roster and sign witness registration forms if they wished to present testimony. They were also advised that the hearing was being recorded and of the procedures to be followed. A brief description of the proposed rule changes was presented, followed by public testimony. Four people were present and one person testified on the rulemaking proposal.

Mr. Jeffery Ring, of the law firm Heller, Ehrman, White and McAuliffe, stated he supported the CAMU rule proposal and would like to see the Federal RCRA Hazardous Waste Corrective Action Program delegated to the Department. Mr. Ring also asked if the Department had interpreted whether or not the CAMU rule would apply to a generator who had an emergency spill or would application of the CAMU be limited to facilities subject to RCRA permitting or in interim status.

No further verbal or written testimony was presented at the public hearing. The Department staff responded to Mr. Ring's question by clarifying that the CAMU rule would be applicable only if RCRA regulated units such as a waste pile, surface impoundment or land disposal area existed and would not be applicable to cleanup of an emergency spill.

The hearing was closed at 3:00 pm.

RULEMAKING REGARDING HAZARDOUS WASTE DISPOSAL FACILITIES

**Class Three Permit Modification Delegation,
Financial Assurance Mechanism, and;
Corrective Action Management Unit**

INDEX TO WRITTEN COMMENTS

A summary of all comments received on the proposed rule amendments is contained in ATTACHMENT C. The following people submitted written comments on the proposed rules.

1. Thomas Badrick, Environmental Safety and Health Officer, OECO Corporation, 4607 SE International Way, Milwaukie, Oregon 97222
2. Dick Briggs, Dick Briggs Consulting Services, 80 W 23rd Avenue, Eugene, Oregon 97405
3. Bruce Visser, Environmental Safety and Health Officer, Marion County Department of Public Works, Salem, Oregon 97301
4. Donald A. Haagensen, Attorney representing Chemical Waste Management of the Northwest and Western Compliance Services, Inc., Cable, Huston, Benedict, Haagensen & Ferris, 2000 Security Pacific Plaza, 1001 SW Fifth Avenue, Portland, Oregon 97204

RULEMAKING REGARDING HAZARDOUS WASTE DISPOSAL FACILITIES

Class Three Permit Modification Delegation,
Financial Assurance Mechanism, and;
Corrective Action Management Unit

SUMMARY OF COMMENTS AND RESPONSE TO COMMENTS

A public hearing was held on June 16, 1993, to solicit comments on three proposed rule amendments for hazardous waste disposal sites. One brief comment was submitted at the hearing.

The comment period for these proposed rules ended on June 17, 1993. A total of four letters were submitted.

Below is a summary of the comments received.

A. AMENDING THE PERMIT MODIFICATION RULES TO CHANGE THE FINAL DECISION MAKING FROM THE COMMISSION TO THE DEPARTMENT

Three comments were submitted supporting amending the permit modification rules as proposed. No comments were received in opposition or with concern regarding amendment of the permit modification rule.

DEQ Response: No response is required.

B. USE OF VARIOUS FINANCIAL ASSURANCE MECHANISMS FOR CLOSURE AND POST-CLOSURE CARE

Three written comments in favor of amending the financial assurance rules as proposed were submitted. No comments were received in opposition to the financial rule amendments.

DEQ Response: No response is required.

C. ADOPTION OF THE FEDERAL CAMU RULE

Two written comments and one comment at the hearing were submitted supporting adoption of the federal CAMU rule. No comments were received in opposition or had concerns regarding adoption of the CAMU rule.

DEQ Response: No response is required.

D. ADOPTION OF FEDERAL RECYCLING AND MANAGEMENT OF USED OIL REGULATIONS

One commenter requested that Title 40 Code of Federal Regulations Part 279, Recycling of Used Oil be adopted as an Oregon Administrative Rule.

DEQ Response: At this time the Department is only proposing to amend three specific hazardous waste rules, and in accordance with Oregon rulemaking, can only address issues that specifically pertain to these three issues. At a later time, DEQ will be proposing rules to address management of used oil, and at that time the Department would welcome comments.

DEPARTMENT OF ENVIRONMENTAL QUALITY
HAZARDOUS & SOLID WASTE DIVISION
HAZARDOUS WASTE/TOXICS USE REDUCTION
ADVISORY COMMITTEE MEETING
May 11, 1993

COMMITTEE MEMBERS PRESENT:

Don Haagensen, Hill, Huston, Cable, Ferris and Haagensen
Harold Rodinsky, Schnitzer Steel Products
Jim Spear, Williams Control
Quincy Sugarman, OSPIRG

COMMITTEE MEMBERS ABSENT:

Bruce Snyder, Chair, Lambier Professional Group
Shirley Benson, National Federation of Independent Businesses (NFIB)
Frank Brawner, Oregon Bankers Association
Jim Craven, American Electronics Association
Margie Harris, Citizen
Bob Hansen, Marion County Public Works
Richard Kosesan, Oregon Agriculture Chemicals Association
Wynne Perryman, Oregon Environmental Council
Robert Prolman, Weyerhaeuser Company
Chet Schink, Consultant
Robert Westcott, Wesco Parts Cleaners
Jim Whitty, Associated Oregon Industries
Robert Westcott, Wesco Parts Cleaners
Eugene Rosolie, NW Environmental Advocates

GUESTS:

Kurt Burkholder, Oregon Department of Justice
Al Smith, City of Portland

DEQ STAFF:

Roy Brower, Manager, HW Policy & Program Development
Janelle Dean
Sandy Gurkewitz
Fredrick Moore
Dave St. Louis, Manager, HW Reduction and Permitting Section

The meeting was called to order at 8:45 am by Roy Brower who acted as meeting facilitator. The purpose of the meeting was to present three proposed rules related to hazardous waste treatment, storage and disposal facilities (TSDs) to the advisory committee for comment, prior to a public hearing. A schedule of this rulemaking process was distributed (attached).

Three proposed rules were discussed: 1) the delegation of Class III permit modification decision authority from the EQC to the Director or Director's designee; 2) expanding the range of financial assurance options available to hazardous waste management facilities; and 3) early adoption of the EPA's Corrective Action Management Unit (CAMU) rule.

Dave St. Louis presented the proposed Class III permit modification at hazardous waste disposal sites rule change (OAR 340-105-041). St. Louis related how at the March 5, 1993 Environmental Quality Commission (EQC) meeting, the EQC voiced the opinion that such technical modification decisions should not be part of the EQC agenda. In response, the Department initiated this rulemaking to delegate such Class III modification decisions to the DEQ Director or the Director's designee, and that this expedited rulemaking for final action in July would preclude unnecessary EQC deliberation for ongoing permit modifications that might be ready for the September 1993 EQC meeting. Proposed rule changes were explained and an example of a Class III permit modification was described. It was noted that a slight change in wording to the rule (as received in the agenda packet) would be made. Instead of stating that the Commission retains modification decision authority "in accordance with ORS 466", proposed language reads "in accordance with **ORS 466.025 or 466.055**". It was also explained that this rule would primarily pertain to the Chemical Waste Management facility at Arlington [the only operating disposal permit in Oregon], but would also apply to any Class III modification of a post-closure permit.

No concern to the proposed rule was voiced by the Committee, and some voiced support. As a preamble, St. Louis then described that DEQ decided to proceed with two additional rulemakings that were, in the opinion of the Department, noncontroversial, and therefore for the sake of efficiency, attached to the permit modification rulemaking.

St. Louis then proceeded to discuss the financial assurance for facility closure (OAR 340-104-143 and 340-104-145). In reviewing these rules, as they apply to the Chemical Waste Management facility in Arlington, it appears that Oregon Administrative Rules are in conflict with federal regulations with respect to financial assurance mechanisms available for hazardous waste disposal site closure and post-closure. Changes to these rules were proposed to eliminate inconsistencies between the federal and state program and to clarify that additional financial assurance mechanisms than are currently specified in Oregon Administrative Rules can be used. The committee voiced no opposition to this rule, but requested that gender specific wording in the rule be changed. The following additional language changes will be proposed (bracketed and underlined):

Financial Assurance for Facility Closure.

340-104-143

- (1) This rule amends the requirements of 40 CFR 264.143.
- (2) An owner or operator of a disposal facility ~~must~~ may choose a cash bond as specified in ORS 466.150(6) or other equivalent financial assurance as the option specified in 40 CFR 264.143(a) to 264.143(h).

- (3) (a) If an owner or operator uses the trust fund option specified in 40 CFR 264.143(a) to establish financial assurance for closure of the facility, ~~he~~ [the owner or operator] must also comply with subsection (3)(b) of this rule.
- (b) During the period the current closure cost estimate (CE) exceeds the current value of the trust fund (CV), the owner or operator must also establish supplemental financial assurance in the amount CE-CV by choosing one of the options specified in 40 CFR 264.143(b) to 264.143(f).
- (4) The phrase "...term of the initial RCRA permit..." in the first sentence of 40 CFR 264.143(a)(3) is deleted and replaced with the phrase "...initial 10 years the facility is permitted under Divisions 105 and 106..."
- (5) The phrase "...in one or more States" in the last sentence of 40 CFR 264.143(e)(1) is deleted and replaced with the phrase "in Oregon."
- (6) The phrase "Except as may be required by 40 CFR 264.143(f)(10)," is added to the beginning of the first sentence of 40 CFR 264.143(f)(1).
- (7) The phrase "An owner or operator that has a parent corporation may only meet ..." replaces the phrase "An owner or operator may meet" in the first sentence of 40 CFR 264.143(f)(10).

Financial Assurance for Post-Closure Care.

340-104-145

- (1) This rule amends the requirements of 40 CFR 264.145.
- (2) (a) The owner or operator of a disposal facility ~~must~~ may choose a cash bond as specified in ORS 466.150(6) or other equivalent financial assurance as the option specified in 40 CFR 264.145(a) through (h).
- (b) The owner or operator of a treatment or storage facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility and must choose one of the options specified in 40 CFR 264.145(a) through (h).
- (3) (a) If an owner or operator uses the trust fund option specified in 40 CFR 264.145(a) to establish financial assurance for post-closure care of a facility, ~~he~~ [the owner or operator] must also comply with subsection (3)(b) of this rule.
- (b) During the period the current post-closure cost estimate (CE) exceeds

the current value of the trust fund (CV), the owner or operator must also establish supplemental financial assurance in the amount CE-CV by choosing one of the options specified in 40 CFR 264.145(b) to 264.145(f).

- (4) The phrase "Except as may be required by 40 CFR 264.145(f)(11)," is added to the beginning of the first sentence of 40 CFR 264.145(f)(1).
- (5) The phrase "An owner or operator that has a parent corporation may only meet ..." replaces the phrase "An owner or operator may meet ..." in the first sentence of 40 CFR 264.145(f)(11).

Fredrick Moore, described the federal Corrective Action Management Unit [CAMU] federal rule proposed to be adopted. Moore explained how the rule could be used for remedial actions at RCRA facilities in order to promote more on-site treatment and not let land disposal restriction [LDR] and minimum technology rules [MTR] unnecessarily impede more effective cleanups. The Department also explained that this rule would need to be adopted at a later date as part of a federal rule package as a requirement to obtain authorization to run the federal corrective action authority program. Early adoption would help Oregon's effort now to obtain corrective action authority from EPA. This early adoption would create similar federal and state remediation rules, which would result in similar cleanups at sites where both DEQ and EPA are evaluating corrective action. One committee member was concerned that this rule in actuality would allow less stringent standards to be met. DEQ explained that adherence to LDR and MTR during RCRA corrective action could be cost prohibitive to a facility, therefore causing the probable case of simply covering the waste without treatment as the only financial, and legally acceptable, option open to the facility. The committee member agreed to review it further.

Three documents not included in the May 3 agenda packet were distributed to the committee one is attached (Schedule of proposed rulemaking) and the other two are available by calling Frederick Moore at 229-6991. They are the CAMU Rule as specified in the February 16, 1993 *Federal Register* Vol 58, No. 29 8658 and a draft Staff Report for hearing authorization on the proposed rule changes.

The meeting was adjourned at 9:30 am.

NEXT MEETING: To be scheduled.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
Rulemaking Regarding Hazardous Waste Disposal Facilities

Rule Implementation Plan

Summary of the Proposed Rule

There are three proposed changes: 1. Amend class three permit modification rules for hazardous waste disposal sites to change final decision authority from the Commission to the DEQ Director or designee. 2. Amend the financial assurance rules to clarify that permittees of hazardous waste disposal facilities may choose other financial mechanisms rather than just one, equivalent to the federal hazardous waste program. 3. Adopt the federal RCRA Corrective Action Management Unit [CAMU] rule to improve the effectiveness of cleanups at hazardous waste facilities.

Proposed Effective Date of the Rule

August 1, 1993

Proposal for Notification of Affected Persons

Not needed

Proposed Implementing Actions

No implementing actions needed for the regulated community or public due to the specific rules only for the Arlington hazardous waste facility, or in the case of the proposed CAMU rule, outreach and information occurred with the federal promulgation.

The DEQ Hazardous and Solid Waste Division staff will provide information and assistance with CAMU instruction through normal information sharing activities (e.g., quarterly meetings, site-specific discussions, etc.,)

Proposed Training/Assistance Actions

DEQ hazardous waste staff have already received EPA training in implementing the CAMU rule.

No training is required for the proposed permit modification or financial assurance rules.



Environmental Fact Sheet -

RECEIVED

MAR 03 1993

ATTACHMENT H

EPA Issues Final Rules for Corrective Action Management Units and Temporary Units

EPA has revised the corrective action-related regulations under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The revised regulations address the difficulties associated with management of remediation wastes during corrective actions. EPA is introducing the concepts of Corrective Action Management Units (CAMUs) and Temporary Units for remediation wastes to provide facilities with a wider range of remediation alternatives, while assuring reliable, protective, and cost-effective remedies. This flexibility will help to promote more expeditious clean-ups at many sites.

EPA's Corrective Action Program

Subtitle C of the 1976 Resource Conservation and Recovery Act (RCRA) created a comprehensive program for the safe management of hazardous wastes. In 1984, Congress passed the Hazardous and Solid Waste Amendments (HSWA), which mandated even stricter standards for the regulation of hazardous wastes. One of the key provisions of HSWA was the authority provided to EPA to compel "corrective action" for environmental problems that have resulted from historic waste management practices at hazardous waste facilities.

Since 1984, corrective action has become a major part of the RCRA program. More than 800 facilities are now in the process of investigating and cleaning up contamination problems. EPA estimates that as many as 4,000 RCRA facilities may eventually need some type of corrective action.

The actual cleanup of these facilities, as with Superfund sites, often involves excavating and managing large volumes of hazardous wastes, including contaminated soils, debris, sludges and other wastes. These cleanup wastes are subject to the same set of RCRA regulations that apply to management of newly generated hazardous wastes. However, EPA's experience with implementing the corrective action program has shown that application of these uniform, national standards has often been counterproductive when applied to the cleanup of individual sites. In many cases, the application of these standards, such as the RCRA land disposal restrictions (LDRs), has forced EPA to select remedies that are environmentally less effective and reliable, and in some cases more expensive, than alternative remedies that could otherwise have been available. For example, treatment

standards requiring incineration often preclude the use of other effective treatment technologies that could be used in achieving a protective cleanup for a site.

Action Being Taken

In order to address these problems, EPA has finalized regulations that provide for the use of corrective action management units (CAMUs) when cleaning up sites under RCRA and Superfund. Use of the CAMU concept under these regulations will ensure cleanups that are fully protective, yet better tailored to actual site conditions. Under the rule, appropriate treatment requirements will be determined as part of the overall cleanup plan for a particular site. This is expected to result in more expeditious cleanups, and will promote the use of new, innovative treatment technologies. The use of CAMUs should decrease the volumes of cleanup wastes that must be incinerated, and increase the use of alternative treatment technologies that are appropriate for actual site and waste characteristics. In addition, EPA expects the new rule to result in less waste being hauled off-site, and overall, more treatment of greater volumes of cleanup wastes

The CAMU regulations contain important restrictions and safeguards that ensure the rule will be used to achieve more protective and effective cleanups. For example, newly generated process wastes cannot be managed in CAMUs, nor can wastes that originate from other clean-up sites. Technical requirements for ground-water monitoring, closure, and post-closure are also specified. In addition, the rule requires thorough public review and comment on CAMU decisions.

Based on the Regulatory Impact Analysis conducted for this rule, the use of

Glossary and Acronyms

Corrective Action Management Unit (CAMU)

An area within a facility that is designated for the management of remediation wastes generated during the implementation of specific corrective action requirements. CAMUs can only be designated by the EPA Regional Administrator.

Temporary Unit (TU): Temporary tanks and/or container storage area used solely for treatment or storage of hazardous remediation wastes during specific remediation activities. Designated by the Regional Administrator, such units must conform to specific standards, and may only be in operation for a pre-specified period of time.

Remediation Wastes: All solid and hazardous wastes, and all media (including ground water, surface water, soils and sediments) and debris that contain listed hazardous wastes, or which themselves exhibit a characteristic, that are managed for the purpose of implementing corrective action requirements.

Land Disposal Restrictions: A series of regulations restricting the land disposal (placement in or on land) of hazardous wastes as mandated by the 1984 HSWA amendments.

In Situ: In place.

RCRA: The Resource Conservation and Recovery Act, enacted in 1976.

HSWA: The Hazardous and Solid Waste Amendments, enacted in 1984.

CERCLA: *Comprehensive Environmental Response, Compensation, and Liability Act*. Also known as "Superfund". Enacted in 1980

SWMU: Solid Waste Management Unit

TSDF: Treatment Storage and Disposal Facility

RFA: RCRA Facility Assessment

MTRs: Minimum Technology Requirements

the CAMU concept is also expected to result in billions of dollars of cost savings for industry and Federal agencies.

In addition to the CAMU provisions, the final rule also will allow regulatory agencies to approve "temporary units" for remedial purposes. This provision will allow regulatory agencies to modify design standards for tanks and container storage units that are used for short-term treatment or management of remediation wastes.

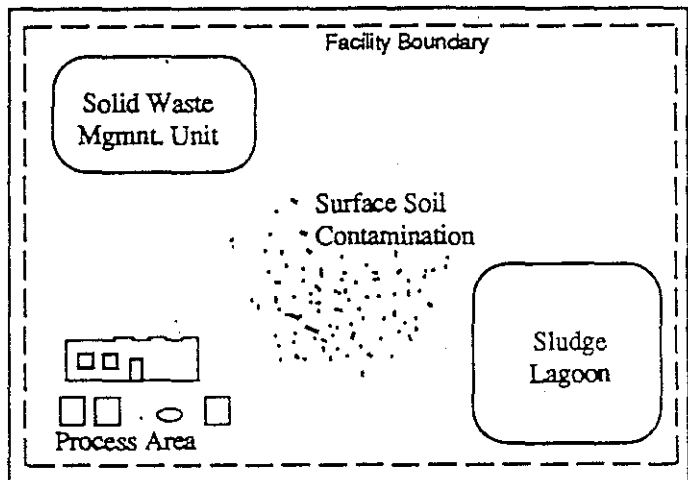
State Applicability

This rule will take effect shortly after publication, in States where EPA is implementing the RCRA corrective action program. In other States, the rules will not take effect until they are adopted by the State legislatures. Since the rule is considered "less stringent," adopting the CAMU rules will not be mandatory. However, EPA strongly encourages States to adopt these regulations.

Example 1

Before Remedial Activities

The remedial goal at this facility is to 1) treat and contain contaminated surface soil from the site, and (2) to stabilize and contain sludge wastes from the leaking sludge lagoon. In this case, the two waste streams have very different characteristics and require different treatment processes. In addition, they will require different ultimate containment methods.

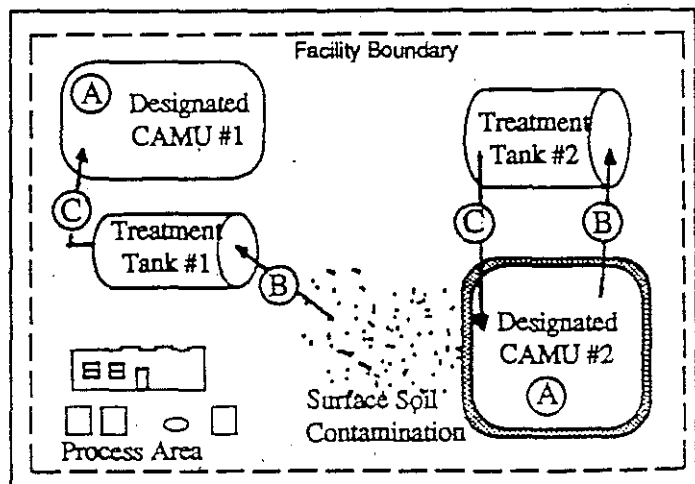


After Designating CAMUs

(A) To allow for these differing waste characteristics and to minimize further contamination, the regulatory officials have designated two separate CAMUs to deal with the two remediation waste streams.

(B) Remediation wastes from the contaminated surface soil of the facility will be treated in treatment unit #1 and remediation wastes from the lagoon will be treated in unit #2. Both units may be temporary units authorized specifically for the remediation process.

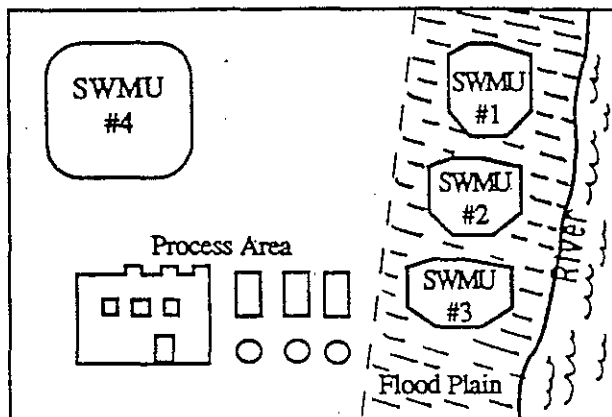
(C) Treatment residuals can be placed in each CAMU without triggering the Land Disposal Restrictions. Each CAMU must be protective of human health and the environment. For the sludge lagoon (now CAMU #2), this may mean retrofitting the unit, even though it would not necessarily need to meet minimum requirements.



Example 2

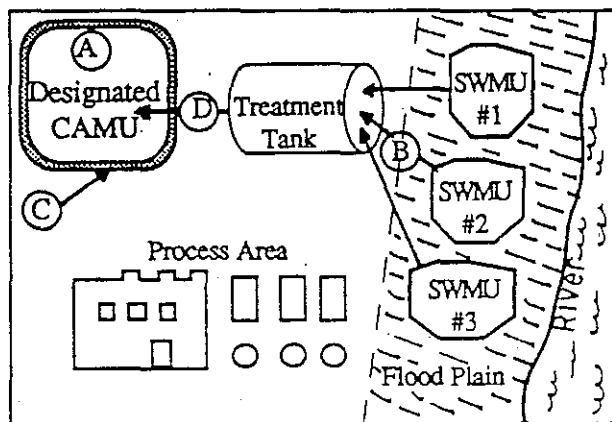
Before Remedial Activities

The remedial goal at this facility is to treat the wastes in each of the solid waste management units and consolidate the wastes from the SWMUs in the flood plain to more protective location.



The Resolution Using CAMUs

(A) The Regional Administrator or State Director designates SWMU #4 as a CAMU. (B) The Remediation wastes from the four SWMUs are then removed and treated in an on-site temporary treatment unit. (C) SWMU #4 is retrofitted with a liner. (D) The treatment residuals can be placed in the CAMU without meeting the Land Disposal Restrictions. Specific treatment standards and other design, operation, closure, and post-closure requirements for the CAMU would be specified according to the criteria in the CAMU regulations.



For More Information

For additional information or to order a copy of the *Federal Register* notice, contact the RCRA Hotline, Monday-Friday, 8:30 a.m. to 7:30 p.m. EST. The national, toll-free number is (800) 424-9346; TDD (800) 553-7672 (hearing impaired); in the Washington, D.C. metro area, the number is (703) 412-9810, or TDD (703) 412-3323.

The general public may also obtain copies of documents applicable to this rulemaking by writing to the:

RCRA Information Center (RIC),
U.S. Environmental Protection Agency
401 "M" Street SW
Washington, D.C. 20460.

Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item D
July 23, 1993 Meeting

Title:

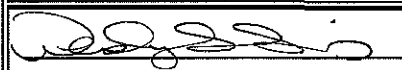
Anodizing Inc. New Source review Variance Request

Summary:

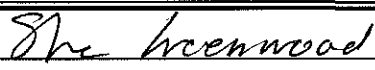
Anodizing Inc. has requested a variance from the air quality rules requiring New Source Review for major sources of volatile organic compounds (VOC) in ozone non-attainment areas. New Source Review requirements include state of the art control equipment and offsets for 110% of remaining emissions, to ensure a net air quality benefit in non-attainment areas. Anodizing Inc. would like to exceed the 40 ton per year threshold for New Source Review requirements by up to 10 tons, with no emission controls, for a period ending March 1997. In return, they offer to give up their right to construct a separate facility under an old permit for Pacific Coatings Inc., which had a plant site emission limit of 66.4 tons per year.

Department Recommendation:

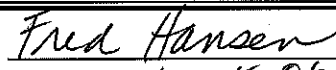
The Department recommends denial of the variance request on the grounds that it does not represent a unique circumstance, that it violates the New Source Review policy of requiring technological controls in addition to emission offsets, and that such a variance would likely result in a net environmental detriment.



Report Author



Division Administrator



Director

K. Olsen

†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: July 9, 1993

To: Environmental Quality Commission

From: Fred Hansen, Director *Fred Hansen* *K. Olson*

Subject: Agenda Item D, July 23, 1993 EQC Meeting

Anodizing Inc. New Source Review Variance Request

Statement of the Issue

Anodizing Inc. seeks a variance from the air quality rules requiring New Source Review (NSR) for any new major Volatile Organic Compound (VOC) source in the Portland ozone nonattainment area. This request was withdrawn at the December 11, 1992 Commission meeting before its merits were considered. Based on clarifying input from the U.S. Environmental Protection Agency on the legal options available, the company has renewed its request.

Background

Anodizing Inc. does contract coating of exterior aluminum panels and extrusions for commercial buildings. The air permit, issued September 29, 1988, authorizes construction and limits VOC emissions to 39.9 tons per year. The company was aware that it was siting in an ozone nonattainment area and specifically requested the maximum allowable emission limit that avoided New Source Review. At the time, they stated that they would install emission control equipment if higher production levels would cause an exceedance of the permit limit. The permit required the facility to be built to readily accommodate later installation of such control equipment.

Anodizing Inc. also holds the permit for the Pacific Coatings Inc. facility. This facility was shutdown around August 1991 and the production equipment removed. The permit allows 66.4 tons per year of emissions. No emission credits from this facility are available as an offset for facilities at other locations.

[†]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

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July 23, 1993 Meeting

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New Source Review, a federally delegated program, is a key element of control strategies for nonattainment areas. It provides a mechanism for industrial development without hindering progress toward attainment, by requiring major new sources to first install state of the art control equipment and then offset the emissions that would still occur plus 10% to provide a net air quality benefit. It requires *preconstruction* review to ensure that major facilities are built with *Lowest Achievable Emission Rate* (LAER) technology. This results not only in an environmental benefit, but also state of the art controls that will be effective for the life of the facility. Oregon's rules trigger New Source Review at 40 tons per year of VOC in Portland (100 tons per year under the federal regulations). These requirements are intentionally rigorous, but can be avoided by sources that restrict their emissions increases to less than 40 tons per year.

The requested variance would allow Anodizing Inc. to:

- Exceed the 40 ton per year trigger for NSR through March 1, 1997.
- Allow uncontrolled emissions up to 49.9 tons per year.
- Bypass NSR requirements for Lowest Achievable Emission Rate, net air quality benefit, offsets, and an alternatives analysis.

Anodizing Inc. would also:

- Relinquish the Pacific Coatings Inc. facility permit.
- Reduce emissions back under 40 tons per year by the end of the variance period.

The December 11, 1992 staff report for Agenda Item J contains detailed background on this issue. Further explanatory information on the company's air permits and regulatory relief requests is given in Attachment A.

Authority to Address the Issue

The Commission's authority to grant variances is in ORS 468A.075. The New Source Review rules are OAR 340-20-220 through -276. The SIP is codified at OAR 340-20-037.

The EPA continues to hold (Attachment B) that a variance from the 40 ton per year trigger for New Source Review that is contained in the State Implementation Plan (SIP) would have to be approved by EPA as a source specific SIP revision before it would be federally enforceable. Unless the revision was made federally enforceable, both the source and the Department would be obligated to abide by the terms of the existing SIP, rendering the

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variance meaningless. A source specific SIP revision requires the Department to undergo a rulemaking process to amend OAR 340-20-037, Commission adoption of the revised SIP, and submittal to and processing by EPA. Since the requested emission rate is less than the federal New Source Review trigger of 100 tons per year, EPA could give consideration to the request. This process can be expected to require one or more years to complete.

Alternatives and Evaluation

There are several options for Commission action at this time. Each should be evaluated in the context of two other potential actions: the request for a revision to RACT (Reasonably Available Control Technology, required of this source even if it continues to emit less than 40 tons) and the potential use of emission credits from the former Pacific Coatings facility. The message sent to the public and the regulated community about the NSR program should also be weighed.

The Commission could deny the variance request, which would constitute a final action. The Commission could approve the variance request as an intermediate step and direct the Department to undertake the SIP revision process including public hearing, adoption of the SIP revision by the Commission after public hearing, and submittal to EPA. Third, the Commission could direct the Department to proceed with a SIP revision based on the variance request, decline to act on the variance request, and take final action on the SIP revision after public comment.

From a strictly environmental perspective, granting a variance would result in a net environmental loss if the Pacific Coatings site remains closed, since its emission credits would otherwise have reverted promptly to DEQ. Compared to using the credits at the Pacific Coatings site there would be a potential net environmental gain of no more than 26.5 tons per year (see Attachment A). The Department believes this scenario is unlikely, for economic reasons.

The Department objects to the request as being fundamentally at odds with the purpose and intent of the state's New Source Review program and nonattainment area strategy. By definition, LAER cannot take into account the economics of control equipment. Yet the variance request seeks to change the requirements postconstruction and is primarily based on the economics of installing control equipment. Additionally, the New Source Review policy is clearly based upon first requiring stringent control technology, then offsets for

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remaining emissions. The variance would allow expansion of a facility with no control equipment. The Department is concerned with the precedent such a request could set, particularly at a time when details of the ozone maintenance plan are being developed.

Summary of Any Prior Public Input Opportunity

No input from the public has been received. Public notice and comment would be required prior to revision of the SIP to reflect the variance, if approved.

Conclusions

- The Department continues to oppose the variance request.
- SIP revisions require public hearing prior to Commission adoption. Whether or not the Commission approves the variance, if it wants to approve the NSR relief, it would need to take action on a SIP revision following public comment.
- No credits from Pacific Coatings Inc. are available for use as offsets.

Recommendation for Commission Action

It is recommended that the Commission deny the request for a variance from New Source Review requirements.

Unless otherwise directed, the Department would proceed with a SIP revision on the RACT rule.

Attachments

- A. Additional Information
- B. Letter from U.S Environmental Protection Agency
- C. Letter and Attachments from Lynne Perry to Wendy Sims
- D. Interoffice Memorandum from Shelley McIntyre

Reference Documents (available upon request)

- 1. Statutory Authority
- 2. Applicable Rule(s)

Memo To: Environmental Quality Commission

Agenda Item D

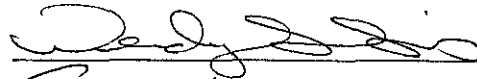
July 23, 1993 Meeting

Page 5

3. DEQ/LRAPA Guidance to Applicants for Air Quality Control Variances (Approved by the Environmental Quality Commission on May 20, 1983).

Approved:

Section:



Division:



Report Prepared By: Wendy L. Sims

Phone: 229-6414

Date Prepared: July 9, 1993

WLS:cc

EQCE.708

July 9, 1993

ADDITIONAL INFORMATION

What is the Department's position on the RACT request?

The RACT rule adopted in 1991 limits how many pounds per gallon of VOC can be in the coatings used, which is 3.5 lb/gal for high performance architectural coatings. The Department tentatively supports the request for a SIP revision to relax this particular limit, provided that total emissions remain under 40 ton per year.

A company could comply with the RACT rule directly by using coatings that meet the lb/gal limit. High performance architectural coatings that meet the rule limit are not available, however.

Indirect compliance could be achieved by installing control equipment so that emissions meet the lb/gal limit even though the coatings do not. Anodizing Inc. maintains that the cost of the equipment would exceed "Reasonably Available" measures. The Department agrees that the cost would be excessive for RACT for a small source.

How are the New Source Review and RACT rule revision requests related?

Both of these are requests by Anodizing Inc. for relief from the rules on VOC emissions from the facility. One, the NSR rule, limits total plant site emissions, while the other, the RACT rule, limits unit specific emissions.

The following scenarios show how the two relate, assuming that the company continues to use coatings that exceed the lb/gal limit.

Higher production, no NSR relaxation. If the NSR request is denied and the company's production levels would result in emissions over 40 tons per year, control equipment will have to be installed. By using control equipment to satisfy NSR, both the total annual emissions and the unit specific emissions would be reduced. A RACT rule change would be unnecessary if control equipment is installed to satisfy NSR.

Current production, no NSR relaxation. Production could remain at levels resulting in emissions under 40 tons per year, either because the NSR request is denied or because of market forces. The company would still have a problem, because its coatings do not meet RACT. It would either need to obtain the RACT rule relaxation or install control equipment because

of the RACT rule.

NSR relaxation. If the NSR request is approved, the company will be able to emit above 40 tons per year without control equipment. However, it would be out of compliance with the RACT rule. It would still need to install control equipment to meet RACT or obtain a relaxation of the RACT rule.

One other important point is that the NSR question only arises because the company is not using RACT complying coatings. If their coating emissions were within the 3.5 pounds per gallon limit, their total emissions would be under 40 tons per year at the proposed production levels. The company wouldn't exceed the NSR threshold if it was complying with Reasonably Available Control Technology guidance developed by EPA and adopted by the Commission.

What is the status of the Pacific Coating Inc. permit?

The current permit expires on April 1, 1994. There are several problems with the permit. First, the Department has held off on initiating any action on this permit in consideration of the NSR variance request.

Second, the permit contains a limit on high performance architectural coatings of 6.2 lb/gal. Under the terms of a lawsuit settlement agreement entered on July 7, 1993, the Department is required to issue a permit modification to limit the emissions to the SIP levels (3.5 lb/gal). This modification must be issued by August 6, 1993.

Third, the source was permanently shut down around August 1991. Emissions were less than 2 tons in 1991 and 18 tons in 1990. The permit modification required above will reflect the source shutdown. Allowable emissions will be set at zero. The company will have one year to submit a plan if it wants to retain credit to emit any of the 66.4 tons per year PSEL at the same site. (Since the Department has held off on action on this permit, the full one year period is still available.) The plan would have to include detailed specifications on how the credits would be used onsite, and any new equipment would have to satisfy the RACT, Highest and Best Practicable Treatment and Control, and odor regulations.

Under the Oregon SIP (OAR 340-20-265), facilities have only one year from the date of an *actual* emissions reduction to transfer emission credits for use as offsets at another facility. A minimum of 10 tons per year can be transferred. The proposed offset misses both of these criteria, since the one year period ended in August 1992 and since the actual emissions reduction from the last year of operation is less than 10 tons. In addition, under the SIP, offsets would be used

only to mitigate the residual emissions that would occur after LAER is used at the receiving facility, not as an alternative to LAER.

In summary, the facility is closed. The company can still bank the emission credits for use onsite. Any future use would have to comply with RACT and other requirements. Credits are not available for transfer to any other facility.

Would the variance provide an environmental benefit?

Probably not. The answer depends primarily on whether or not Anodizing Inc. would promptly install any new operations at the Pacific Coatings facility. It also depends on the outcome of the company's request for a RACT relaxation.

If the Pacific Coatings facility is permanently closed, the full Plant Site Emission Limit reverts to the Department for use in attaining the ambient standard. Any increase in emissions at Anodizing Inc. for which "offset" credit from Pacific Coatings is used would represent an environmental loss. To date, Anodizing Inc. has not submitted any plans for resuming operations at the site, and has been leasing out the facility for use as a warehouse.

On the other hand, application of the existing NSR rules to any increase at Anodizing Inc. would result in installation of control equipment that would have a long term environmental benefit, meeting the NSR intent that new facilities be equipped with state of the art controls to provide low emissions for the life of the facility. Control equipment would allow the company to avoid the need for a RACT rule relaxation and would allow them to increase production levels greatly without exceeding the current Plant Site Emission Limit.

If operations are resumed at the Pacific Coatings Inc. facility, plans would need to be submitted in advance to the Department and within one year. After one year, the emission credits would all revert to the Department. Any plans submitted within one year would have to satisfy RACT, Highest and Best Practicable Treatment and Control, odor, and any other applicable requirements. The Department could reallocate any or all of the 66.4 ton per year PSEL based on demonstrated need. Any unused portion of the PSEL would revert to the Department. Of course, any new source that met the same criteria would be eligible for a permit for up to 39.9 tons per year. The maximum difference between the Pacific Coatings Inc. facility and any other new facility is 26.5 tons. Denying the NSR variance and not terminating the Pacific Coatings Inc. facility permit, then, could result in up to 26.5 tons per year of extra emissions allowance being retained. However, the costs of building and operating a second facility

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would seem to make this a poor tradeoff for avoiding the cost of installing control equipment at a single facility.

Regarding RACT, relief from New Source Review would only be meaningful if the RACT relaxation is also approved. Relaxing RACT would allow higher emissions from the facility than would otherwise occur, which would not be an environmental benefit. If Anodizing Inc. installed control equipment to comply with New Source Review, the increased emissions from a RACT relaxation would not occur. Granting an NSR variance would represent a environmental loss when considering the unit specific facility emissions.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101
June 29, 1993

Agenda Item D
Attachment B
Page B1

Reply To
Attn Of: AT-082

Wendy Sims, Manager
Program Operations Section
Air Quality Division
Oregon Department of Environmental
Quality
811 SW Sixth Avenue
Portland, Oregon 97204-1390

Dear Ms. Sims,

This letter is in response to your request for clarification of the federal Clean Air Act requirements which would apply to a request from Anodizing, Inc. for a variance to the EPA-approved new source review (NSR) rules. Specifically, you have asked whether such a variance would have to be submitted to EPA as a source-specific revision to the Oregon state implementation plan (SIP) and, if so, what requirements must be met for such a SIP revision to be approvable.

Anodizing, Inc., a facility in northeast Portland, was constructed as a new "minor" source under the provisions of the EPA-approved Oregon SIP. Specifically, Anodizing, Inc. requested and obtained, federally-enforceable conditions in order to limit its potential to emit to less than 40 tons of volatile organic compounds (VOC) per year (the size threshold which defines a major source in the EPA-approved NSR rules). Anodizing, Inc., now desires to increase its emissions of VOC by 10 tons per year, from 39.9 tons per year to 49.9 tons per year, for the next five years. In accordance with the provisions of the EPA-approved rules (OAR 340-20-250(3)), this relaxation would subject the facility retroactively to the requirements of the NSR rule as if it had not yet been constructed.

Since the federal Clean Air Act defines a major source for purposes of ozone nonattainment areas as one which emits or has the potential to emit 100 tons per year of VOC, the existing Oregon NSR rule is more stringent than required by federal law. As such, Oregon could amend the existing rule (or issue a source-specific variance to the rule) and submit it as a revision to the Oregon SIP. EPA could approve such a SIP revision if it meets the requirements of the Clean Air Act and EPA regulations and did not relax the current requirements for any existing source.

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Dept. Environmental Quality Printed on Recycled Paper

If, however, the revision would relax the current requirement for an existing source (i.e., a source which has already been constructed or modified), then the SIP revision would also have to include compensating emission reductions for other sources in the nonattainment area pursuant to the requirements of §193 of the Act. The Air Contaminant Discharge Permit or other compliance document which establishes new enforceable emission limits to create the compensating emission reductions would have to be included in the SIP revision submittal. Of course, the SIP revision submittal will have to meet the procedural requirements of 40 CFR Part 51.102 (30-day public comment period, public hearing with 30 days advance notice) and be adopted by the Environmental Quality Commission as a revision to OAR 340-20-047.

While EPA has approved the Oregon statutory variance provisions as part of the SIP, EPA does not recognize the state's exercise of its variance authority as automatically changing the SIP. Rather, the state must adopt and submit each variance as a case-by-case SIP revision in accordance with 40 CFR 51.104(g). The variance must then be approved by EPA before the existing requirements of the SIP are changed (see 40 CFR 51.105). EPA would be able to approve a variance from the NSR rules for Anodizing, Inc., as a source specific SIP revision only if it is consistent with the requirements of the Clear Air Act and EPA regulations, including the savings provision of §193.

If you have additional further questions on the requirements for variances to state new source review rules, or wish to discuss how EPA would process such a SIP revision, please contact David Bray at (206) 553-4253.

Sincerely,



Ann Pontius, Chief
Air Compliance and Permitting Section

cc: Paul Koprowski, OOO

MILLER, NASH, WIENER,
HAGER & CARLSEN

ATTORNEYS AND COUNSELORS AT LAW
3500 U.S. BANCORP TOWER
111 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204-3699
TELEPHONE (503) 224-5858
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FACSIMILE (503) 224-0155

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Attachment C
Page C1

SEATTLE OFFICE:
4400 TWO UNION SQUARE
601 UNION STREET
SEATTLE, WASHINGTON 98101-2352
TELEPHONE (206) 622-8484
FACSIMILE (206) 622-7485

LYNNE A. PERRY

June 18, 1993

Ms. Wendy Sims
Department of Environmental Quality
Air Quality Division
811 S.W. Sixth Avenue, 11th Floor
Portland, Oregon 97204

Subject: Anodizing, Inc., Variance Request

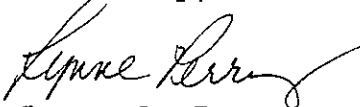
Dear Wendy:

I have enclosed a summary of the proposed EPA guidance that would allow sources in ozone nonattainment areas to receive credit for emissions reductions from past shutdowns or curtailed activities. We are working to obtain the proposed guidance itself. I will forward that along as soon as it is available.

We would like to ensure that the proposed guidance and our two earlier memorandums (both dated April 6, 1993) are included in the administrative record on this matter. I have also enclosed copies of both memorandums for ease of reference. At this time, we do not intend to submit a second application or additional materials. We believe that this would be an unnecessary burden and that the scope of the variance request has been fully outlined, both in the earlier materials, and those enclosed with this letter.

I would appreciate an opportunity to review DEQ's report to the EQC on Anodizing, Inc.'s variance request before the July 23 meeting. Please call if you have any questions or concerns with this matter.

Sincerely,


Lynne A. Perry

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DEPT. OF ENVIRONMENTAL QUALITY



The Bureau of National Affairs, Inc.

AIR & WATER POLLUTION CONTROL

A review of developments in pollution laws, regulations, and trends in government and industry.

Volume 6, Number 10

May 12, 1993

New Source Review

EPA Proposes Policy Change

Any firm in an ozone nonattainment area could offset new emissions of ozone precursors by taking credit for past shutdowns or curtailed production or operating hours, according to EPA proposed guidance. However, such offsets could only be used if they were generated after passage of the 1990 Clean Air Act Amendments (Nov. 15, 1990) and the state has met the law's planning milestones.

Currently, past shutdowns or curtailments may generate emission cred-
(cont'd on p. 2)

(cont'd from p. 1)

its only if the state has demonstrated how the ozone standard will be attained under its state implementation plan. Absent a demonstration, a firm may only claim credits if the shut-down or curtailment occurs after it has filed for a construction permit.

Under the Air Act, offsets must be obtained by firms before construction begins or modifications are made that result in new emissions in nonattainment areas above specific levels.

The proposed guidance is explained in a draft memo to EPA regional directors from John Seitz, director of the Office of Air Quality Planning and Standards.

Seitz explained that the policy change is needed because the 1990 Air Act amendments dramatically changed the circumstances that shaped the current policy. The 1990 amendments established new attainment schedules and states are now in the process of preparing SIPs with attainment demonstrations for EPA approval, he said. For example, states with ozone nonattainment areas must show reasonable further progress toward attainment by submitting SIP revisions that provide for a 15 percent reduction in ozone levels compared to a 1990 baseline. To do so, Seitz said states may need to establish offset banking programs. Without the policy change, their development could be hindered, he said.

Under the agency's current emissions trading policy, offset banks should accept and evaluate requests to certify emission reduction credits, serve as a clearinghouse for credits on deposit, and account for transfers and withdrawals of credits (see *Air Pollution Control*, p. 131:271). For example, a new or modified source in a serious ozone nonattainment area must offset new emissions at a 1.2-to-1 (cont'd on p. 3)

Page 3

lutants on a case-by-case basis.

Comments on the proposed draft may be sent to EPA's Mike Sewell, New Source Review Section, RTP, N.C. 27711; (919) 541-0873.

ductions it has produced.

If the guidance is made final, even though it would be limited to ozone, Seitz said EPA would consider requests for its application to other pol-

(cont'd from p. 2)
ratio. To obtain offsets, a firm could buy surplus emissions deposited in a state bank by another source, or could apply for certification of emission re-

May 12, 1993

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MEMORANDUM

To: Wendy Sims
Shelly MacIntyre

cc: Lew Rink
Mike Davis

From: Thomas E. Lindley
Lynne A. Perry

Client: Anodizing, Inc. (126351)

Matter: Clean Air Act Variance (0008)

Subject: Authority in SIP For Variance Requested

Date: April 6, 1993

Anodizing, Inc., ("AI") operates its northeast Portland facility under an air contaminant discharge permit issued by DEQ. The permit authorizes emissions of volatile organic compounds ("VOC") up to 39.9 tons per year. As currently permitted, AI is a minor source of VOC emissions. AI desires to increase its VOC emissions limit by 10 tons to 49.9 tons per year for the next five years. This increase would, however, cause AI to be classified as a "major source" under the state's new source review ("NSR") amendments. OAR 340-20-225(16).

AI seeks a variance from the state NSR requirements to postpone installation of lowest achievable emission rate ("LAER") "mechanical" control technology for five years. AI is confident that advancements in coating technologies within the next five years will render application of LAER mechanical technologies unnecessary.

I. The requested variance is a permissible state implementation plan ("SIP") revision.

As a major source (by state definition),¹ AI would be subject to the state's NSR requirements for major sources and major modifications within designated nonattainment areas. OAR 340-20-240. OAR 340-20-240 requires in relevant part that the owner or operator proposing the construction or modification triggering NSR review:

- (1) demonstrate that the source or modification will comply with LAER for each nonattainment pollutant emitted above the significant emission rate; and
- (2) provide offsets in a 1.1 to 1 ratio (i.e., demonstrate a net emissions reduction of 10 percent).²

These two requirements derive from the Clean Air Act permit requirements applicable in nonattainment areas. See Clean Air Act §§ 173(a)(1) and (2).³

There is, however, a mechanism by which the Environmental Quality Commission ("EQC") can, within the State Implementation Plan, permit an owner or operator to postpone installation of LAER or provision of offsets. The Oregon air pollution control laws empower the EQC to grant a variance from

¹ Under DEQ's rules, a "major source" is any stationary source which emits or has the potential to emit, any pollutant regulated under the Clean Air Act at a significant emission rate. OAR 340-20-225(16). The significant emission rate for VOCs is 40 tons per year. OAR 340-20-225(25).

² See also, OAR 340-20-260(3)(c) (which specifies the extent of the reduction required).

³ 42 USC §§ 7503(a)(1) and (2). As noted below, these requirements are applicable only to those sources emitting over 100 tons of a given pollutant per year.

particular NSR requirements to specific sources "upon such conditions as it may consider necessary to protect the public health and welfare." ORS 468A.075. A variance is appropriate if the EQC determines that strict compliance with a given requirement is inappropriate because "special circumstances render strict compliance unreasonable, burdensome, or impractical due to special physical conditions or cause."

ORS 468A.075(1)(b). The variance procedure outlined in ORS 468A.075 is a federally approved component of the Oregon SIP.⁴ It is not a variance from the SIP itself.

A variance is treated as a SIP revision, which must be submitted to the United States Environmental Protection Agency ("EPA") for approval as would other SIP revisions. 40 CFR § 51.104(g).⁵ Clean Air Act § 110(1) requires that SIP revisions be consistent with the requirements of the Clean Air Act, including attainment of NAAQS and reasonable further progress toward those standards. 42 USC § 7410(1). The federal rules allow states to revise their individual SIPs consistent with the requirements applicable to all implementation plans in 40 CFR Part 51. 40 CFR § 51.104(c). The variance requested by AI would

⁴ The SIP included ORS Chapter 449 as drafted in May 1972. 40 CFR § 52.1970(c)(1). The variance procedure was then codified as ORS 449.810. (It was originally codified in 1961, c. 426 § 15.) That section of the SIP was approved by EPA. 40 CFR § 52.1972.

⁵ See e.g., 57 Fed Reg 53,868 (Nov. 13, 1992); 57 Fed Reg 45,715 (Oct. 5, 1992).

be consistent with both the Clean Air Act and the regulations promulgated thereunder.

40 CFR Part 51 enumerates several elements that must be included within the SIP. 40 CFR § 51.165(a). Deviations within the SIP are allowed only to the extent that the state provides for more stringent control than that required under the federal rules. 40 CFR § 51.165(a). The breadth of Oregon's NSR requirements makes them more stringent than those proscribed under federal law. It is in this area, where the state and federal requirements diverge, that the EQC is empowered to issue a variance that would still provide for regulation consistent with the Clean Air Act and its implementing regulations.

The Oregon NSR requirements apply to a significantly broader class of emission sources than would be regulated under federal law. The Oregon rules define a "major source" as a source capable of emitting a given pollutant at a "significant emission rate." OAR 340-20-225(16). The "significant emission rate" for VOCs is 40 tons per year. OAR 340-20-225(25)(a)(Table 1(E)). Thus, any emission source emitting 40 or more tons of VOCs per year would be deemed a state major source, subject to the state NSR requirements.

By contrast, the federal rules define a "major source" as a one that emits or has the potential to emit 100 tons per year or more of a given pollutant. 40 CFR § 51.165(a)(1)(iv)(A). Only construction or modification of a federal major source would

trigger the federal NSR requirements.⁶ Thus, the federal NSR requirements, namely, compliance with LAER and the provision of offsets, are applicable only to those sources that emit or have the potential to emit VOCs at a rate of 100 or more tons per year. Clean Air Act § 173(a).⁷ As a source emitting less than 100 tons of VOCs per year (and with a potential to emit of less than 100 tons of VOCs per year), AI would not fall within the scope of the federal NSR requirements. The NSR requirements triggered if AI's variance was granted (allowing VOC emissions of 49.9 tons per year) are state-only requirements.

This distinction is significant for purposes of determining whether the EQC has sufficient latitude to grant the requested variance. As noted above, the SIP can be revised only to the extent that the SIP remains consistent with 40 CFR Part 51. 40 CFR § 51.104(c). There is nothing in 40 CFR Part 51 that requires sources emitting 49.9 tons of VOCs per year to comply with LAER and, for that reason, nothing that should preclude the EQC from granting the requested variance.

Presumably, the EQC could, consistent with the federally-mandated SIP provisions, grant a variance that relieved a source emitting up to 99.9 tons per year of any given pollutant from the more stringent (i.e., broader) state NSR requirements.

⁶ The modifications of major sources (greater than 100 tons per year) resulting in a significant net emissions increase of 40 or more tons per year would trigger the NSR requirements.

⁷ 42 USC § 7503(a). See also 40 CFR § 51.165. Permit requirements apply only to major sources. Clean Air Act § 172(c)(5) (42 USC § 7502(c)(5)).

On the other hand, the EQC would not have the authority to grant a variance postponing the installation of LAER or the provision of offsets to a source emitting 100 or more tons per year of a given pollutant as such a variance would be inconsistent with the Clean Air Act.

II. The requested variance satisfies the criteria of ORS 468A.075.

As noted above, a variance is appropriately granted to a specific emission source where strict compliance with a given rule is inappropriate because special circumstances render strict compliance unreasonable, burdensome, or impractical due to special physical conditions or cause. In making the determination as to whether a given variance is appropriate, the EQC is required to consider (1) the equities involved, (2) the advantages and disadvantages to residents, and (3) the advantages and disadvantages to the party conducting the regulating activity. ORS 468A.075(4).

Three special circumstances render application of the NSR requirements unreasonable, impractical, and burdensome (and give rise to a solution that will actually benefit the airshed). First, technological improvements in the coatings available to AI over the next five years will improve emissions performance. The new coatings will substantially decrease the VOC emissions

generated in the coatings process and will render the LAER technology unnecessary.⁸

Second, AI estimates that demand for its products will fall by approximately twenty percent per year over the next four years (or 80%) as its market-base shifts to vinyl coated windows. This decrease, and the consequent decrease in production, would reduce AI's VOC emissions below the existing permit limit.

Third, AI has the ability to utilize two permitted plants to achieve its desired production levels without triggering NSR requirements, if necessary. Such an outcome would benefit neither AI nor the airshed, but would be necessary given the high cost and short useful life of the LAER technology required under the state NSR rules.⁹

Taken together, these three special circumstances render application of LAER unreasonable, burdensome, and impractical. These three special circumstances have also made it possible for AI to shape a mutually beneficial variance request. The temporary relief from LAER requirements requested by AI should not be viewed in isolation. Together with its request to increase VOC emissions by 10 tons per year for a five year period, AI has also proposed to:

⁸ In addition, more effective mechanical control technologies will be available, at substantially lower cost, by the end of the variance period.

⁹ As an alternative, AI could also use new, nonadjacent locations to service incremental increases in production. The individual coating lines at new locations could be operated at a rate well below that triggering NSR review.

- (1) Offset increased emissions with the 66.4 tons per year of VOC emissions available at a second permitted facility (a greater than 6:1 or 600 percent offset as compared to the 110 percent offset required by the NSR rules);
- (2) Release the entire 66.4 tons per year of VOC emissions from the second permitted facility at the end of the five year variance period (thereby freeing a significant quantity of the nonattainment pollutant for allocation to new or expanding sources or removal from USC altogether); and
- (3) Reduce AI's VOC emissions to below 40 tons per year at the end of the five year variance period.

When the advantages and disadvantages of the requested variance are evaluated, the scales tip heavily in favor of granting the requested variance. The variance requested offers an exceptional opportunity to decrease VOC emissions in the Portland airshed.

LAER technology will most likely be unnecessary at AI beyond the requested variance period. Given the short useful life of the expensive LAER technology, AI would likely operate the two facilities rather than install LAER technology at one. Thus, denial of the requested variance would not reduce actual emissions in the short term (and would likely increase the total actual emissions generated by two separate operations, as well as the secondary emissions related to additional materials transport). In the longer term (after the five year variance period), however, AI would return 66.4 tons of VOC permitted capacity per year to the airshed for allocation to new or expanding businesses, or (at DEQ's option) contribution toward attainment goals (i.e, not allocated at all).

AI's proposal also ensures that this industry and the related employment stays in Oregon. Simply put, if AI does not satisfy the market demand for its product, another entity will.

Upon evaluation, it is clear that AI's proposal offers significant advantages to area residents and the airshed, without countervailing disadvantages. DEQ's opposition to the requested variance as outlined in its November 24, 1992 memorandum is not justified. AI recognizes that the installation of LAER and the provision of offsets are two separate and distinct NSR requirements. If LAER could be achieved through offsets, a variance would not be necessary. Contrary to DEQ's memorandum, AI is not attempting to avoid NSR by providing offsets.

DEQ's "preconstruction" focus is also misplaced. As the court in Oregon Environmental Council v. Oregon Department of Environmental Quality, No. 91-13-FR, 1992 WL 252123 (D Or 1992), held recently, emissions attributable to increased operating hours and production increases can trigger NSR requirements without new construction or a physical modification to an existing source.

DEQ has also expressed concern that AI is speculating regarding the availability of low emissions coatings within the next five years. AI is sufficiently confident that such low emissions coatings will be available that it has proposed to both limit its request to a five year period and commit to returning the full 66.4 tons currently permitted to its second facility to the Department at the end of the five-year period. Obviously,

from AI's informed perspective, the availability of such coatings is not speculative. In any event, the risk that such coatings would not be available at the end of the variance period, rests entirely on AI.

DEQ's opposition to this variance request is ironic given that DEQ is working (and the state is investing substantial funds) to develop an air emissions banking system to "free up" nonattainment pollutants for purposes of encouraging expanded business development in the Portland area. The requested variance would release 66.4 tons of nonattainment pollutant to other users at the end of five years. On a net emissions basis, the variance will lead to decreased emissions in the longer term (beyond five years) and at most equivalent emissions in the shorter term (during the variance period).

Finally, the overall net emissions decrease, the release of permitted emissions to other users, and the limited five year postponement of LAER (given AI's assurance that emissions will be reduced below 40 tons per year at the end of the variance period) would not impair the integrity of the Department's ozone control program. For the reasons noted above, the requested variance would enhance both the airshed and the integrity of the Department's ozone control program.

MEMORANDUM

To: Wendy Sims
Shelly MacIntyre

cc: Lew Rink
Mike Davis

From: Thomas E. Lindley

Client: Anodizing, Inc. (126351)

Matter: Clean Air Act Variance (0008)

Subject: Criteria for EPA Approval of SIP Revision

Date: April 6, 1993

A source-specific variance is treated as a revision to the state implementation plan ("SIP"), which must be submitted to the United States Environmental Protection Agency ("EPA") for approval, as would other SIP revisions. 40 CFR § 51.104(g). The EPA's ability to approve a proposed SIP revision is constrained by Clean Air Act § 110(1).

Clean Air Act § 110(1) provides as follows:

Each revision to an implementation plan submitted by a State under this chapter shall be adopted by such State after reasonable notice and public hearing. The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in Section 7501 of this title), or any other applicable requirement of this chapter. 42 USC § 7410(1).¹

¹ "The term 'reasonable further progress' means such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may be reasonably be required by the Administrator for the purpose of ensuring attainment of the
(continued...)

The rules provide that the EPA will approve a SIP revision if it meets the requirements of the Clean Air Act. 40 CFR § 51.105. Specifically, states may revise their SIPs if the revision is consistent with the requirements applicable to implementation plans outlined in 40 CFR Part 51. 40 CFR § 51.104.

EPA has reviewed numerous source-specific SIP revision requests since the Clean Air Act was amended in 1990. These decisions reflect that before the EPA will approve a site-specific SIP revision request, the state proposing the revision must demonstrate that the revision will not interfere with the timely attainment and maintenance of NAAQS or reasonable further progress toward those standards (citing Clean Air Act § 110(l)). (See, e.g., 57 Fed Reg 53,868 (Nov. 13, 1992); 57 Fed Reg 44,689 (Sept. 29, 1992); 57 Fed Reg 45,715, 45,717 (Oct. 5, 1992).²

In addition, Clean Air Act § 193 (the General Savings Clause) requires the state to demonstrate that its proposed revision includes equivalent emissions reductions to compensate for relaxed emission limitations (i.e., offsets) in nonattainment areas. 57 Fed Reg at 44,691; 57 Fed Reg at 45,717.

Finally, it appears that, for purposes of SIP revisions, "consistency" with Clean Air Act requirements extends

¹(...continued)
applicable national ambient air quality standard by the applicable date." 42 USC § 7501(1).

² The revision or variance allowing relaxation of emission limits must also include an alternate limit to ensure enforceability. 57 Fed Reg 53,868.

beyond the express language of the Clean Air Act to policy guidances drafted by those responsible for administering the CAA at the federal level. Source-specific SIP revisions have been denied because criteria in an EPA policy memorandum had not been satisfied. 55 Fed Reg 14,972 (Apr. 20, 1992);³ see also 55 Fed Reg 3,606 (Feb. 2, 1990).⁴

The variance requested by AI satisfies the criteria used by the EPA to evaluate source-specific SIP revisions. Specifically, the variance requested will not interfere with the attainment and maintenance of NAAQS or reasonable further progress toward those standards. Although the variance would allow increased VOC emissions above historical levels from AI, it would not constitute an increase in historical VOC emissions from the combined AI/PCI operation, which should be the relevant "source" for purposes of evaluating the real impact of the proposed revision. 55 Fed Reg 12,827, 12,828 (Apr. 6, 1990) (evidence that a revision will result in status quo emissions is sufficient to establish maintenance of NAAQS).

The variance includes enforceable limits of 49.9 tons per year of VOC emissions and an enforceable time frame of five

³ The proposed SIP revision allowed the source to measure compliance based on the monthly averages. An EPA policy memorandum entitled "Average Times for Compliance with VOC Emission Limits" includes three criteria for evaluating VOC requests for extended monthly averaging. The proponent of the SIP revision had not demonstrated that the criteria had been satisfied.

⁴ The proposed SIP revision was denied because baseline emissions had been calculated contrary to the method outlined in EPA's Emission Trading Policy statement.

years, after which the emissions limitation will be reduced to 39.9 tons per year. In addition, offsets of over 600 percent have been offered. AI is aware of no EPA guidances or policy statements that impose additional requirements or criteria to be satisfied by the SIP revision.⁵

⁵ EPA would have no reason for drafting a guidance establishing NSR criteria applicable to sources emitting less than 100 tons per year because such sources are not subject to the NSR criteria at the federal level.

MEMORANDUM

To: Lew Rink
Mike Davis

From: Thomas E. Lindley
Lynne A. Perry

Client: Anodizing, Inc. (126351)

Matter: Clean Air Act Variance (0008)

Subject: Practical Problems With AI Variance Request

Date: March 29, 1993

The EPA decisions on source-specific SIP revisions indicate that a great deal of time passes between submission of the proposed SIP revision and EPA's final decision on that proposal. Given the five-year window AI has requested, the regulatory time lag may alone be sufficient to defeat AI's variance request (in a practical sense).

For example, a final ruling dated August 19, 1992, was based on a SIP revision submittal dated January 27, 1987. 57 Fed Reg 44,689 (1992). Four source-specific revisions submitted by the Ohio EPA, the last of which was dated June 13, 1989, were denied in September 1992. 57 Fed Reg 45,715 (1992). A source-specific revision submitted in January 1987 was denied in March 1990. 55 Fed Reg 12,828 (Apr. 6, 1990). A source-specific SIP revision submitted in April 1991 was denied in October 1992. 57 Fed Reg 53,868 (1992).

It appears that a fast track SIP revision would take at least nine months. In the speediest decision reviewed, the revision was submitted in February 1989 and was denied in November 1989. 55 Fed Reg 3,606 (1990). Moreover, the time required for EPA approval must necessarily be added to the time required for EQC review and approval.

Revisions are not considered part of a SIP until approved by EPA. 40 CFR § 51.105. If nothing else, we need to be aware of the time lag and the danger in committing to a fixed date five years in the future. Until the variance is approved by EQC and EPA, AI should be wary of the possibility that the date fixed could pass before action is taken on the request.



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DEPARTMENT OF JUSTICE

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MEMORANDUM

DATE: July 13, 1993

TO: Wendy Sims, Program Operations
Air Quality Division
Department of Environmental Quality

FROM: Shelley K. McIntyre 
Assistant Attorney General

RE: Anodizing, Inc. Request for Variance

INTRODUCTION

The following contains the substance of my memorandum dated January 12, 1993 to Assistant Attorney General Michael Huston as a follow-up to the December 11, 1992 EQC meeting regarding EQC's variance authority at ORS 468A.075 under the federally approved State Implementation Plan (SIP).

BACKGROUND

As I recall, when the Anodizing, Inc. request for variance pursuant to ORS 468A.075 first came to me, it was not in the context of whether the EQC had authority to grant the variance but whether it needed to go through the source-specific SIP revision process, including public hearings. DEQ staff and I had several discussions about source-specific SIP revisions versus variances. DEQ staff seemed surprised to learn that the EPA-approved SIP contained the variance provision because it appeared to be in conflict with the federal Clean Air Act requirements. As a matter of policy, the EQC simply has not authorized variances so the issue has not surfaced.

After assuring myself that the variance provision is part of the federally approved SIP, I concluded that the EQC not only has authority to grant variances under state law (the ORS provision) but also under the SIP, which is binding as a matter of federal

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law. However, based on subsequent research discussed below, I now conclude I was wrong.

THE FEDERAL ACT

Section 110(a)(2) of the 1977 Clean Air Act Amendments¹ sets forth eleven general requirements for a legally sufficient SIP. The primary purpose of a SIP is to provide "for implementation, maintenance and enforcement" of national primary and secondary ambient air quality standards (NAAQS). This is to be achieved through emission limits, schedules and timetables for compliance with such limits.

Paragraph (D) requires that a SIP include a program to provide for "regulation of the modification, construction, and operation of any stationary source," including the nonattainment area permit program, to assure that NAAQS are achieved and maintained. Paragraph (I) requires that the SIP provide that no major stationary source² be constructed or modified in any nonattainment area if the emissions will cause or contribute to concentrations of any pollutant for which a NAAQS is exceeded in the area.

Section 172(b)(6) directs that the SIP for nonattainment areas require permits for the construction and operation of new or modified major stationary sources in accordance with section 173. Section 173 in turn sets forth four conditions for the issuance of a permit: (1) the so-called "offsets" requirement that the emissions from new sources, in combination with other

¹ I do not believe the 1990 Amendments apply here because the federal operating permit program required under Title V is not implemented yet. The EQC did adopt new New Source Review rules pursuant to the 1990 Amendments, but they do not change the fundamental analysis here.

² Neither the section on SIP requirements nor the Part D requirements for nonattainment area plans define the term "major stationary sources." However, the Act's general definition section defines the term as a source "which directly emits or has the potential to emit, 100 tons or more of any pollutant" per year. Section 302(j), 42 USC §7602(j). The term "major source" is defined in Oregon's SIP in terms of emissions at "significant emission rates." OAR 340-20-225(16) (Sept. 1991 ed.). For VOC's the "significant emission rate" is equal to or great than 40 tons per year. OAR 340-20-225(25)(a)(E).

sources, must be sufficiently less than total emissions from existing sources allowed under the SIP as to represent "reasonable further progress" towards eventual attainment; (2) compliance with the "lowest achievable emission rate (LAER); (3) the source owner or operator must show that all major stationary sources under its control are in compliance with "all applicable emission limitations and standards;" and (4) the SIP is being carried out for the nonattainment area.

OREGON'S SIP

The federally approved SIP contains, in pertinent part, the required elements for permitting new major sources in the Portland ozone nonattainment area. As Wendy explains in her staff report, the New Source Review rules require that any new major source in a nonattainment area must install LAER technology, obtain offsets for emissions remaining after LAER application, demonstrate that a net air quality benefit will be achieved and conduct an alternatives analysis demonstrating that benefits of the proposed source "significantly outweigh the environmental and social costs imposed" as a result of its construction. OAR 340-20-240.

The federally approved SIP also contains the variance provision found at ORS 468A.075. This authorizes the EQC to grant specific variances "from the particular requirements of any rule or standard to * * * [a] specific air contamination source, upon such conditions as it may consider necessary to protect the public health and welfare." However, the EQC may grant such a variance only if it finds that strict compliance with the rule or standard is inappropriate because of one or more of the reasons contained in subsections (1)(a) through (1)(d).

DISCUSSION

There is no express authority for, nor is there express prohibition against, such variances in the 1977 Amendments. Accordingly, my first analysis was that because EPA authorized the variance when it approved the SIP, it is expressly permissible and not in conflict with the New Source Review rules. Further, I did not believe a source-specific SIP revision was necessary because by approving the variance provision, EPA must have impliedly declined to second-guess the EQC's decisions. However, the results of subsequent research have changed my mind, as I will explain.

ORS 468A.075 substantially predates the 1977 Amendments. The key language was adopted in 1971, most likely in response to

the 1970 Amendments. At that time, EPA encouraged states to establish and make immediately effective the emission limitations required by section 110. However, realizing the difficulty many sources would have complying with these new emission limitations, EPA allowed states to have the authority to grant variances to particular sources that could not immediately comply. Although the 1970 Amendments did not use the term "variance," they did have numerous provisions for postponements, revisions, extensions and suspensions, all of which offered relief to individual sources.

In Train v. Natural Resources Defense Council, Inc. 421 U.S. 60 (1975), the Supreme Court upheld the validity of the inclusion in the Georgia SIP of a sweeping variance procedure authorizing relaxation of standards for sources "because of special circumstances which would render strict compliance unreasonable, unduly burdensome or impractical." The language in Georgia's variance is very similar to Oregon's. In reading this case carefully, I now understand why DEQ staff originally asked whether a variance requires a source-specific SIP revision.

The 1970 Amendments contained two key provisions that allowed for exceptions to the SIP requirements. Section 110(a)(3), which is the same in the 1977 Amendments, allows EPA to approve SIP revisions if the agency determines that it meets the requirements of paragraph (2) for a legally sufficient SIP and was adopted by the state after reasonable notice and public hearings. Section 110(f) provided a mechanism for states to apply to EPA to postpone the applicability of any SIP requirement for any source. That section set forth the bases and procedures for EPA to determine whether it would grant postponement of the requirement.³

The question in Train was which of these sections should be used by individual sources to obtain relief from the applicable

³ There is no identical provision in the 1977 Amendments, although sections 110(f) and (g) provide for temporary emergency suspensions by the governor under extraordinary circumstances if the state has adopted and submitted to EPA a proposed SIP revision. Section 113(d) also allows states to issue a delayed compliance order (DCO) if a source is unable to comply with the deadlines contained in the SIP. For major stationary sources, no DCO is effective until EPA has approved it. For non-major sources, the DCO is effective until or unless EPA objects.

emission limitations. In other words, is a proposed variance a "revision" under §110(a)(3) or a "postponement" under §110(f)? NRDC argued that "variances" applicable to particular sources could be approved only if they meet the stringent procedural and substantive standards set forth in §110(f). EPA argued that § 110(a)(3) allows a state plan to provide for an individual variance from generally applicable emission limitations so long as the variance does not cause the plan to fail the requirements of §110(a)(2), i.e. attainment and maintenance of NAAQS.

Thus, EPA contended that a variance should be allowed through a SIP revision when (1) the variance does not defer compliance beyond the attainment date, and (2) when the NAAQS have been attained and the variance is not so great that a plan incorporating it could not insure continued maintenance. There was no discussion whatsoever of the state's unilateral authority to issue the variance without EPA's approval under one section or the other. See W. Rodgers, Jr. Environmental Law V.1, §3.13 (1986) for a detailed discussion.

In a post-Train case, Union Electric Co. v. EPA, 427 U.S. 246 (1975), concerned a variance provision in the Missouri SIP. Again, the plan's emission limitations were effective at once but the state retained authority to grant variances to particular sources that could not immediately comply. After EPA approved the SIP, Union Electric Co. applied for and received variances from the emission limitations for its three coal-fired generating plants. Apparently two of the variances were submitted to EPA as a SIP revision, but one was not. The two had expired and the source was applying for extensions when EPA issued a notice that the emissions from all three plants were in violation of the SIP.

The key issue before the Court was procedural. However, in the face of arguments that compliance with the emission limitations were impossible because of various economic and technological difficulties, the Court explained that if a source or an industry is not exempted from or accommodated by the original SIP, then it may obtain a variance, which may be submitted to EPA as a SIP revision. 427 U.S. at 266. Again, it appears that it was clear to the Court that variances must be approved by EPA before the source is shielded from the SIP requirements.

In Bethlehem Steel v. EPA, 638 F.2d 994 (7th Cir. 1980), Indiana issued a delayed compliance order (DCO) pursuant to section 113(d) delaying the dates Bethlehem Steel was required to comply with the SIP. EPA disapproved the DCO and Bethlehem

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appealed. The court compared the DCO procedure with the SIP revision process in section 110(a)(3) and observed that "like the state variance procedures reviewed in [Train], the DCO operates, in effect, as a revision of the state SIP compliance date with regard to a specific source." 638 F.2d at 1003.

CONCLUSION


From these and other cases, it now is clear to me that even though the EQC has authority to grant a variance pursuant to ORS 468A.075, it must be submitted to EPA as a source-specific SIP revision. Although Anodizing, Inc.'s request for variance does not concern an emission limitation, §110(a)(2)(B) refers to other measures as may be necessary to insure attainment and maintenance of NAAQS, including but not limited to the nonattainment plan provisions of §172. Those provisions include the New Source Review requirements. Thus, the Court's conclusions in Train likely would apply with equal force here. Further, if the EQC does grant the variance, Anodizing will be subject to EPA enforcement actions and citizen's suits until EPA approves the SIP revision.

SKM0119.MEM

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: July 6, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director 
Subject: Agenda Item E. - July 23, 1993 EQC Meeting

Request for Commission Review of the Water Pollution Control Facilities (WPCF) Permit issued to Guide Dogs for the Blind, Inc. on June 9, 1993

Background

Mr. Derald Bleu, on behalf of himself and the Kelso Road Area Neighborhood Group and the Kelso Area Neighborhood Association has requested Environmental Quality Commission review of the Water Pollution Control Facilities (WPCF) permit issued by the Department to Guide Dogs for the Blind, Inc. on June 9, 1993. (See letters dated June 15, 1993 to Fred Hansen, Director (Attachment A), and June 21, 1993 to William Wessinger, Chairman (Attachment B). By letter dated June 22, 1993, Chair Wessinger advised Mr. Bleu that his request would be on the agenda for the July 23, 1993, meeting and advised of procedures for EQC consideration of his request (Attachment C).

Pursuant to the procedures, standards, and guidance contained in rules adopted by the Commission, the Department reviews permit applications and takes action to issue or deny requested permits. State law specifies procedures for judicial review of an agency decision (order). Judicial review of contested case orders is assigned to the Oregon Court of Appeals. Judicial review of orders other than contested cases is assigned to the Circuit Court in Marion County or the county where the petitioner resides or has a principal business office. A petition for review must be filed within 60 days of the agency decision (order). The Department's determination on a permit application is not a contested case order. Therefore, review is in the circuit court.

State law also provides that an application for a permit or license may not be denied without granting the applicant a contested case hearing. Procedural rules for permit application processing adopted by the Commission allow the applicant for a permit to request a contested case hearing if the Department denies its permit application or if the applicant is dissatisfied with the conditions of a granted permit. (Applicant

[†]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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dissatisfaction with conditions of a granted permit is effectively considered to be denial of some portion of their application.) Since the Department's decision on the permit application is not a contested case decision (order), this procedure was necessary to comply with state law granting the applicant a right to a contested case hearing before a denial decision on their permit application is final. Under the Commission's procedure, if the applicant fails to request a contested case hearing, the applicant is deemed to accept the Department's decision and waive any right to a contested case hearing.

In prior discussions, the Commission has agreed that any citizen may informally ask the Commission to initiate a review of a decision by the Department to issue a permit. During discussions on this unofficial review option, Commission members indicated their expectation that very few reviews would be initiated in this manner. However, if Commission members were persuaded that an error may have occurred or that policy direction was unclear, their action to initiate review may be preferable to circuit court review. This informal review process is not directed by statute, and the Commission is not obligated to initiate a review when requested.

Department Recommendation

The Department recommends that the Commission decline to initiate review of this permit decision.

If the Commission is persuaded to initiate a review of the Department's decision to issue a WPCF permit to Guide Dogs for the Blind, Inc., we believe the Commission will find that the Department followed the established procedural rules for review of the permit application and issuance of the permit. We also believe that the Commission will find that the Department properly interpreted and applied the environmental protection standards related to wastewater disposal.

Summary of Information in File

The following information summarizes significant actions, events and documents related to the procedures followed in processing this permit application.

- May 8, 1992 The Clackamas County Hearings Officer filed a decision allowing the proposed Guide Dogs Facility as a conditional use. This decision followed a land use hearing held on February 19, 1992.
- June 25, 1992 Guide Dogs for the Blind and their consultants met with DEQ staff to discuss their proposed facilities and explore

requirements that would have to be met to obtain approval of wastewater disposal systems for 2 existing residences, a 12 person dormitory with kitchen, commissary staff offices, kennel space for 228 dogs, and a veterinary clinic. Treatment and disposal of wastewater using on-site disposal systems without discharge to surface waters was discussed. The quantity of wastewater would exceed 5000 gallons per day and therefore would be subject to regulation under a WPCF permit.

- November 5, 1992 WPCF Permit application forms and information on filing were mailed to the potential applicant.
- January 4, 1993 A WPCF Permit Application signed by the Architect as authorized representative of Guide Dogs for the Blind was received.
- January 11, 1993 A DEQ letter acknowledged receipt of the permit application on January 4, 1993. The letter stated that application would not be considered complete until the required Land Use Compatibility Statement was received.
- January 15, 1993 The applicants representative submitted a revised application form showing Guide Dogs for the Blind as the authorized representative (rather than the architect) and transmitted the signed Land Use Compatibility Statement from Clackamas County.
- February 11, 1993 DEQ sent a letter to the applicant providing an evaluation of application materials submitted and advising of additional materials that would be required.
- February 18, 1993 DEQ sent a letter to citizens in the area near the Guide Dogs site advising that an application had been received and summarizing the procedures for DEQ action on that application.
- March 11, 1993 A Draft Permit was sent to applicant for review and comment pursuant to EQC rules. Comments were due by March 25, 1993.

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- March 24, 1993 The applicant submitted comments.
- March 26, 1993 DEQ staff evaluated and prepared a memo responding to comments. Some changes were made to the draft permit in response to applicant's comments.
- March 31, 1993 Public Notice of the proposed permit was issued. The notice advised of an informal "public information meeting" to be held in the Sandy Community Center at 7:00 p.m. on April 26, 1993, and a "public hearing" to be held in the Sandy Community Center a 7:00 p.m. on May 11, 1993. The notice indicated that the deadline for submittal of written comments was May 18, 1993. Notice was mailed to regular permit mailing lists plus known interested citizens in the area. Copies of the notice, proposed permit, and evaluation report were placed in the Sandy Library and the Gresham Branch Library.
- April 26, 1993 The Public Information Meeting was held.
- May 11, 1993 The Public Hearing was held.
- May 24, 1993 Guide Dogs responded to a request from DEQ for information on their planned schedule for bringing dogs to the facility.
- May 28, 1993 DEQ completed its evaluation of comments on the proposed permit, made revisions deemed appropriate, and mailed a copy of the revised proposed permit, hearings officers report, and summary of changes made to the permit to the applicant for review.
- June 7, 1993 A representative for Guide Dogs faxed comments to DEQ on the draft permit, as revised. Changes to monitoring provisions and startup schedule were suggested.
- June 8, 1993 The Department concurred with changes suggested by applicant and revised the proposed permit.
- June 9, 1993 The Department issued the permit as revised.

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- June 10, 1993 A letter was sent to area residents advising them of the permit issuance by DEQ.

Throughout this process, the Department was in contact with various consultants as they assembled the information and proposals for wastewater treatment and disposal for the proposed Guide Dogs facility. The Department encourages this type of exchange with project proposers as a fundamental component of a long range pollution prevention strategy.

Citizens from the area expressed their concerns to DEQ regarding the proposed Guide Dogs facility beginning as early as March 1992, and continuing throughout the process. Concerns raised by the citizens, particularly those related to the potential effect of the facility on drainage, groundwater, and drinking water wells supplying residences in the area prompted the Department to focus additional attention on issues related to the Guide Dogs application.

On June 16, 1993, Mr. Bleu arranged a meeting with several legislators or their representatives to express concerns about the Department's action. DEQ representatives at that meeting were Fred Hansen and Olivia Clark. By letter dated June 25, 1993, DEQ forwarded a written response to issues raised at that meeting to the legislators with a copy to Mr. Bleu. A copy of the letter addressed to Representative Ken Baker is attached for purposes of presenting DEQ's view on the issues of apparent greatest concern to the local citizens relative to DEQ issuance of the permit (Attachment D). Issues addressed in this letter include the hearing process and permit processing procedures, rules governing permit processing, dog waste and treatment technology, hydrology and on-site systems, and the request for EQC review.

Also attached for reference is a copy of the permit issued June 9, 1993 (Attachment E), and a copy of the Permit Application Review Report, the Addendum addressing changes made in response to public comment, and a memo regarding changes made in response to the applicants final review comments (Attachment F).

Summary

In summary, we believe the Department followed the established procedural rules for review of the permit application and issuance of the permit to Guide Dogs for the Blind, Inc. The Department also properly interpreted and applied the environmental protection standards related to wastewater disposal.

The Department recommends that the Commission decline to initiate review of this permit decision.

Memo To: Environmental Quality Commission
July 6, 1993
Page 6.

The Department will be glad to respond to any questions from the Commission.

Attachments:

- A. June 15, 1993, Letter from Derald Bleu to Fred Hansen Requesting Commission Review.
- B. June 21, 1993, Letter from Derald Bleu to William Wessinger requesting Commission Review.
- C. June 22, 1993, Letter from William Wessinger to Derald Bleu scheduling consideration of review request.
- D. June 25, 1993, Letter from Fred Hansen to Representative Ken Baker.
- E. Permit issued June 9, 1993 to Guide Dogs for the Blind, Inc.
- F. Permit Application Review Report, Hearings Officer's Report, and two addendums to the Application Review Report.

DERALD J. BLEU
43900 SE MUSIC CAMP RD
SANDY, OREGON 97055

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

June 15, 1993

SUBJECT: File Number: 107579
Permit for Guide Dogs for the Blind, Inc.

Dear Mr. Hanson:

I respectfully request that you have the ENVIRONMENTAL QUALITY COMMISSION REVIEW the above permit. This permit was issued June 9, 1993. There are many reasons the Commission should be involved.

1. The rules for a HEARING PROCESS for the DEQ have a time for public comment, after which the hearings officer makes his decision on the evidence supplied. To solicit and accept new information after the comment period has passed is unprofessional if not illegal. If not, why go to the pretense of a hearing?

We believe that the State Administrative Procedures Act has been violated and we want you to investigate.

Mr. Ashbakers statements, prior to the Formal Hearing, said that the Draft Permit is not the permit that will be acted upon by the DEQ. We were there to provide information dealing with the Draft Permit and the proper disposal of dog waste. To date, the only acceptable way of disposing of dog waste is with a sewer system and settling ponds.

2. There is no information in the literature that shows dog waste can be treated in a septic system normally used for human waste. On the contrary, DEQ studies at the Coos Bay Animal Shelter show dog waste in Septic/gravel filter systems is a complete failure. It is known that Guide Dogs are planning to use a Recirculating Gravel Filter in their system. Mr. Cline (DEQ, Coos Bay) and the Small Flows Clearinghouse has recommended that research be done on a laboratory scale, to develop and prove a system works on dog waste before any approval for a system is granted. On what basis was this aforementioned information used by the DEQ?

3. There are no OAR rules for handling dog waste except as animal waste. There is no data available under animal waste in Oregon or in the U. S. Department of Agriculture systems for handling dog waste (OHIO LIVESTOCK MANAGEMENT GUIDE, THE OHIO STATE UNIVERSITY, BULLETIN 604).

At this time, there are no OAR rules directly related to dog waste in the State of Oregon. Any system the DEQ approves, must be under a human waste or industrial waste system. These systems have strict rules for approval. These rules require systems that have been proven to work on similar types of waste (OAR 340-45-033 and 340-71-300). The rule for Experimental Systems

(OAR 340-71-450) is designed for SINGLE FAMILY DWELLINGS and not for animal waste.

It is apparent that these rules are interpreted differently by different DEQ offices. We must have a directive that the rules are used as designed. If the DEQ is set up to allow unproven systems, then we must change the rules to eliminate that possibility.

4. Testimony was given at the formal hearing on May 11 that the septic/gravel filter system could not meet the DEQ requirements as presented in the Draft Permit. These levels were set at 30 mg/l by the DEQ. The Small Flows Clearinghouse suggested 10 to 20 mg/l. The new permit shows 200 mg/l. What is the basis for raising this level and ignoring the DEQ data as well as ignoring the recommendations of the Small Flows Clearinghouse?

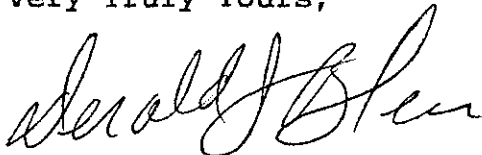
To my knowledge and the knowledge presented (by The Small Flows Clearinghouse, The Livestock Management Guide from The Ohio State University, U.S. Department of Agriculture, the Schools of Veterinary Medicine at Davis, Cal., Corvallis, Oregon and at Washington State University at Pullman, Wash.) there has been NO research and there is NO information available in the literature on disposing of dog waste.

What information does the DEQ have confirming a proven system for handling of dog waste?

I have recommended to our State Representatives that if the DEQ rules allow untried systems, laws must be made to close these loopholes. Not having strict guidelines is one reason for the runaway growth of DEQ.

I have also recommended to our State Representatives on the Appropriations Committee, to significantly CUT the DEQ budget. It is apparent that if the rules are clear and stringent, the DEQ will not be in RESEARCH AND DEVELOPMENT, as it is in this case.

Very Truly Yours,



Derald J. Bleu

cc. Representatives:

Ken Baker
Denny Jones, Chair, Appropriations Committee
Dave McTeague
Bererly Clarno
Ray Baum
Veral Tarno
Avel Gordly
Greg Walden
Larry Sowa
Bob Shiprack

Senators:

Cameron Kennemar
Bob Kintigh

219-5850

DERALD J. BLEU
43900 SE MUSIC CAMP RD
SANDY, OREGON 97055
TEL 503-668-9211

William Wessinger, Chairman
Environmental Quality Commission
121 SW Sallmon
Suite 1100
Portland, Oregon 97204

June 21, 1993

Subject: DEQ File No. 107579
Permit for Guide Dogs for the Blind, Inc.

Dear Mr. Wessinger:

On behalf of the Kelso Road Area Neighborhood Group and the Kelso Area Neighborhood Association, representing approximately 150 families in the Boring, Kelso and Sandy area, I respectfully request that you (EQC) undertake to resolve the questions under which this permit has been issued.

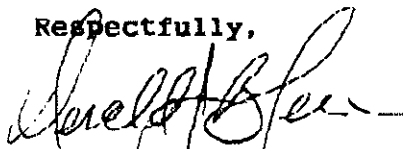
Under the OAR rule for the DEQ No. 340-45-055 provisions are made for a hearing if " the Director determines that significant public interest merits a public hearing or if there are written requests for a hearing from ten or more persons or from an organization representing at least ten persons."

Enclosed is a letter delivered to Mr. Hanson, Director of DEQ, on June 16, 1993, requesting a HEARING and outlining the concerns we have.

The rule that only the applicant can formally request a hearing from the EQC is discriminatory and possibly violates our rights to EQUAL ACCESS and EQUAL REPRESENTATION UNDER THE LAW.

Thank you for considering this case.

Respectfully,



Derald J. Bleu

cc. Denny Jones, Chair, Appropriations	'A' Sub-Committee
Ray Baum	Larry Sowa
Beverly Clarno	Veral Tarno
Avel Gordly	Greg Walden
Dave McTeague	Senators: Bill Kennemer
Bob Shiprack	Bob Kintigh
	Fred Hanson, Director DEQ

June 22, 1993

Derald J. Bleu
43900 S. E. Music Camp Road
Sandy, Oregon 97055

Re: Permit for Guide Dogs for the Blind, Inc.

Dear Mr. Bleu:

Your June 15, 1993, letter to Fred Hansen requesting Environmental Quality Commission (EQC) review of the permit issued on June 9, 1993, to Guide Dogs for the Blind, Inc. has been received. Your request will be scheduled for consideration by the Commission during its next regular meeting on July 23, 1993.

Under the Oregon Administrative Procedures Act and EQC rules, the applicant for a permit may request a contested case hearing before the EQC if their application is denied or if they are dissatisfied with conditions of a granted permit. Under the Administrative Procedures Act, the review option available to third parties (persons other than the applicant) is to petition the Circuit Court in Marion County or the county where the petitioner resides within 60 days of permit issuance to review the Department's permit issuance action.

In prior discussions, the Commission has agreed that any citizen may informally ask the Commission to initiate a review of a decision by the Department to issue a permit. During discussions on this unofficial review option, the Commission indicated their expectation that very few reviews would be initiated in this manner, however, if they were persuaded that an error may have occurred or that policy direction was unclear, their action to initiate review may be preferable to circuit court review. Please be advised that this process is not directed by statute, and the Commission is not obligated to initiate a review.

Your June 15, 1993, letter is being forwarded to Commission members for their review. You are requested to provide any additional written information that you believe the Commission should consider in acting on your request by no later than July 9, 1993. Information you choose to provide should be received by the Director's office by July 9 so that it can be forwarded to Commission members with their regular package of materials for the July 23 meeting. The Department will also provide any information it deems appropriate relative to its permit issuance decision by the same date.

At the meeting on July 23, 1993, you will have approximately 5 minutes to summarize your request for Commission action to initiate a review of



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Portland, OR 97204-1399
(503) 229-5696

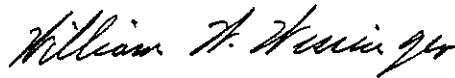
Derald J. Bleu
June 22, 1993
Page 2

the Department's decision to issue a permit to Guide Dogs for the Blind, Inc. The Commission may allow others who have an interest in the matter to speak. The Commission may ask questions of you, the Department, or any others who present information. At the close of presentations and questions, the Commission will deliberate and make a decision on your request.

The Commission meeting will begin at 8:30 a.m. on July 23, 1993, in Conference Room 3a at the Department of Environmental Quality, 811 S. W. 6th Avenue, Portland, Oregon 97204. This item is being scheduled on the agenda as Item E to be considered at 10:30 a.m.

If you have any questions, please feel free to contact me or Director Hansen.

Sincerely,



William W. Wessinger
Chair

WWW:1

cc: EQC Members (with request letter)
Representative Baker
Representative Jones
Representative McTeague
Representative Clarno
Representative Baum
Representative Tarno
Representative Gordly
Representative Walden
Representative Sowa
Representative Shiprack
Senator Kennemer
Senator Kintigh
Guide Dogs for the Blind, Inc. % Karen Vickers

June 25, 1993

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

Representative Ken Baker
State Capitol, Room H-381
Salem, OR 97310

Ken
Dear Representative Baker:

This letter is a follow-up to the meeting held June 16, 1993, in Representative Baker's office regarding the wastewater disposal permit for Guide Dogs for the Blind, Inc. In attendance were Representative Baker, Representative Sowa and his legislative assistant Ginny Van Loo, Representative Walden's legislative assistant Phyllis Shoemake, and Mr. Derald Bleu of Sandy. Identical letters are being sent to each of the representatives.

1. **Hearing Process:** There were questions raised concerning DEQ's administrative procedures for receiving information at and following hearings. The Environmental Quality Commission has adopted extensive procedural rules for contested case hearings associated with appeals of final actions. Other Commission rules provide for Public Notice and Informational Hearings associated with the permit issuance process. The informational hearings are a public participation process designed to both provide information to the public and receive information from the public before a final decision on the permit application is made. Permit hearings are not contested case hearings.

The Department issues public notice and solicits written comments on draft permits. The public is given 30 days to review the application, proposed permit and related documents, and provide written comments. A public informational hearing is held when the Department believes there is significant public interest or controversy associated with an application or when a hearing is requested by 10 or more citizens or an interest group representing 10 or more citizens. Because of the interest in the Guide Dogs permit, the Department elected to hold two public meetings; one informal session to provide information to interested citizens, and an information hearing to solicit comments.

A specific concern was raised as to the appropriateness of DEQ requesting additional information from the applicant after the close of the public participation process. Often, in the process of evaluating and responding to public comments, the Department may solicit additional information from the applicant, one of the parties who has submitted comments during the comment period, or any other source. Since this is an information gathering process and not a contested case proceeding, *ex parte* contact is not an issue. In this case, the DEQ requested information from the applicant regarding their schedule for bringing dogs to the site. The draft permit was then modified to include a limit of 50 dogs until the treatment system capability could be verified.



811 SW Sixth Avenue
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TDD (503) 229-6993
DEQ-1

Attachment D-1

Representative Ken Baker

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June 25, 1993

After all the changes had been made to the draft permit, it was sent to the applicant for their final review prior to issuance. After some minor changes pursuant to their final comments, it was issued. A letter was sent to all participants informing them of the action taken and the changes made in response to comments. It is standard practice for DEQ to have the applicant review modifications made in response to comments received during the public participation process. Experience has shown that this helps to avoid misunderstandings regarding the intent of permit conditions and reduces the number of appeals by permit applicants.

2. **Permit Rules** - A question was raised as to which rules the DEQ is using in issuing the permit to Guide Dogs. The processing of Water Pollution Control Facilities (WPCF) permits is regulated by Oregon Administrative Rules Chapter 340, Division 14. Permits for installation of on-site sewage disposal systems (septic tank/soil absorption systems) with a capacity of less than 5000 gallons per day from residences and commercial establishments are regulated by the rules in OAR Chapter 340, Division 71.

The Division 71 rules provide a uniform framework for administration of the on-site program by 23 counties under contract with DEQ and by DEQ staff in the remaining 13 counties. Systems larger than 5000 gallons per day capacity or that handle waste that varies significantly from domestic sewage are regulated by WPCF permits issued by DEQ. The most significant factors in the design and sizing of on-site systems include the organic strength of the waste, the quantity of solids in the waste, the volume of water to be disposed of, and the capability of the soil to receive the liquid volume and provide further biological treatment and filtration of the wastewater. In general, a smaller disposal field is required if the wastewater is treated to reduce the concentration of BOD and suspended solids. The on-site rules are designed to assure that any water that flows through the soil to reach groundwater or ultimately to a stream will not cause water pollution. On-site systems handling waste that is different from domestic sewage are evaluated in terms of their equivalency to domestic sewage. Where raw wastes are significantly stronger than domestic sewage, an added safety factor is usually applied to system sizing.

The Guide Dogs facility is considered a commercial establishment and has a capacity larger than 5000 gallons per day. Therefore, the applicable permit is a WPCF permit processed under the Division 14 rules. Extrapolations of the Division 71 criteria are often used as a guide in arriving at final permit criteria for larger on-site systems.

A question was raised as to whether the Guide Dogs facility was considered a "major" facility. The description of "major" facilities is found after the fee tables in Division 45. Major facilities include such facilities as pulp mills, aluminum plants, and cities over 10,000 population. The Guide Dogs facility is considered a "minor" facility.

3. **Dog Waste and Treatment Technology:** There was discussion regarding the composition of dog waste and its treatability. There was also specific reference made to the failure of a treatment and disposal system for a kennel in Coos Bay.

There are many dog kennels using on-site waste disposal (septic tank/soil absorption disposal trench system) throughout the state. Most of them are standard on-site systems which have been approved and permitted by counties administering the on-site waste disposal program. The DEQ has no information on the construction or operation of these county approved systems. The Coos Bay Animal Shelter is unique and cannot be compared to the preliminary proposal for Guide Dogs. Site conditions are not the same. Because of a very limited disposal field area, Coos Bay Animal Shelter installed a sand filter system to achieve additional treatment and reduce the size of the necessary disposal field. The system failed because of hydraulic overload and lack of maintenance. After failure, the treatment system was converted to a single pass pea gravel filter. According to Del Cline of the DEQ Coos Bay Branch Office, it is currently working fine. Mr. Cline mentioned that he is aware of at least two other systems, Coos Bay Kennels and Myrtle Point Kennels, which use disposal trenches and are working fine. From his experience, standard septic tank/disposal trench systems can be used successfully provided there is regular maintenance, including daily hair removal and frequent removal of sludge from septic tanks.

The preliminary proposal of Guide Dogs is for a recirculating gravel filter. This is different technology from the one used at Coos Bay Animal Shelter. In addition, the water use for the Guide Dogs site is projected to be more, so the raw waste concentrations will be less.

DEQ's initial draft permit specifically referenced the proposal of Guide Dogs for use of a recirculating gravel filter. It also included a proposed performance standard for the kennel waste treatment system of 30 mg/l BOD and Suspended Solids and identified the proposed design wastewater flow. The 30 mg/l concentration limit was established by DEQ as the level necessary to accommodate the proposed wastewater flow in the available disposal field area. Although not directly stated in the permit, the soil loading rate calculated based on the concentration limit, proposed flow rate, and available disposal area would have been 0.075 pounds of BOD per day per 100 lineal feet of disposal trench. DEQ rules for a standard domestic waste on-site system in the same area would be allowed to load the soil at 0.167 pounds of BOD per day per 100 lineal feet of disposal trench. Based on evaluation of public comments, DEQ deleted the 30 mg/l limit and reference to specific treatment technology, and instead, specified 0.075 pounds per day per 100 lineal feet of disposal trench as the performance standard that would be necessary for a treatment and disposal system to assure that the entire system would properly function and meet environmental protection requirements. The modified permit standard achieves exactly the same purpose as the original draft proposal. Specification of the 30 mg/l limit could encourage maximum water use in order to reduce waste concentration, and this is not desirable. DEQ is encouraging Guide Dogs to design their facilities to use less water. We recognize that using less water

Representative Ken Baker
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June 25, 1993

will result in higher BOD concentrations in the wastewater going to the treatment and disposal system. To assure that the strength of wastewater discharged to the disposal trenches would in no event exceed that for normal domestic sewage, DEQ added an additional permit limit of 200 mg/l as the maximum allowable concentration of BOD in wastewater discharged to the kennel waste disposal trenches of 200 mg/l. These changes were consistent with the spirit and intent of ORS 468B.048(3) which reads as follows:

Subject to the approval of the department, any person responsible for complying with the standards of water quality or purity established under this section shall determine the means, methods, processes, equipment and operation to meet the standards.

The permit, as issued, therefore establishes the performance standards that the consultants for Guide Dogs can use to design the final treatment system. Consistent with ORS 468B.055, final engineering plans and construction specifications must be submitted to DEQ for approval prior to construction. The final design for the Guide Dogs treatment system will be reviewed on its merits and its ability to adequately treat the waste water and meet the performance standards in the permit. It may require a combination of technologies. The revised limits will allow Guide Dogs to consider alternatives which reduce the quantity of kennel wastewater in response to concerns raised in public comment. As wastewater volume is reduced, the concentration of BOD will increase, but the loading to the soil will not be allowed to exceed the performance standard, which is effectively the same as originally proposed. As I committed to you in the meeting, if the final proposal includes a significantly different treatment and disposal system, another hearing will be held.

Mr. Bleu indicated that he had contacted other agencies and the Small Flows Clearing House to get information of the treatment and disposal of dog waste. They had no information to offer him. The Small Flows Clearing House has historically dealt only with domestic sewage. Therefore, they could not be expected to have information on dog waste. In addition, the disposal of dog waste has not been troublesome enough for the agricultural agencies to develop policies and guidelines.

Considerable concern has been voiced about the characteristics of dog waste in comparison to human sewage. Technical information about the differences between dog waste and human waste is limited. The Department has attempted to do a literature search for information on the composition and disposal of dog waste. Washington Department of Ecology, Oregon Department of Agriculture, Oregon State University, Washington State University, Portland State University, the University of Ohio, and the Multnomah County Library have been contacted by staff or others. No printed information on the composition and disposal of dog waste has been located. It is evident that dog waste has not been an area of study. Apparently, it is not an area where disposal problems have been manifest and therefore studies have neither been necessary nor of interest.

Representative Ken Baker

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June 25, 1993

We do know that dog kennel waste can have large quantities of hair which must be screened in order to protect the treatment and disposal system. The texture of the waste is very dependent upon the feed used. Dog kennel waste normally has a higher concentration of inert solids. This means that septic tanks will need to be pumped more often. The concentration "strength" of the wastewater is dependent upon the method used in cleaning the kennels, the amount of waste handled dry, and the amount of water used in washing down. The concentration of all constituents, including ammonia are usually higher than domestic sewage because the waste is not diluted by dish washing, clothes washing, and bath water. Even with this higher waste strength, hundreds of dog kennels in the state are using on-site disposal systems with no apparent problems.

As a matter of interest, several counties and individual dog kennels in the northwestern part of the state were contacted and an inquiry made as to their disposal practices and problems. A summary of the results of this informal survey is included as Attachment A.

In addition, several cities in the northwestern part of the state were contacted to determine whether or not they were concerned about connecting dog kennels to their sewerage system. The results of that informal survey are included as Attachment B.

4. Hydrology - Concern has been expressed that shallow groundwater is a serious problem in the area and that Guide Dogs will add to that problem. The Guide Dogs property is probably the best site in the area for an on-site disposal system. Since it is on a knoll, it doesn't have the standing surface runoff and high groundwater associated with some of the neighboring properties. On-site disposal systems using disposal trenches (soil absorption system) may contribute some water to the local groundwater system. On-site treatment and disposal systems are designed to assure that any of the treated wastewater that reaches groundwater or migrates through the soil beyond the permittee's property will not cause water pollution, health hazards or nuisance conditions. The wastewater is treated in the septic tank which removes solids and organic matter and then treated further by soil bacteria and natural filtering capacity of the soil. In the case of Guide Dogs, they have initially proposed the recirculating gravel filter in addition to a septic tank to reduce the strength of the wastewater to a level below that of domestic sewage. Most of the wastewater from the Guide Dogs facility will be placed in disposal trenches on the north side of the hill where drainage is toward the highway, not toward residential properties. Because of the soil depth on the knoll, no water should ever surface. The permit requires a final hydrogeologic characterization study be completed prior to submission of final plans and specifications for siting of the treatment and disposal system. This is to assure that conditions projected during the preliminary planning are verified. Monitoring wells will be required to monitor subsurface water quality at the site boundary to verify that water quality is not adversely affected.

Representative Ken Baker
Page 6
June 25, 1993

In addition to other Department staff skilled in the evaluation of soils, two soil scientists have evaluated the property and found it suitable for on-site disposal through a disposal trench system. They took into consideration the fact that the depth of groundwater in the area is below any direct interference from the disposal trench systems and that surface streams and drainages will not be impacted. The soil scientists are Dr. Robert Paeth, consultant for the applicant and Dr. Bijan Pour, DEQ staff soil scientist.

As an additional protection, the permit was written very conservatively. As noted previously, the loading of organic matter to the disposal trenches is restricted to less than one-half of that normally approved for domestic sewage disposal in the same soils. In addition, the system will be restricted to 50 dogs until such time as the treatment system capability has been verified. I would also note that land area for a replacement disposal field must be reserved consistent with Division 71 rule requirements for standard on-site systems.

It was suggested that other on-site disposal systems in the area might be failing. All of the homes in the area are disposing of sewage via on-site septic systems. The Department is not aware of any failing systems. Since Clackamas County is the Department's agent for the permitting of domestic sewage on-site disposal systems of less than 5000 gallons per day, complaints for failing systems should be referred to them. To alert them of this expressed concern, they will be sent a copy of this letter. Only if Clackamas County fails to act appropriately will DEQ be involved in investigating and taking enforcement action on small failing on-site disposal systems.

5. EQC Petition - Mr. Bleu has submitted a letter to DEQ requesting that the EQC review the permit for Guide Dogs for the Blind.

Under the Oregon Administrative Procedures Act and EQC rules, the applicant for a permit may request a contested case hearing before the EQC if their application is denied or if they are dissatisfied with conditions of a granted permit. Under the Administrative Procedures Act, the review option available to third parties (persons other than the applicant) is to petition the Circuit Court in Marion County or the county where the petitioner resides within 60 days of permit issuance to review the Department's permit issuance action. In prior discussions, the Commission has agreed that any citizen may informally ask the Commission to initiate a review of a decision by the Department to issue a permit. During discussions on this unofficial review option, the Commission indicated their expectation that very few reviews would be initiated in this manner, however, if they were persuaded that an error may have occurred or that policy direction was unclear, their action to initiate review may be preferable to circuit court review. This informal process is not directed by statute, and the Commission is not obligated to initiate a review.

Mr. Bleu's letter is being forwarded to the EQC and his request is being placed on the Commission's agenda at the next regular meeting on July 23, 1993.

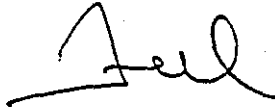
Representative Ken Baker

Page 7

June 25, 1993

If you have any further questions, you may want to contact Mr. Kent Ashbaker directly. His phone number is 229-6385, Ext. 251.

Sincerely,

A handwritten signature in black ink, appearing to read "Fred Hansen". The signature is stylized with a large initial "F" and a long horizontal stroke.

Fred Hansen
Director

cka

Attachments (2)

cc: Mr. Derald Bleu
Clackamas County Department of Environmental Services
Identical letter sent to:
Representative Sowa
Representative Walden
Senator Kintigh

INFORMAL SURVEY OF DOG KENNELS
NORTHWESTERN OREGON

<u>KENNEL</u>	<u>TYPE OF SYSTEM</u>	<u>PROBLEMS</u>
Charlton Kennels Sauvie Island	2 std. septic systems 30 year old kennel	had hair prob. no current probs.
Rock Creek Kennels Old Corny. Pass	std. system 67 runs	no current probs.
Forest Glen Scholls Rd.	std. septic system	no current probs.
Sauvie Island Ken.	std. system expanded system 1 yr. ago 50 runs	no probs.
Cascade Retriever Marion County	std. system 30 runs, new system (on WPCF permit)	no probs.
Laurel Acres Ken. Hillsboro	std. system 8 yrs old, no washdown	no probs.
Green Acres Boring	std. system. 24 runs, system 10 yrs old pumped every 3-4 yrs.	no probs.

OTHER KENNEL RESEARCH

Bill Ross, supervising sanitarian, Washington County--Mr. Ross stated that the county has numerous dog kennels on septic systems and that he does not know of any failures. (6/21/93)

Michael Ebeling, Sanitarian, Multnomah County--Mr. Ebeling stated that many of the kennels are small, that there are no known problems occurring with kennels on septic systems. (6/21/93)

Del Cline, DEQ Coos Bay Office--Del Cline has worked in recent years with three kennels. One was a new facility, the other two were repairs. His experience is that failure is caused by lack of maintenance and/or hydraulic overload. He does not know of any kennels in his area with malfunctioning systems. (6/18/93)

Walter Cate, Dick Polson, Clackamas County Soils Department--They stated that there are quite a few dog kennels on septic systems, but that they know of no failures. (6/21/93)

John Greely, United Sewerage Agency, Washington County. Mr. Greely stated that USA takes kennel septage. It has a higher loading strength and there are more odors. However, the plant has no difficulty in assimilating the septage.(6/21/93)

Dave Pickar, Aloha Sanitary Service--Mr. Pickar stated that he regularly services three kennels: Forest Glen, Rock Creek and Sauvie Island Kennels. He pumps the tanks on a regular basis, and states that the septic systems at the three kennels are working fine. (6/21/93)

Michael Antee--Washington Dept. of Ecology.--Mr. Antee stated that the DOE considers kennel waste as NOT a public health hazard. It is handled as a solid waste. If an owner/operator's practices allow odors or vector problems, it is handled as a "nuisance." Kennel owners in Washington are not required to provide subsurface disposal for washdown water. However, if such is desired, authorization would be through a county septic permit--or dry well authorization. (6/23/93)

WASTE STRENGTH OF KENNEL WASHWATER

Waste strength of kennel washwater--(3/10/93)--Del Cline gave test results for the septic tank effluent, Coos Bay Animal shelter. BOD₅ is as high as 1,800 mg/l, TSS from 2,000 to 2,700 mg/l. The kennel probably uses under 10 gal/dog/day, which would be a major factor in the creation of high loads. After treatment from the single pass peagravel filter, the filtrate samples range from 200-840 mg/l BOD₅, and 1000 mg/l TSS.

No other kennel waste analysis has been found by staff as of 6/23/93.

The characteristics of kennel waste are likely to vary significantly from source to source, depending on the diet and activity of the dogs, and the amount of water used in operation of the kennel. Other factors may play a part.

SUMMARY

1. The technology exists and is available to reduce the waste strength of kennel washdown to the levels where it can be adequately disposed of in a standard septic tank and drainfield.
2. There is nothing about dog waste that makes it impossible to treat and dispose of. There are many kennels in Oregon operating successfully on standard septic tank systems, usually with hair removal and frequent tank pumping. Dog waste differs from human sewage in that dog waste is known to contain significant amounts of hair and nondigested solids. The variations found in dog waste can be provided for in the system design and/or in system maintenance and operation. The kennels in the survey have septic tanks pumped 3-4 times per year.

INFORMAL SURVEY OF MUNICIPALITIES
and
Their Attitude Toward Receiving Dog Kennel Waste

<u>Municipality</u>	<u>Response</u>
St. Helens	They accept waste from the Humane Society Shelter, septage from kennels on septic systems, and waste from vet offices.
Scappoose	Had no policy regarding the acceptance of dog kennel waste.
Arch Cape S.D.	Have no kennels connected at present time. Years ago had a kennel connected which periodically clogged comminutor with dog hair. No policy against.
Tri-City S.D.	Have veterinary hospitals connected which don't create any problems.
Gresham	Multnomah Kennel Club is connected. No problems noted.
Oak Lodge S.D.	Animal Hospitals connected, no problems.
Tillamook	Three veterinary hospitals connected. Had one clogged line at one time, possibly from hair.
Portland	No problems with taking kennel waste.
U.S.A.	No problems with taking kennel waste.
Wilsonville	Have veterinary hospitals connected. Have had no problems.
Note:	Some of the municipalities indicated that they were aware of dog kennels in their rural areas with on-site septic systems. They were not aware of any problems with the on-site systems.

Expiration Date: 6/30/98
Permit Number: 101104
File Number: 107579
Page 1 of 8 Pages

WATER POLLUTION CONTROL FACILITIES PERMIT

Department of Environmental Quality
811 S.W. Sixth Avenue, Portland, OR 97204
Telephone: (503) 229-5696

Issued pursuant to ORS 468B.050

ISSUED TO:

Guide Dogs for the Blind, Inc.
202 NE Kelly
Gresham OR 97030

SOURCES COVERED BY THIS PERMIT:

<u>Type of Waste</u>	<u>Method of Disposal</u>
Minor Domestic, and animal waste	Subsurface disposal trenches

PLANT TYPE AND LOCATION:

On-site Subsurface Disposal
Guide Dogs for the Blind
32919 S.E. Kelso Road
Boring, Oregon

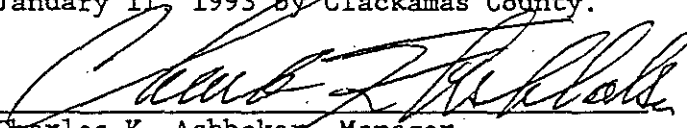
RIVER BASIN INFORMATION:

Basin: Willamette
Sub-Basin: Clackamas
Hydro Code: 22N-DEEP 1.6 N
County: Clackamas

Nearest surface stream which would receive waste if it were to discharge: headwaters of N. Fork Deep Creek, about 5 miles from Deep Creek

Issued in response to Application No. 996626 received January 4, 1993.

This permit is issued based on a land use compatibility statement signed on January 11, 1993 by Clackamas County.


Charles K. Ashbaker, Manager
Water Quality, Northwest Region

JUN 09 1993
Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a wastewater collection, treatment, control and disposal system in conformance with requirements, limitations, and conditions set forth in attached schedules as follows:

	<u>Page</u>
Schedule A - Waste Disposal Limitations	2-3
Schedule B - Minimum Monitoring and Reporting Requirements..	4-5
Schedule C - Compliance Conditions and Schedules.....	6
Schedule D - Special Conditions.....	7-8
General Conditions.....	Attached

All direct discharges to surface waters or the surfacing of raw or treated sewage are prohibited.

SCHEDULE A

Waste Disposal Limitations

1. Permittee is authorized to construct, operate and maintain sewage treatment and disposal systems to serve the following facilities at Guide Dogs for the Blind, Inc., 32919 S.E. Kelso Road:
 - a. An existing single family dwelling. Design flow, 450 gpd.
 - b. A second existing single family dwelling. Design flow, 450 gpd.
 - c. A 12 student dormitory with kitchen. Design flow, 1,200 gpd.
 - d. Administration, veterinary clinic, shop and dispensary. Design flow, 675 gpd.
 - e. Graduation pavilion, attendance once in two weeks, 275 persons. Design flow 1,375 gallons per event, to be dosed at 450 gpd.
 - f. Kennels, 114 dog runs, with a maximum of 228 dogs. Design flow, 11,400 gpd.
2. All systems shall be constructed in accordance with plans submitted and in compliance with the conditions of the Department's approval of plans.
3. Total design flow is 14,625 gpd.
4. No direct discharge to surface waters is permitted. All wastewater shall be distributed for dissipation by subsurface soil absorption.
5. The permittee shall, during all times of disposal, provide personnel to assure the continuous performance of the disposal system within the limitations of this permit.
6. The septic tank effluent from the dormitory and the clinic shall not exceed the following concentrations:

<u>Item or Parameter</u>	<u>Maximum Effluent Concentration</u>
BOD ₅	200 mg/l or less
TSS	150 mg/l or less

7. Loading of the kennel's subsurface disposal system shall not exceed any of the following:

<u>Item or Parameter</u>	<u>Maximum Effluent Concentration and Loading</u>
BOD ₅	200 mg/l
TSS	150 mg/l
BOD ₅	.075 lbs/100 lineal ft.
TSS	.075 lbs/100 lineal ft.
Flow	300 gal/100 lineal ft.

8. A deep-rooted, permanent grass cover, or alternative vegetation approved by the Department in writing, shall be maintained on the land disposal areas at all times.

SCHEDULE B

Minimum Monitoring and Reporting Requirements

The permittee shall monitor the operation and efficiency of all treatment and disposal facilities. Unless otherwise agreed to in writing by the Department of Environmental Quality, data collected, and submitted shall include but not necessarily be limited to the following parameters and minimum frequencies:

1. Dormitory septic tank effluent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
BOD ₅	*Quarterly	Grab
TSS	*Quarterly	Grab

2. Clinic septic tank effluent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
BOD ₅	*Quarterly	Grab
TSS	*Quarterly	Grab

* Quarterly for the first year of operation; and annually thereafter.

3. Kennel septic tank effluent.

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
BOD ₅	**Monthly	Grab
TSS	**Monthly	Grab
NO ₃ -N	**Monthly	Grab
Ammonia	**Monthly	Grab
TKN	**Monthly	Grab

**Monthly for the first six months of operation, and quarterly thereafter.

4. Effluent from the kennel treatment system to the disposal field:

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
BOD ₅	***Monthly	Grab
TSS	***Monthly	Grab
NO ₃ -N	***Monthly	Grab
Ammonia	***Monthly	Grab
TKN	***Monthly	Grab
TN	Annually	Grab

*** Monthly for 60 days to allow the treatment system to equilibrate, then weekly for 60 days to verify treatment capacity. Test BOD₅, TSS and NH₃-N monthly thereafter. Total nitrogen (TN) shall be determined annually. Whenever there is an increase in amounts exceeding 10%, the weekly analysis shall return until compliance has been verified for at least 60 days.

5. Other Parameters

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Water Usage at:		
a. Dorm	Monthly	Calculation
b. Clinic	Monthly	Calculation
c. Kennel	Monthly	Calculation
Pavilion dosing tank flow to disposal field	Monthly	Pump cycle counter
Influent dosing tank flow to kennel treatment system	Monthly	Pump cycle counter
Inspect hydrosplitter(s)	Quarterly	Visual
Check pump cycles:		
A. Inspect all dosing tanks for measurement of gallons/cycle/pump and adjust as necessary	Annually	Measure and calculate
B. Test pumps and alarms at each dosing tank	Quarterly	Visual/Aud
Inspect dosing tank pump screens	Monthly	Visual
Clean hair screens	Daily	Flush or rinse
Inspect disposal field monitoring ports	March and Sept.	Measure & record
Check kennel treatment system	Monthly	Observe and flush or pump as necessary
Inspect septic tank	Annually	Pump as necessary
Inspect kennel septic tanks	Monthly	Pump as necessary
Number of dog runs in use	Monthly	Record

Reporting Procedures

Prior to use of a system, permittee shall develop and submit monitoring forms for Department approval. Monitoring results shall be reported on approved forms. Monitoring reports shall be submitted monthly, starting one month after any of the systems constructed under this permit are placed into use. The reporting period is the calendar month. Reports must be submitted to the Department by the 15th day of the month following the reporting period.

SCHEDULE C

Compliance Conditions and Schedules

1. The permittee shall implement preventive maintenance practices or corrections in accordance with the following schedule:
 - a. Pump the septic tanks when sludge and scum volume exceed 35 percent of the liquid capacity of the tank or every 5 years, whichever is less.
 - b. Clean the pump screen(s) when 25 percent of the screen surface becomes clogged. Clean the hair screens daily.
 - c. Pump solids from the recirculation tank and dosing tanks a minimum of once every 5 years.
2. No system constructed under this permit shall be placed into use before the construction has been certified by a qualified party and approved by the Department. As soon as practicable, but not later than 30 days after construction of each system, the permittee shall:
 - a. Arrange a final joint inspection for Department representatives, the contractor, designer, owner and representatives of the package treatment plant company (if applicable), at which time all components, controls, monitoring apparatus, operation and maintenance procedures shall be reviewed and agreement reached on the completion and operation of the system.
 - b. Submit as-built drawings of the system as actually constructed and a report from the responsible party verifying that construction was done in accordance with the approved plans and specifications.
 - c. Develop and submit an operation and maintenance manual for the system.
3. As soon as practicable, but not later than 30 days from permit issue date, the permittee shall either consolidate all tax lots involved with this facility into one tax lot; or record a nonexclusive utility easement in perpetuity, in favor of the State of Oregon, for the septic systems and replacement area that are not on the lot occupied by the facility.
4. By no later than 30 days after issuance of this permit, the permittee shall submit a sludge management plan in accordance with Oregon Administrative Rule 340, Division 50, "Disposal of Sewage Treatment Plant Sludge and Sludge Derived Products Including Septage." The plan shall include management of canine fecal material. Upon approval of the plan by the Department, the plan shall be implemented by the permittee.
5. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

SCHEDULE D

Special Conditions

1. The permittee shall perform a Minimum Hydrogeologic Characterization and have completed Preliminary Groundwater Monitoring according to the following schedule:
 - a. Prior to submittal of final construction plans, the permittee shall submit to the Department's Northwest Region the results of the Minimum Hydrogeologic Characterization using the approved Department format.
 - b. Prior to submittal of final construction plans, the permittee shall submit to the Department's Northwest Region approvable plans for Preliminary Groundwater Monitoring. No construction of sewage treatment or disposal systems shall take place until the monitoring plans have been approved.
 - c. The permittee shall install the approved monitoring well system, and initiate the Preliminary Groundwater Monitoring Program at least 60 days prior to the use of any of the wastewater systems whose construction is authorized by this permit.
 - d. After initiating the Groundwater Monitoring Program, water samples from the designated monitoring well(s) shall be:
 - (1) Collected quarterly, unless otherwise authorized in writing by the Department;
 - (2) Analyzed by a laboratory approved by the Oregon State Health Division for Drinking Water Analysis; and
 - (3) Reported to the Department with an analysis of the meaning of the results on a quarterly basis within one month of each sampling event.
 - e. The need for permit-specific concentration limits, on-going groundwater monitoring, and/or treatment and disposal system improvements shall be evaluated by the Department. Any corrective actions and/or additional monitoring requirements shall be incorporated into the permit by addendum, should the data suggest that the discharge to groundwater poses a significant threat.
2. Prior to constructing or modifying any wastewater control facilities or any phase of a facility, permittee shall:
 - a. Submit detailed plans and specifications and have them approved in writing by the Department;
 - b. Arrange a pre-construction joint meeting with Department representatives, the designer and the installer at the site; and
 - c. Obtain the Department's written approval of the party who is to do the inspecting and certification of the construction.

3. Prior to construction of facilities, a surety bond in the amount of \$14,625 executed in favor of the State of Oregon shall be filed with the Department of Environmental Quality as required by ORS 454.425 and OAR 340 Division 15.
4. The leachfield systems for the facilities other than the kennel shall be designed to provide 150 lineal feet of 24 inch trench per 150 gallons daily design flow of treated waste water.
5. The leachfield for the kennel may be designed to provide 50 lineal feet of 24 inch trench per 150 gallons daily design flow of treated waste water. This is based upon a projected waste strength after treatment of 30 mg/l BOD₅ and TSS. If the waste strength is higher, the amount of leachfield required shall be proportionately higher.
6. No leachfield shall be constructed at a depth exceeding 30 inches.
7. No leachfield shall be located in an area where the effective soil depth is less than six (6) inches from the bottom of the disposal trench.
8. For the systems serving the kennel, the clinic, and the dorm: starting one week from the date the system is completed, the permittee shall monitor the effluent quality from the facility, as per the frequency required by Schedule B. Testing shall be by a private lab. Excluding values in the eight week start up period, if parameters are not within allowances specified in Schedule A, permittee shall develop and submit plans and specifications within 90 days of that reporting period, for the upgrading of the treatment system to meet the effluent parameters in Schedule A. Permittee shall complete all required upgrades within a reasonable time period established by the Department at the time of the violation.
9. Once the kennel system has reached full design capacity, whenever a kennel waste parameter violation of Schedule A occurs for three consecutive weekly samples, the waste shall be diverted from the leachfield to a holding tank for further treatment or approved off-site disposal.
10. Until the kennel wastewater treatment system has demonstrated the capability of reliably and consistently treating the wastewater to meet standards set in Schedule A, the facility is limited to a total of 50 dogs, including pups.
11. The permittee's proposed waste treatment and disposal facilities are considered to be interim facilities and the use thereof shall be terminated and connection made to an approved area-wide sewerage system as soon as service is available.
12. An adequate contingency plan for prevention and handling of spills and unplanned discharges shall be in force at all times. A continuing program of employee orientation and education shall be maintained to ensure awareness of the necessity of good in-plant control and quick and proper action in the event of a spill or accident.

WPCF GENERAL CONDITIONS

- G1. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit.
- G2. All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:
- a. At all times all facilities shall be operated as efficiently as possible and in a manner which will prevent discharges, health hazards, and nuisance conditions.
 - b. All screenings, grit, and sludge shall be disposed of in a manner approved by the Department of Environmental Quality such that it does not reach any of the waters of the state or create a health hazard or nuisance condition.
 - c. Bypassing of untreated waste is generally prohibited. No bypassing shall occur without prior written permission from the Department except where unavoidable to prevent loss of life or severe property damage.
- G3. Whenever a facility expansion, production increase, or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, a new application must be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans have been approved and a new permit or permit modification has been issued.
- G4. After notice and opportunity for a hearing this permit may be modified, suspended, or revoked in whole or in part during its term for cause including but not limited to the following:
- a. Violation of any terms or conditions of this permit or any applicable rule, standard, or order of the Commission;
 - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
- G5. The permittee shall, at all reasonable times, allow authorized representatives of the Department of Environmental Quality:
- a. To enter upon the permittee's premises where a waste source or disposal system is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit;
 - c. To inspect any monitoring equipment or monitoring method required by this permit; or
 - d. To sample any discharge of pollutants.
- G6. The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

- G7. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws, or regulations.
- G8. The Department of Environmental Quality, its officers, agents, or employees shall not sustain any liability on account of the issuance of this permit or on account of the construction or maintenance of facilities because of this permit.
- G9. In the event the permittee is unable to comply with all the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause such as an act of nature, the permittee shall:
- a. Immediately take action to stop, contain, and clean up the unauthorized discharges and correct the problem.
 - b. Immediately notify the Department of Environmental Quality so that an investigation can be made to evaluate the impact and the corrective actions taken and determine additional action that must be taken.
 - c. Submit a detailed written report describing the breakdown, the actual quantity and quality of resulting waste discharges, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

G10. Definitions of terms and abbreviations used in this permit:

- a. BOD₅ means five-day biochemical oxygen demand.
- b. TSS means total suspended solids.
- c. NH₃-N means Ammonia Nitrogen.
- d. NO₃-N means Nitrate Nitrogen.
- e. NO₂-N means Nitrite Nitrogen.
- f. TKN means Total Kjeldahl Nitrogen.
- g. Cl means Chloride.
- h. TN means Total Nitrogen.
- i. mg/l means milligrams per liter.
- j. ug/l means micrograms per liter.
- k. kg means kilograms.
- l. GPD means gallons per day.
- m. MGD means million gallons per day.
- n. Averages for BOD, TSS, and Chemical parameters based on arithmetic mean of samples taken.
- o. Average Coliform or Fecal Coliform is based on geometric mean of samples taken.
- p. Composite sample means a combination of samples collected, generally at equal intervals over a 24-hour period, and apportioned according to the volume of flow at the time of sampling.
- q. FC means fecal coliform bacteria.

WPCFP.GC (3-8-88)

WATER POLLUTION CONTROL FACILITIES PERMIT EVALUATION
March 11, 1993

Department of Environmental Quality
1500 SW 1st Ave, Suite 750
Portland, Oregon 97201
Telephone: (503) 229-5263

PERMITTEE: Guide Dogs for the Blind, Inc.
P.O. Box 151200
San Rafael, California 94915

SOURCE CONTACT:

<u>Name</u>	<u>Phone Number</u>
Ted Haller, AIA	228-7571
Karen Sendelback	666-5158

REVIEWER: Anne Cox, Charles K. Ashbaker, NWR:DEQ

PROPOSED ACTION: New WPCF permit for expansion of facility

SOURCE CATEGORY: Minor Domestic, and animal waste

PERMIT APPLICATION DATE: 1/4/93

PERMIT APPLICATION NUMBER: 996626

FILE NUMBER: 107579

Introduction

This is an application for a new WPCF permit. The Guide Dog site is at 32919 S.E. Kelso Road, Boring, Oregon, in Clackamas County, about 2 miles north of Sandy, Oregon. It is bordered by Highway 26 along the north property line, and S.E. Kelso Road on the south.

Service Area, Population Served, Significant Contributors

The kennel will have 114 runs to handle 228 dogs. The dorm will house 12 persons, and will have a kitchen for meal preparation. The administration building, clinic, and shop will serve a total estimated staff of 45 persons. The graduation pavilion will have a capacity of 275 persons, and is expected to be used once each two weeks. There are two existing single family residences, whose uses will continue as single family dwellings. One dwelling is to be demolished and replaced in another location. There are no other significant contributors.

Permit Draft Discussion

Schedule A, Limitations

Authorizes the construction, operation and maintenance of 6 sewage treatment and disposal systems to serve the Guide Dogs facility. Requires the systems to be constructed in accordance with the Department's approval of plans. Sets effluent concentration limits for septic tank effluent from the dormitory, clinic, and kennel, and for recirculating gravel filter (RGF) effluent from the kennel.

Schedule B, Monitoring/Reporting Requirements

Requires monitoring of septic tank effluent of the dormitory, clinic and kennel. Requires monitoring of the kennel RGF effluent. Requires monitoring/inspection of dosing tanks, pumps, alarms, screens. Reporting is monthly, starting one month after any of the systems constructed under the permit is placed into use.

Schedule C, Compliance Conditions and Schedules

Sets minimum pumping schedules. Requires inspection and certification of each system prior to use. Requires upgrades, if needed, of effluent from the kennel, clinic, and dorm, to meet parameters in Schedule A. Requires a Minimum Hydrogeologic Characterization, a groundwater monitoring plan, and subsequent groundwater monitoring. (The plan for the minimum characterization has already been requested of the applicant, and it must be approved by the Department before the permit can be issued.) Requires consolidation of tax lots and a sludge management plan.

Schedule D, Special Conditions

Requires written approval of plans before construction can begin. Requires a surety bond of \$14,625 to be filed with the Department. Requires a contingency plan for spills.

Facility Description

The systems to serve the single family dwellings, the dormitory, the administration-clinic-shop unit and the pavilion are proposed to be standard septic tank/drainfield systems, with sizing of tanks and drainfields based on Division 71 rules. A waste strength limitation of 200 mg/l BOD₅ will be required for the dormitory and/or the administration-clinic-shop unit. The wastewater from the pavilion will be dosed at a rate of 450 gpd, following each use of the facility.

The kennel is proposed to be served by a recirculating gravel filter (RGF) followed by 3,750 lineal feet of disposal trenches. In addition, a waste strength limitation of 200 mg/l BOD₅ going to the RGF will be required. RGF effluent concentrations must also be kept within 30 mg/l as specified in Schedule A.

Total design flow is 14,625 gpd.

Sludge Treatment and Disposal

Septic tanks provide treatment, with disposal of effluent to subsurface trenches. Waste sludge is disposed of when the tank is pumped.

Unique Operating Conditions or Problems

Hair removal is important in the kennel system. The system will have to be carefully monitored. Alternative or additional methods of removal may become necessary to provide adequate removal.

Canine fecal material is relatively inactive, not readily digested in a septic tank. The condition of the kennel septic tank will need to be monitored and the tank pumped more frequently to avoid excessive buildup of sludge.

Environmental Concerns

Citizen Complaints

The Department has not received complaints about the facility as presently operated. However, there is considerable public concern about the proposed expansion of the facility.

Groundwater Issues

The site is in an area with a temporarily perched water table. It is near a drainageway that contributes to the N. Fork of Deep Creek. The site is underlain by silt loam and silty clay loam, with an effective soil depth of 30 inches to 40 inches.

An RGF treatment plant is proposed for the kennel waste (design flow 11,400 gpd) to reduce the possibility of impact on groundwater.

A groundwater characterization is being required because of the nature of the waste, the widespread use of wells in the area, and the level of community concern.

End of Report.

HEARING OFFICER REPORT AND FINDINGS

for

GUIDE DOGS FOR THE BLIND

On May 11, 1993, a public hearing was held in the Senior Citizen Center in Sandy. The purpose of the hearing was to receive testimony regarding the permit application for wastewater disposal from Guide Dogs for the Blind. The hearings officer was Charles K. Ashbaker. Ms. Anne Cox, the permit writer, and Ed Sale, Public Affairs Representative, also assisted in the hearing.

There were 54 people in attendance at the hearing. There were three which presented oral testimony. They were Representative Ken Baker, Linda Hall, and Derald Bleu. Others submitted written testimony. The opportunity to present written testimony was extended through May 18, 1993. A brief summary of what I consider the key issues in the testimony received is as follows:

<u>NAME</u>	<u>ISSUE</u>
Keith & Christine Walker	Expressed concern that the facility will pollute their source of drinking water. Applicant should be required to adhere to the same rules as the public.
James & Rotha Lisher	Concerned that the applicant will pollute the surface water and ground water in the area.
Lewis F. Bayer	Live down hill from facility and am concerned about well pollution Also concerned about depleted water table
Senator Bill Kennemer	RGF not proven technology for dog waste. Further soils study should be required prior to permitting
Representative Dave McTeague	RGF not proven technology for dog waste. Study should be conducted by Small Flows Clearinghouse prior to dog kennels using RGF.
Representative Ken Baker	Deny permit because there is no data showing that an RGF can produce comparable effluent to sand filter. Require research on dog waste. Require off site composting until conclusions reached. Monthly monitoring should be required.

Representative Larry Sowa

Deny permit because there is no data showing that RGF can produce effluent comparable to sand filter. Suggest research by Small Flows Clearinghouse.

Representative Greg Walden

Constituent is concerned about ability of RGF to handle waste. Want assurance that DEQ is in compliance with rules as well as following up on unanswered questions.

Raymond and Judith Bader

Don't reduce monitoring. Ask that monitoring be done by DEQ or third party. Applicant must post adequate bond. Look hard at waste disposal plans.

Ron and Linda Hall

Do not think the treatment system proposed will work adequately. Are concerned about disease transmitted to humans from surface or groundwater.

Roger and Kristy Wittekind

Concerned that the treatment system proposed will not work. Concerned with the amount of water use proposed.

Harley and Betty Cissna

Concerned about the groundwater entering their basement sump. Fearful that it will become contaminated from Guide Dogs wastewater disposal system.

Derold J. Bleu

Concerned that the RGF treatment system proposed by the applicant cannot provide the necessary degree of treatment. Dog waste is unique. It should be proven to work on dog waste before it is allowed to be installed at that site. If another system is proposed, it should come in as a new application.

Suggest that a legal determination be made as to which OARS are covering the issuance of this permit.

The application is incomplete since there was no information verifying that the proposed treatment system

would work. Application should be considered withdrawn.

Could find no septic system working properly for dog waste which were not rapid draining soils.

Reported that the soils report by Geotechnology, Inc. indicated that the hydraulic conductivity reported by Dames & Moore was too high. A letter from West Virginia University suggested that the tight soils may not be able to take high strength waste and that the waste may have to be treated to lower the BOD to the 10 or 20 mg/l range.

DEQ is requiring a minimum hydrogeologic characterization to be completed during the summer months. They should require a more detailed study (high risk) and it should include winter months.

Suggested that more accurate hydraulic conductivity tests be made. The soils are too tight for the system proposed. According to the previous residents at the house on Guide Dogs property, the septic system for the house drained slowly and backed up.

An environmental impact study should be conducted for this site.

Note:

Mr. Bleu also submitted several documents associated with the land use hearings as well as other reports and documents which I have not attempted to summarize.

Ron & Susan Littlepage

Guide dogs should be on public sewer, but not here. Soils are marginal. Storm runoff from the operation will aggravate existing problem in the area. Concerned about private well contamination.

Ray & Charlotte Littlepage

Deny permit to save our area from contamination. They are at high point and will drain to everyone around. Proposed system has not

been proven for this type of waste.

Mark Mullins, City of Sandy

The treatment system proposed has not yet been proven for canine effluent. Concerned that the effluent would eventually reach Tickle Creek. Then, the City of Sandy may be forced to take this waste. The applicant should develop another source of treatment.

Milton & Karolyn Ogden

We live within 250 feet of the Guide Dogs property and support what they are doing.

Carol Riser

Expressed concern about poor drainage in their area being made worse by the Guide Dogs operation.

Also concerned about how it might affect taxes. Would it require the local people having to pay for a sewer system at some future time?

Zeldon W. Gernhart

Stated that an environmental impact statement should have been conducted.

Expressed concern about groundwater moratorium and the 15,000 gpd well proposed at Guide Dogs.

Dogs waste biodegrades differently than human waste. Needs to be addressed in depth.

Drain fields in the area all surface during the winter. Who will catch the runoff from Guide Dogs?

How will the tree and shrub removal affect drainage and where is it going to go?

Concerned about the on-site disposal of 15,000 gpd.

A minimum hydrogeologic characterization is required before 10/31/93. The winter season may escape this study.

The Boring sewerage system hasn't worked well. What guarantees will there be that this facility will work? Who will suffer if it fails?

The facility should be required to have trained people operating the disposal system. DEQ should make periodic surprise visits.

What effect do the chemicals used to treat the dogs have on the disposal system?

Michael P. Jones

A thorough hydrogeologic study should be completed at the site. A determination should be made as to the effect the facility will have on the entire ecology of the area. Too many unanswered questions. The permit should be denied.

Harold Winegar

The riparian areas below the development are very sensitive and important and should be protected. Land clearing at the site could affect soil permeability and increase runoff to surrounding neighbors.

Boring Community Association

Oppose the facility because the property is not suited for disposal of the proposed quantity of water. The added drainage from the area will cause increased flooding problems in an area where it is already bad.

Eugene and Deb Cissna

Strongly oppose facility because added water put into the soil will make our poor drainage problems even worse. There is no guarantee that the RGF will work for dog waste. We should not be the guinea pigs.

Guide Dogs for the Blind

Information was presented to clarify errors and misinterpretations in testimony submitted in opposition to the project. The areas covered are:
(1) Quality and composition of dog waste (2) Existing systems (3)

Diseases (4) Data on kennel waste
(5) Oregon Administrative Rules (6)
Soil groups (7) Hydraulic
Conductivity value (8) Timing of
Hydrogeologic Characterization
Study (9) Environmental Impact
Study (10) Wetlands (11) Number of
Dogs (12) Surges (13) Solids

SUBSTANTIVE ISSUES AND DEQ'S RESPONSE

Issue:

Several people testified that the technology proposed by the applicant, recirculating gravel filter (RGF), was not a proven technology for high strength waste, particularly dog waste. A letter from the National Small Flows Clearinghouse indicated that the tight soils probably could not take a high strength waste. They suggested that pretreatment in order to lower the BOD to a range of 10 or 20 mg/l should be required.

Response:

Those testifying have made a good point. However, that should be a plan review issue and not a permit issue. The permit should not list the acceptable technology but should list only the effluent criteria to be required. Whatever treatment train must be employed in order to achieve the required effluent limitations, should not be specified in the permit. Therefore, all references to RGF or other treatment processes for the kennel wastewater will be stricken from the permit.

For the kennel waste system, the permittee will be required to meet a soil loading of not more than 0.075 pounds of BOD or TSS per 100 lineal feet of trench. This is calculated based upon a treated effluent wastewater strength of 30 mg/l BOD and TSS and 300 gallons per 100 lineal feet of leach field. If the wastewater use is reduced, which causes an increase in treated wastewater strength, the same loading will apply. This will require the higher wastewater strength to be distributed to more lineal feet of leachfield for the same flow. The maximum treated wastewater strength permitted will be 200 mg/l BOD or TSS. At that wastewater strength, either the length of leachfield would have to be increased or the wastewater flow decreased. In any event, the permitted loading rate to the leachfield is less than one half that allowed for domestic sewage. In order to achieve the effluent concentration required, the facility may need an aerobic treatment system or a combination of treatment systems. Until there is demonstrated experience with the constructed wastewater treatment system, the permittee will be limited to a maximum of 50 dogs on site.

As an additional safety factor, the permit will contain a

condition which will require that any treated wastewater which does not meet the permit loading limits shall be diverted to a holding tank for further treatment or off site disposal until such time as the treatment system does provide the required degree of treatment. This condition will trigger once the system is up to design capacity.

Issue:

Several testified that the soils are marginal at the site for an on-site leach field system. They were fearful that the system would fail and threaten both surface waters and ground waters in the area. They are particularly concerned about ground water used for water supply.

Response:

The Department is aware that the soils are relatively tight with a moderate percentage of clay. However, based upon past experience, the Department believes that with adequate treatment, a system can be designed and constructed which will function properly in those soils and will not pollute surface waters or groundwater. The soil loading limitation for the Kennel wastewater is set at less than one half of that allowed for domestic sewage in the same soil type.

Also, the Department will require an early warning groundwater monitoring system which will detect failure so that it can be corrected prior to having any affect on surface or groundwater off-site.

Issue:

One person indicated that the Department was not following the rules in Divisions 71 and 45. The specific reference to Division 45 was that the application was not complete because final approvable plans had not been submitted as part of the application.

Response:

Division 71 may be used as a guide for the review of some of the aspects of the treatment and disposal system. However, Division 71 relates only to human waste with flows less than 5000 gpd. The rules do not apply to systems over 5000 gpd and non-human sewage systems.

Divisions 45 and 14 require a completed application before the Department can act. If the Department requests additional information in order to make the application complete, the application can be considered withdrawn if the information is not received within 60 days. The Department does consider the application complete. The Department does not require final

plans as part of a complete application. In fact, the Department does not want to review final plans until such time as the permit has been issued. The issued permit establishes the effluent limitations to be used in preparing the final design of the treatment and disposal system. It is a two step process, permit issuance and then plan approval.

Issue:

Several indicated that an environmental impact study should be conducted prior to issuance of a permit.

Response:

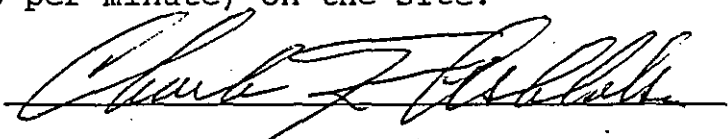
Oregon does not have an law requiring an environmental impact study. However, as part of the permit process and plan review process, the Department requires submission of whatever information the Department considers necessary in conducting an adequate review of the facility.

Issue:

Several commented on the poor drainage in the area surrounding the proposed site. The expansion of the system would aggravate an already intolerable situation.

Response:

It is possible that additional roof drainage and paved area drainage will increase the surface water flow in the immediate area. In addition, with some trees and shrubs removed to accommodate the facility expansion, the total ability of the soil to absorb water may be slightly decreased. However, compared with the overall precipitation which falls in the area. The added runoff should not be significant. Although the natural drainage of precipitation runoff is not under the jurisdiction of the Department, we are responsible to assure that wastewater pollutants do not become part of this runoff contribution and cause public health or water quality problems. We believe that an adequate leachfield system can be constructed on site which will contain the 14,000 gallons per day of waste (average of 9 gallons per minute) on the site.

Signed: 

Date: May 28, 1993

SUMMARY.GD/CKA

WATER POLLUTION CONTROL FACILITIES PERMIT EVALUATION
ADDENDUM
May 26, 1993

Department of Environmental Quality
1500 SW 1st Ave, Suite 750
Portland, Oregon 97201
Telephone: (503) 229-5263

PERMITTEE: Guide Dogs for the Blind, Inc.
202 NE Kelly
Gresham, Oregon 97030

SOURCE CONTACT:

<u>Name</u>	<u>Phone Number</u>
Ted Haller, AIA	228-7571
Karen Sendelback	666-5158

REVIEWER: Anne Cox, Charles K. Ashbaker, NWR:DEQ

PROPOSED ACTION: New WPCF permit for expansion of facility

SOURCE CATEGORY: Minor Domestic, and animal waste

PERMIT APPLICATION DATE: 1/4/93

PERMIT APPLICATION NUMBER: 996626

FILE NUMBER: 107579

A number of issues were raised during the public comment period, which ended on May 18, 1993. The Department has evaluated all comments received, and as a result has revised the draft of the WPCF permit.

Brief Summary of Proposed Changes to the Draft Permit

General

All reference to a recirculating gravel filter or any specific means of treatment has been deleted. Permittee is required to meet standards contained in the permit.

Schedule A

Condition 7 has been rewritten to require each of several parameters be met for kennel effluent. The loading rates of .075 lbs/100 lineal feet for both BOD₅ and TSS are equivalent to the design flow of 11,400 gpd, 3,800 lineal feet of trench, and BOD₅/TSS concentrations of 30 mg/l. This means that the facility will not be penalized for water conservation measures that increase the concentration of effluent but do not cause the amounts of BOD₅ or TSS to exceed the total poundage loading rate designed for the disposal trenches.

The flow parameter maximum of 300 gal/100 lineal feet of trench assures that the system will not be hydraulically overloaded.

The concentration limits for BOD₅ and TSS have been raised to 200 mg/l and 150 mg/l, respectively. This sets a limit on the amount of water conservation that can offset a higher waste strength concentration. At this concentration limit, hydraulic loading would calculate to be less than 1/2 gallon per lineal foot, roughly half of what is allowed for equivalent waste strengths from a single family dwelling discharging to these soils.

Schedule B

Monitoring frequencies for the kennel's treated effluent have been changed to weekly until compliance with treatment standards have been verified for at least 60 days, then monthly thereafter. Whenever there is an increase in amounts exceeding 10%, the weekly analysis shall return until compliance has been verified for at least 60 days.

Schedule C

Condition 3 has been moved to Schedule D and the remaining conditions renumbered.

The sludge management plan required in Schedule C is to include management of canine fecal material.

Schedule D

New Conditions 3, 4, 5 and 6, specifying system sizing and trench depth requirements, have been added.

Condition 7, moved from Schedule C, requires upgrading of the systems serving the kennel, the clinic or the dorm, if parameters in Schedule A are not met after the first four weeks of operation of a system.

Condition 8 has been added, requiring that once the kennel system has reached full design capacity, whenever a kennel waste parameter violation of Schedule A occurs for two consecutive weekly samples, the waste shall be diverted from the leachfield to a holding tank for further treatment or approved off-site disposal.

Condition 9 has been added, limiting the facility to a maximum of 50 dogs, including pups, until the kennel wastewater treatment system has demonstrated the capability of reliably and consistently treating the wastewater to meet standards set in Schedule A.

Subsequent conditions have been renumbered.

End of Report.

State of Oregon
Department of Environmental Quality

Memorandum

Date: June 8, 1993

To: Guide Dogs File
From: Anne Cox/^{AKC} Environmental Specialist
Subject: Response to 5/28/93 draft of Guide Dogs WPCF permit

On June 7, 1993, I contacted Steve Strand of Guide Dogs to see if they had comments on the redrafted permit. Mr. Strand said that they would abide by the comments to be made by KSWA Architects. I contacted Ted Haller of KSWA, and we discussed the redrafted permit. He submitted comments by fax that afternoon. Here is a summary of the comments and staff response:

1. Changes kennel treatment effluent testing to the following: Monthly for 60 days to allow the treatment system to equilibrate, then weekly for 60 days to verify treatment capacity. Test BOD₅, TSS and ammonia monthly thereafter. Total nitrogen (TN) should be determined annually. TN=TKN + NO₃-N + NO₂-N. Ammonia will be used to determine that the treatment remains aerobic and is functioning properly.

Response: Staff agrees that weekly testing prior to stabilization of the system would be premature. The data collected during startup would be of limited value. The suggested reduction in testing for nitrogen to monthly analysis for ammonia, annual TN would provide adequate data. This would be more data than listed in the guidelines for monitoring, which suggest a quarterly grab sample of NH₃-N + NO₃-N + NO₂-N. The presence or increase in ammonia would indeed be indicative of decreased treatment and nonaerobic conditions.

2. Change the startup period in Schedule D, Condition 7 to 8 weeks or 60 days in order to allow sufficient time for the treatment system to stabilize.

Response: Staff agrees. The treatment system may not be able to stabilize within the first 4 weeks period.

3. In Condition 8, Schedule D, allow 3 successive violations before requiring upgrade, rather than 2.

Response: Reasonable.

Staff recommendation: Make the suggested permit changes.

Memo To:

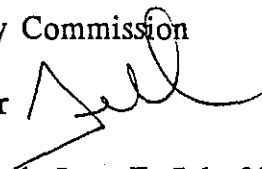
June 8, 1993
Page 2

An additional staff-initiated change was made to the permit draft, requiring the hydrogeologic characterization and the monitoring plans to be submitted prior to submittal of final construction plans. The hydrogeologic conditions were moved from Schedule C to Condition 1 of Schedule D, and subsequent conditions in each schedule were renumbered.

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: July 21, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director 
Subject: ADDENDUM to Agenda Item F, July 23, 1993, EQC Meeting

Clarification of Language in Tualatin River Watershed Nonpoint Source Management Implementation/Compliance Schedule and Order

Statement of Purpose

A number of issues were raised during the public comment period on the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule. These issues are identified and responded to in the Staff Report for Agenda Item F which was mailed to the Commission. Discussions with the Designated Management Agencies (DMAs) involved with implementation of pollution control activities, and with the Department of Justice, have continued and have resulted in some further clarification of language associated with tasks 3, 5, 9, and 14 of the compliance schedule. The purpose of this memo is to explain the changes to the Commission and provide a revised copy (attached) of the complete Implementation/ Compliance Schedule and Order. In the revised schedule, language to be deleted has been struck out and language to be added is underlined. It is the revised schedule provided here that the Department recommends be adopted by the Commission.

Background

Response to comments received and subsequent discussions have led to clarification of the language in the compliance schedule relating to Task #5, Riparian Area Management, Task #9, Jackson Bottom Wetland, and county responsibilities under Task #14, County Roads Ditches and Task #3, Site Specific Problems. Each of the issues are discussed below:

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

Task #5, Riparian Area Management

During the negotiations on the new compliance schedule several of the DMAs expressed concern that a specific task related to riparian areas could create confusion and lead to expectations of a program that would go beyond the requirements of the phosphorus TMDL. These concerns were raised again during the public comment period. The Department responded by explaining the importance of riparian areas in water quality protection and recommended that the task remain in the schedule. Subsequent discussions have focused on the intent of the task. The Department and the DMAs have agreed that task #5 is intended primarily to be part of efforts to reduce nutrients in the Tualatin River and its tributaries. Other water quality improvements and related benefits that may be realized, such as improved wildlife habitat, are secondary. Successful implementation of this task will be dependant on landowner cooperation. A sentence was added to the task to clarify that high priority areas will be those that provide the greatest water quality benefit with particular emphasis on phosphorus.

Task #9, Jackson Bottom

Unified Sewerage Agency (USA) of Washington County has raised concerns that including a task related to Jackson Bottom in the compliance schedule would create confusion and potential inconsistencies with the National Pollution Discharge Elimination System (NPDES) permit for the Hillsboro West wastewater treatment plant which irrigates effluent in Jackson Bottom during the dry season. The Department disagrees that confusion will occur and does not see conflict with existing NPDES requirements. Concerns have persisted, however, and USA has indicated that placing the compliance schedule requirements in the NPDES permit would be a more desirable resolution. The Department is not opposed to placing the requirements of task #9 in the NPDES permit. Language has been added to the compliance schedule to indicate that DEQ will initiate modifications of the NPDES permit. This process will take several months. In the interim the compliance schedule, if adopted by the Commission, will apply. Once the NPDES permit has been modified the permit will supersede the compliance schedule.

Task #14, County Road Ditches and Task #3, Site Specific Problems

Roads are sources of nonpoint pollution and road ditches can transport these pollutants, along with pollutants that originate on adjacent lands, to waters of the state. The Department placed task #14 in the schedule to address this important pollution source; especially in rural areas where stormwater permits are not required. Washington County has pointed out that the TMDL rule (OAR 340-41-470) assigns responsibility to the county for "controlling the quality of urban storm runoff." The County believes that this language limits county responsibility under the TMDL authority to areas inside the USA service area. The Department suggested that the task remain in the schedule and that, if necessary, the rule be revised to clarify responsibility for non-agricultural and non-forestry activities in rural areas. The County has continued to be concerned about this issue stating that until the rule is changed the tasks and schedules for Washington County should be limited to those geographic areas within the territorial jurisdiction of the Unified Sewerage Agency of Washington County (USA). The Department has responded by clarifying the language of task #14 so that the County is encouraged, rather than directed, to develop and begin implementing a program to minimize transport of pollution to waters of the state via county road ditches. A line is also added indicating that future rulemaking by the Commission may result in the task becoming a requirement.

The Department suggests that the Commission direct DEQ to clarify in the rule the responsibility of counties with respect to county roads and possibly other non-agriculture and non-forestry activities in rural areas.

Washington County raised similar concerns about the inclusion of septic tanks, possibly in rural areas, in the inventories requested under task #3a. Similar language clarifications have been made.

Finally, language is added to the end of the purpose statement, on page 2 of the compliance schedule, to clarify that revisions to relevant rules may result in modifications to the compliance schedule at a later date.

Memo To: Environmental Quality Commission
Agenda Item F
July 23, 1993 Meeting
Page 4

Department Recommendation

It is recommended that the Commission consider the revised version of the Implementation/Compliance Schedule and Order (attached) during discussions of Agenda Item F. If the Commission chooses to adopt the Department recommendation of alternative 1 as stated in Agenda Item F, this revised Order should be considered to be the "currently written" version of the Order.

Attachments

Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order (Revised July 21, 1993).

Approved:

Section:

Al Shredel

Division:

Michael Down

Report Prepared By: Mitch Wolgamott

Phone: 229-6691

Date Prepared: July 21, 1993

*** (Author: Typist)
*** (File Name/Number)
*** (Date Typed)

REVISED July 21, 1993

Attachment B
Agenda Item F
July 23, 1993 EQC Meeting

Tualatin Sub-basin Nonpoint Source Management
Implementation/Compliance Schedule and Order
for Designated Management Agencies (DMAs)

Designated Management Agencies:

Unified Sewerage Agency of Washington County (representing
participating cities)
Clackamas County & River Grove Multnomah County
Washington County City of Portland
City of Lake Oswego City of West Linn
Oregon Department of Agriculture Oregon Department of Forestry

Purpose:

Because of chronic violations of water quality standards for dissolved oxygen and pH, Total Maximum Daily Loads (TMDL), Waste Load Allocations and Load Allocations for nutrients in the Tualatin River were established in 1988 as required under 40 CFR 130.7. Oregon Administrative Rules (OAR 340-41-470) were amended "In order to improve the water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/l chlorophyll a action level..." The rule revisions established compliance concentrations at several points along the main stem of the river and at the mouths of major tributaries. The same rule required development of plans to control nonpoint source (NPS) pollution from urban runoff, agricultural, and forest lands to help achieve the compliance concentrations by the compliance date of June 30, 1993. While considerable progress in the implementation of those plans has been made, full compliance with the phosphorus TMDL will not be achieved by that date. The purpose of the following compliance schedule is to help insure continued implementation of ongoing efforts to achieve the goal: "improve the water quality within the Tualatin River subbasin."

The compliance schedule lists tasks and responsibilities of the various Designated Management Agencies (DMAs) in controlling nonpoint source water pollution in the Tualatin River Watershed between the dates of June 30, 1993 and December 31, 1995. The intent is to improve water quality and achieve all applicable standards and limits through the implementation of a comprehensive, watershed-wide program. Another goal is to promote continuation of the communication that has evolved among jurisdictions involved in pollution control in the watershed. All of the management agencies and the Department will continue to work cooperatively to implement these NPS control efforts.

It is intended that, to the extent possible, neighborhood groups, friends groups, interest groups, and other citizen groups be involved in the implementation of this schedule. This is particularly important in the areas of monitoring, public awareness and education, and review of rules, ordinances, and reports/data analysis. All plans, inventories, products, and performance requested in the compliance schedule are subject to Department approval. Any revision of DEQ rules relevant to this order may result in modification of this compliance schedule in order to make it consistent with such rule change. Such modification may occur at any time during the compliance period covered by this schedule.

TASKS FOR ALL DMAS

<u>DATE</u>	<u>TASK</u>
	#1 MONITORING
Ongoing	a) Continue existing monitoring programs and plans; submit data to DEQ quarterly.
January of each year	b) DEQ and DMAs review & evaluate existing monitoring data, Identify gaps and needs. Include monitoring by DMAs and evaluation/verification of models. Set minimum monitoring and reporting requirements through December 1995.
April of each year	c) Develop, in cooperation with DEQ, a single, coordinated, watershed-wide monitoring plan which identifies sites to be sampled, frequency of sampling, parameters to be measured, mechanisms of reporting results to DEQ, quality assurance mechanisms. Sites should include the mouth of each of the tributaries and each of the specified points along the mainstem of the Tualatin River listed in OAR 340-41-470. Also re-evaluate and modify monitoring plans as needed within 90 days of any revisions to load allocations.
5/94-12/95	d) Implement the revised monitoring plan.

#2 PUBLIC AWARENESS/EDUCATION

- ongoing a) Continue ongoing public involvement and education programs.
- 12/31/93 b) Revise and submit to DEQ a detailed public awareness plan. The plan should reflect a coordinated, basin-wide effort that includes specific activities of all DMAs to be implemented by 12/95.
- 1/94-12/95 c) Implement the public awareness plan according to the agreed upon schedule.

#3 SITE SPECIFIC PROBLEMS

- 07/30/93 a) A number of inventories have been conducted in the Tualatin watershed using aerial evaluation, streamwalk, or other techniques. Insure that written documentation has been submitted to DEQ. Include such items as streambank erosion sites, pipes of unknown origin discharging to stream, removal of vegetation, illegal dump sites, animal waste entering stream, ~~failing septic systems,~~ etc. Inclusion of failing septic systems is also encouraged. Identify location and nature of problem and rank all problems identified.
- 09/30/93 b) DMAs and DEQ coordinate on a watershed-wide basis and identify all areas of the basin that have not yet been inventoried. DMAs and DEQ cooperate to determine whether there is a need for other kinds of inventories such as accurate inventories and pollution potential assessment for specific kinds of operations (e.g. in-ground nurseries or lawn chemical application). Establish a schedule which will lead to completion of needed inventories and prioritization of all stream segments by 12/95.
- 06/30/94 c) Visit all high ranking sites identified in 3a above and correct the identified problem, or establish a firm schedule that will either result in correction of the problem by 12/95, or identify the problem as part of a long term comprehensive watershed restoration program by 12/95.

It is recognized that additional ordinances and procedures may be needed dependant upon the nature of the problems identified and the actions necessary for their correction. (See task #6.)

06/30/95

e) In coordination with DEQ, develop recommended course of action and schedules for other priority sites identified in 3a and 3b above. Submit to DEQ a schedule which identifies and ranks all problems and identifies dates by which corrective actions will take place.

**#4 IMPLEMENTATION OF MANAGEMENT PRACTICES
(Best Management Practices/Systems)**

Ongoing

a) Continue efforts to insure widespread adoption and implementation of management measures and improved management of riparian areas. Include such management measures as:

Measures for Agriculture

- erosion and sediment control
- facility wastewater & runoff management
- nutrient & pesticide management
- wetland/riparian protection
- irrigation water management

Measures for Forestry

- streamside management areas
- road construction/maintenance management
- timber harvest practices
- revegetation of disturbed areas
- wetland/riparian protection

Measures for Urban Areas

- new development management
- erosion and sediment control
- road and street runoff systems
- lawn/landscape chemical management
- wetland/riparian protection
- On-site disposal systems

Examples of appropriate practices that should be in place are included in (but are not limited to) the following documents:

- Forest Practices Rules and Implementation Guidelines
- SCS Technical Guidance Manual
- Surface Water Quality Facilities Technical Guidance Handbook
- EPA Coastal Nonpoint Pollution Control Program Guidance

January of
each year

b) As part of annual reporting (Task 7 below) report on progress toward getting area-wide adoption of management practices and riparian area management. To the extent possible, estimate percent coverage. For example: Out of total number of units harvested during the year, how many received on-site inspection and of those, what percent were not implementing all needed practices?

#5 RIPARIAN AREA MANAGEMENT

06/30/94

a) Because of their filtering, shading, and buffering functions, healthy riparian areas are important components of water quality protection. Based on existing watershed inventories (task 3 above), identify and prioritize opportunities for enhancement and restoration of riparian areas. Develop management or restoration strategies for high priority riparian areas. High priority areas are those which would have the greatest beneficial effect on water quality with particular emphasis on phosphorus. Establish a schedule and begin implementation of efforts in order of priority areas. (This task should be completed in cooperation with landowners, local government, neighborhood groups, fish and wildlife interests, friends groups, etc.)

06/30/95

b) Inventory, prioritize, and establish target schedules for the management of riparian areas in the rest of the watershed.

#6 RULES, ORDINANCES and GUIDANCE

Ongoing

a) Continue erosion control programs, plans, and enforcement activities.

09/30/93

b) Complete current efforts to review erosion control programs for development activities. Make recommendations on any necessary revisions to relevant DEQ rules or local ordinances. Report recommendations to DEQ. Make recommendations on needed changes to Erosion Control Plans Technical Guidance Handbook. Revise guidance as necessary.

12/31/93 c) Investigate authorities/needs for local control of erosion and runoff from non-development activities throughout the watershed. Make recommendations on any necessary revisions to DEQ rules and/or local ordinances related to erosion, exemptions from on-site stormwater treatment, road maintenance, buffer requirements, or other relevant requirements. Report recommendations to DEQ.

05/01/94 d) Initiate a formal process to adopt new or refine existing ordinances as necessary according to findings of 4(b) and 4(c).

#7 ANNUAL REPORTING

January of each year a) Submit to DEQ a status report on implementation activities. Specifically address public awareness/education (task 2), resolution of site specific problems (task 3), implementation of management practices (task 4), revision of rules, ordinances and guidance (task 6), and any other responsibilities identified under Tasks for Individual Agencies below.

#8 TUALATIN RIVER STATUS REPORT

April of each year Cooperate with DEQ in the production of an annual status report for the Tualatin River Watershed. The report will incorporate items from the DMA annual reports (task 7(a) above) and will cover the compliance status of the river and it's tributaries, and the accomplishments of the DMAs during the preceding year.

ADDITIONAL TASKS FOR INDIVIDUAL AGENCIES

Unified Sewerage Agency of Washington County (representing participating cities)

<u>DATE</u>	<u>TASK</u>
	#9 JACKSON BOTTOM WETLAND
0911/01/93	a) Submit, for DEQ approval, a comprehensive Waste Water Reuse Implementation Plan for all USA's existing and proposed future reuse projects, as required by OAR 340-55 (including the Jackson Bottom Wetland and new lands acquired on the west side of Hwy 219 or other lands acquired for disposal of effluent from the Hillsboro West STP).
10/30/93	b) In consultation with DEQ, review all available data related to pollution, including phosphorus, entering the Tualatin River from or through the Jackson Bottom wetland. Include both surface water and groundwater characterization and potential for contamination of surface water or groundwater from irrigation and leakage from the large effluent retention pond (and other ponds) in Jackson Bottom. Provide all data, data analysis, and interpretation to the Department. Determine any additional data needs and produce a plan and schedule, acceptable to the Department, to gather such information.
01/01/94	c) Achieve agronomic irrigation rates, and begin operating in compliance with the DEQ approved wastewater reuse implementation plan for Jackson Bottom (9a above) consistent with OAR Chapter 340, Division 55 and NPDES permits.
12/31/94	d) Submit to DEQ any additional data and data analysis produced as a result of 9(b) above and a report, which reflects public review and comment, that interprets the collected data.
03/31/95	e) Submit a plan, acceptable to the Department, to reduce or control pollution entering the Tualatin River from or through the Jackson Bottom wetland, under USA management, as identified in 9(b) and 9(d) above.

Within 30 days of adoption of this Compliance Schedule, DEQ will initiate modification of the Hillsboro treatment facility NPDES permit to further address effluent reuse and potential pond leakage concerns within the Jackson Bottom area as specified in this schedule above.

Until such time as the permit is modified, in the event of any inconsistency between the terms of the Hillsboro treatment facility NPDES permit and this Compliance Schedule, the more stringent requirements shall govern.

Upon the effective date of any such modification to the Hillsboro treatment facility NPDES permit, Task #9 of this compliance Schedule shall be superseded by applicable permit provisions.

#10 EXEMPTIONS FROM ON-SITE STORMWATER TREATMENT

08/31/93

a) In cooperation with DEQ and participating cities, develop a mechanism of tracking and reporting, on a quarterly basis, all development that is granted exemption from the on-site stormwater treatment requirements. The report should identify each development that is granted exemption, identify the reason for the exemption, demonstrate that a program is in place to provide equivalent and timely off-site treatment. Quarterly reports due in October, January, April, July.

02/28/94

b) In coordination with DEQ and using data produced by the first quarterly report (10a above), assess the current situation with regard to exemptions from on-site treatment, in-lieu fee collection, and provisions for off-site treatment. Make recommendations for any necessary changes to state or local regulations to provide improved assurance that newly generated urban runoff receives adequate treatment. Begin a formal process to adopt any needed changes.

Oregon Department of Agriculture

<u>DATE</u>	<u>TASK</u>
	#11 CAFO
Ongoing	a) Perform follow-up inspections and respond to complaints on permitted CAFOs and, as needed, develop enforceable schedules that will result in compliance with permit conditions. As part of annual report to DEQ (task 7 above) identify all permitted CAFOs and their compliance status, identify all actions taken or to be taken.
12/31/94	b) Develop and begin implementation of a program to reduce pollution originating from animal operations that are not permitted under the existing CAFO program. Report status in annual report; include estimate of number of operations in the basin and percentage of those that need improved practices.
	#12 NURSERIES
Ongoing	a) Perform follow-up inspections and respond to complaints on containerized nurseries, during irrigation season, to determine compliance with container nursery requirements. As part of annual report to DEQ (task 7 above), identify all container nurseries in the basin and their compliance status.
	#13 ASSURANCE OF IMPLEMENTATION
12/31/94	a) Coordinate with local agencies (for example SWCDs, irrigation districts, municipalities, etc.) and DEQ to develop mechanisms to insure necessary practices are applied. Implement program through enabling legislation or other state or local authorities.

Clackamas County
Multnomah County
Washington County
Oregon Department of Agriculture
Oregon Department of Forestry

<u>DATE</u>	<u>TASK</u>
	#14 COUNTY ROAD DITCHES
01/01/94	<u>Counties are strongly encouraged to Working cooperatively with DEQ, ODF, and ODA, eountiesto develop and begin implementation of a program to, on a priority basis, maintain county roadside ditches in such a way to minimize transport of sediment, nutrients, and other pollutants to waters of the state. Include provisions to establish and maintain vegetative cover on non-road surface county road right-of-way between road ditches and adjoining land uses. Where possible, convert ditches to vegetated swales and direct road ditch discharges into passive treatment facilities (infiltration basins, wet ponds, detention ponds, etc.) prior to entering waters of the state. Submit an acceptable report to DEQ identifying the program elements. <u>Future rulemaking may result in this task becoming mandatory.</u></u>

Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item F
July 23, 1993 Meeting

Title:

Tualatin River Watershed Nonpoint Source Management Implementation/Compliance Schedule and Order

Summary:

Although considerable progress has been made by the Designated Management Agencies (DMAs) responsible for implementing programs to reduce nonpoint source pollution in the Tualatin River watershed, the Total Maximum Daily Load (TMDL) for phosphorus was not met by the June 30, 1993 compliance date set in rule. The Commission has the authority to allow continued activities beyond the compliance date. At the January 29, 1993 EQC meeting the Commission was briefed on this issue and concurred with the Department's preference to develop a new Implementation/Compliance Schedule extending beyond the date set in rule. A new schedule has been developed, reviewed by the public, and is presented for EQC consideration. If the schedule is adopted as proposed, the status of the river and pollution control efforts would be reevaluated at the end of the new schedule period (end of 1995) and decisions about continued activities beyond 1995 would be made at that time.

Department Recommendation:

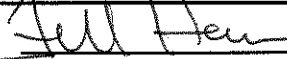
The Department recommends that the Commission adopt the new Implementation/Compliance Schedule and Order and authorize continued activities retroactive to June 30, 1993. This approach will allow activities to continue in the Tualatin River watershed while issuing an order that will require continued aggressive implementation of nonpoint source control efforts.



Report Author



Division Administrator




Director

July 6, 1993 *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: July 6, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director 
Subject: Agenda Item F, July 23, 1993, EQC Meeting

Tualatin River Watershed Nonpoint Source Management
Implementation/Compliance Schedule and Order

Statement of the Issue

As a result of citizen legal action, federal regulations (40 CFR 130.7), and chronic violations of water quality standards for dissolved oxygen and pH, Total Maximum Daily Loads (TMDLs) were established for nutrients (total phosphorus and ammonia nitrogen) for the Tualatin River watershed in 1988. These total load limits were then allocated to sources. Waste Load Allocations (WLA) were assigned to point sources and Load Allocations (LA) were assigned to nonpoint sources of water pollution in the basin. Oregon Administrative Rules (OAR 340-41-470) were amended "In order to improve the water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/l chlorophyll a action level ..." The rule revisions established compliance concentrations at several points along the main stem of the river and at the mouths of major tributaries. The same rule required development of plans to control nonpoint source (NPS) pollution from urban runoff, and from agricultural and forest lands, in order to achieve the compliance concentrations. The rule states that after June 30, 1993, "no activities shall be allowed..." that cause the compliance concentrations to be exceeded at specified points "without the specific authorization of the Commission." Management plans were developed and implementation is in process. Much has been accomplished by the local and state agencies implementing the plans (see the list of accomplishments in Attachment A). The ammonia nitrogen TMDL has been achieved and there has been significant reductions in phosphorus loading to the river, primarily from point source reductions. The phosphorus TMDL has, however, not been met. Because full compliance with the total phosphorus TMDL was not achieved by June 30, 1993, the Environmental Quality Commission (EQC, Commission) must take action to allow continuation of activities or the Department must initiate actions to cause all contributing activities to cease.

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

Adoption of a new compliance schedule by the Commission would constitute an action that will allow activities not specifically prohibited to continue as long as provisions of the compliance schedule are adhered to. A new compliance schedule has been drafted and is presented here for consideration by the Commission. Action taken by the Commission on this issue should be retroactive to June 30, 1993.

Background

The Tualatin River watershed has experienced chronic problems with degraded water quality, resulting from human caused pollution, for many years. At various locations there have been violations of water quality standards for dissolved oxygen, pH, and bacteria. The chlorophyll a action level, an indicator of nuisance algae growth (which is a contributor to both the oxygen and pH violations) has been frequently exceeded. There are also serious concerns with sediment resulting from erosion, and elevated water temperature in the watershed. Efforts have occurred in the past to address some of these water quality problems (in the 1940s, 1960s and 1970s). These efforts focused on two areas: 1) treatment of existing effluent discharges from canneries and sewage treatment plants, and 2) providing additional water for dilution. Historically, little attention was paid to increasing effluent loads that would result from growth and the area-wide, nonpoint source (NPS), loads that come from runoff from construction sites and urban areas, agricultural operations, and forestry activities. As a result, by the 1980s the water quality of the river was again severely degraded.

As a result of federal regulations and citizen legal action in 1986, DEQ began a new program to establish Total Maximum Daily Loads (TMDLs) in water quality limited basins. The Tualatin River was the first waterbody in Oregon for which TMDLs were established. TMDLs are intended to define the amount of a pollutant that can be added to the system without causing a violation of a water quality standard. For the Tualatin watershed, TMDLs were adopted by EQC in 1988 for phosphorus and for ammonia nitrogen based on protection of the dissolved oxygen and pH standards. It was anticipated that the measures required to achieve these limits would also lead to improvements of other water quality parameters (bacteria, sediment, temperature). At the time the TMDLs were established it was not known how long it would take to achieve the limits. After considerable debate an aggressive, five year, time frame was decided on and a compliance date for achievement of the TMDLs was set for June 30, 1993. The rule required development of plans to improve sewage treatment plants in the watershed and plans to decrease the amount of pollution originating from nonpoint sources. Unified Sewerage Agency of Washington County was required to develop and implement plans to reduce ammonia and phosphorus in sewage treatment plant effluent

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released to the river during the dry months. The following Designated Management Agencies (DMAs) were required to develop plans to control NPS pollution to meet the TMDL for phosphorus and help to achieve the water quality standards: Washington, Clackamas, and Multnomah Counties, all incorporated cities in the basin, the Oregon Departments of Agriculture and Forestry. Commission review of the NPS control plans was required by rule. The cities located in Washington County, through agreement with USA, opted to be included in USA's NPS control plan. The Cities of Portland, Lake Oswego, and West Linn remain as separate DMAs. The Department of Agriculture designated the Washington County Soil and Water Conservation District as a Local Management Agency.

At the August, 1990, EQC meeting most of the plans were approved with compliance schedules. Action was deferred on plans for forestry and agriculture. The Forestry and Agriculture plans were returned to the Commission at the June 14, 1991 meeting. At that time the forestry plan was approved with a compliance schedule. The agriculture plan had been significantly improved but concerns still remained primarily related to the lack of mechanisms to provide reasonable assurance that pollution reduction will occur if voluntary measures proved unsuccessful and lack of stable program funding. In order to proceed with implementation the Commission approved the plan, with a compliance schedule, for a duration of one year and directed the Department of Agriculture to work with the counties to develop model ordinances which could be put in place if necessary and to pursue stable funding. On July 24, 1992 the Commission again considered the agriculture plan. Concerns with the ability to provide reasonable assurance and stable program funding were again raised. Model ordinances had not been developed as directed. Legislation intended to provide funding mechanisms and authority to local Soil and Water Conservation Districts (SWCDs) was found to be flawed by the Attorney General's office and was not implemented. The Commission again approved the plan for a limited duration (through April, 1993), this time urging the SWCDs and counties to work together to develop and implement measures to provide reasonable assurance. When the approval period ran out at the end of April, the Department and all of the DMAs had already begun the process of developing a new proposed implementation and compliance schedule, presented in this staff report, which would authorize activities after the June 30, 1993 TMDL compliance date. As a result, the Department opted not to bring the agriculture plan back to the Commission as a separate item prior to this agenda item.

Nonpoint Source Management Plan Accomplishments

Implementation of the NPS control plans has been ongoing since before the plans were approved. Please see Attachment A for a summary of the most significant accomplishments of each of the Designated Management Agencies. Highlights include:

- ▶ **Planning and Special Studies**
A large amount of planning has been done. Guidance documents have been produced by local agencies for stormwater treatment systems and erosion control on construction sites. Ordinances and programs have been established in an attempt to insure these practices are used in urban areas.
- ▶ **Demonstrations and Pilot Projects**
A number of demonstrations and pilot projects have been done which show that practices can be put in place in the Tualatin River watershed and that these practices will reduce the concentration of pollutants in runoff from urban and agricultural lands.
 - Leaf compost treatment system: phosphorus removal as high as 77% and suspended solids removal of 95%.
 - Wet ponds have shown to have results similar to the compost system and have flood control benefits as well.
 - Reseeding road ditches with low growing grasses and maintaining vegetative cover is effective in reducing pollution from road ditches.
 - Cover crops and mulching shown to substantially reduce sediment and phosphorus in agricultural runoff.
- ▶ **Public Involvement and Education**
Because NPS control requires changes in behavior and changes in how areas are developed and how farm operations are conducted, education and awareness is a key element. A number of brochures, newsletters, workshops, etc., have been produced.
- ▶ **Ambient Monitoring**
A great deal of sampling and analysis has occurred. These efforts will need to continue to provide data for tracking success of pollution control efforts and resolving remaining uncertainties about pollution sources.

► Financial Assistance Programs

Federal Hydrologic Unit Area (HUA) and Water Quality Incentive Program (WQIP) have been established in the Dairy-McKay Creek area. These programs provide several million dollars to assist agricultural and forestry operators install and operate practices and systems to reduce pollution.

Legislation (SB 1010), which should provide authorities and stable funding mechanisms for agricultural NPS control programs, appears to be moving through the Legislature and is expected to pass. The Washington County Soil and Water Conservation District has submitted to the Department a proposed program and draft farm plan ordinance which, if implemented, will provide the "reasonable assurance" that has been needed in the agricultural NPS control plan. A copy of the SWCDs proposal is included with their written comments in the Presiding Officers Report (see Attachment C). As of this writing, the Department of Agriculture has not indicated whether such a program will be implemented under SB 1010 if it passes.

Authority to Address the Issue

OAR 340-41-470(3), adopted by the EQC in 1988, established TMDLs for the Tualatin River subbasin in order to meet the dissolved oxygen standard and the chlorophyll a action level. The rule required that after June 30, 1993, "no activities shall be allowed and no wastewater shall be discharged to the Tualatin River or its tributaries without the specific authorization of the Commission" that cause the compliance concentrations to be exceeded. Copies of the rule and enabling statutes are available on request. Establishment of TMDLs is required by federal regulations (40 CFR 130.7)

Alternatives and Evaluation

At the January 29, 1993, Commission meeting an information item was presented (Agenda Item F, copy available on request) which briefed the Commission on the expectation that the TMDL for phosphorus would not be achieved by the June 30, 1993 compliance date. At that time five alternatives for proceeding with efforts to reduce NPS pollution after June 30, 1993, were presented. The alternatives were: 1) No Action, 2) Change the Compliance date in the rule, 3) Development of Stipulated Final Order with each management agency, 4) EQC Authorization of continued activities with Memorandum of Agreement, 5) EQC Authorization of continued activities with Clarification of Conditions and Implementation and Compliance Schedule. At that time the Commission concurred with the Department preference to pursue alternative 5. This

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option suggests the EQC use its authority to allow activities to continue in the watershed as long as an implementation/compliance schedule and order is adhered to. Any activities that the Commission wished to prohibit could be specified.

The Department has worked with the Designated Management Agencies (DMAs) during the past six months to develop an implementation/compliance schedule. Participation of the Northwest Environmental Defense Center (NEDC) was also invited and a representative attended some of the early meetings. Public comment was also sought on the draft schedule. Commission action is now requested on the resulting document: Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order for Designated Management Agencies (DMAs), (Attachment B).

The approach taken in the new schedule was to produce a single document which includes responsibilities of all the DMAs. Tasks which are common to all DMAs, and on which they are expected to work cooperatively are listed first. Some additional tasks which are specific to individual DMAs are also listed. The first page of the schedule provides a purpose statement (to improve the water quality within the Tualatin River subbasin...) and identifies the federal and state regulations under which the program is required. The schedule is intended to encourage a cooperative watershed approach by including all the agencies in a single schedule and asking for monitoring plans and education plans that encompass the entire watershed. A considerable amount of planning and problem identification has been done in the watershed and a number of good demonstration projects have been carried out (see accomplishments in Attachment A). These projects have shown that practices can be put in place in the Tualatin River watershed and that such practices will result in reductions of pollutant concentrations in the runoff from urban and agricultural lands. The currently proposed schedule attempts to change the emphasis from planning and demonstrations to more widespread implementation of practices and correction of identified problems. The schedule runs through 1995 after which a re-evaluation of the implementation program, based on water quality data, will be conducted and decisions about future actions will be made. This schedule will align the Tualatin program with the bi-annual Water Quality Assessment (305(b)) Report required by the Clean Water Act.

In taking action on the Schedule and Order the Commission has at least four possible alternatives:

1. Adopt the Implementation/Compliance Schedule and Order as currently written and authorize continued activities in the Tualatin River watershed, retroactive to June 30, 1993, provided that the schedule is complied with.

2. Direct the Department to modify the Implementation/Compliance Schedule and Order based on Commission deliberations, then adopt the Schedule and authorize continued activities in the Tualatin River watershed, retroactive to June 30, 1993, provided that the schedule is complied with.
3. Reject the Implementation/Compliance Schedule and Order and direct the Department to pursue one of the other alternatives identified in the January 29, 1993 staff report (or some other option). Under this alternative the Commission would need to identify what activities would, or would not, be authorized in the interim while another alternative is developed.
4. Reject the Implementation/Compliance Schedule and Order and allow no activities to continue that would cause the monthly median concentration of total phosphorus to exceed the concentrations listed in OAR 340-41-470.

Under any of the first three alternatives the Commission could authorize activities to continue with the exception of any specific activities the Commission identifies as prohibited.

Summary of Any Prior Public Input Opportunity

A public notice of a chance to comment on the proposed new compliance schedule for implementation of pollution control efforts in the Tualatin River and its tributaries was issued on May 10, 1993. A copy of the public notice is available on request. Comments were solicited on both the list of accomplishments of the DMAs and on the draft implementation and compliance schedule. Two informal public information meetings were held, on May 24 and 25, 1993, so that Department and DMA staff could answer questions related to the draft schedule and list of accomplishments. The Department conducted a formal public hearing, on behalf of the Commission, on the evening of Thursday, June 10, 1993, at the Portland General Electric auditorium in Beaverton. Written comments were due by June 17, 1993. A copy of the presiding officer's report, which summarizes all of the oral testimony received and includes a copy of all of the written comments received, is included as Attachment C. A discussion of the major issues raised during the comment period is provided below. The issues are discussed roughly in the order in which they were raised. The order does not reflect relative significance of the issues.

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Issue: County Road Ditches

Commentor(s): Bonnie Hays, Washington County Commission Chair

Comments: Chair Hays stated that Task #14, which deals with county road ditches, should be deleted or modified to make it apply only to urban runoff inside the UGB. She points out that the rule which identifies the responsibility of Washington County with respect to the TMDL directs the county to produce "a program plan for urban storm runoff" within its jurisdiction. She maintains that this language limits the County's responsibility to urban areas of unincorporated Washington County within the territorial boundaries of Unified Sewerage Agency. Chair Hays does, however, acknowledge that the "goals of the compliance schedule are desirable" and states that the County "will continue to upgrade the quality of our rural drainage and vegetation maintenance practices."

Background: Task #14 requires the county to develop and begin implementation of a program to maintain county roadside ditches in such a way to minimize transport of sediment, nutrients, and other pollutants to waters of the state. The intent is to include rural road ditches. This has been an issue since very early on in the Tualatin efforts. Many of the rural county roads are maintained, either mechanically or by use of herbicides, in a way that removes all vegetation from the ditches and adjacent strips of land (this maintenance is either done by the county or by adjacent landowners). In addition, many of the roads are farmed (tilled) right up to the ditch itself. These two things cause sediment and associated pollutants to be efficiently delivered to the ditch with then often drains to the nearest stream.

The Department has suggested that the County should not allow bare soil to be exposed in the road right-of-way, and that, where possible, they convert ditches to vegetated swales. Research by Dr. Richard Horner of the University of Washington and others has shown that road runoff does carry nutrients and sediment, as well as oil, metals, and other toxics, to receiving streams. He has also shown that simple, inexpensive, low technology practices, such as using roadside ditches for biofiltration where possible, reduces the amount of pollution in the runoff before it reaches the stream. Prohibiting the removal of vegetation from the right-of-way would slow runoff from adjoining agricultural operations allowing sediment and other pollutants to settle out before they are delivered to the roadside ditch. This will not only reduce pollution but would also reduce ditch maintenance needs.

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Department action: The Department recommends that task #14 remain in the schedule. As currently written, the task merely requires that a program be developed and implementation begin, "on a priority basis, to maintain county roadside ditches in such a way to minimize transport of sediment, nutrients, and other pollutants to waters of the state." In the original draft of this task only the counties were identified as responsible DMAs. The Oregon Departments of Forestry and Agriculture have been added to clarify that they should work with the counties to achieve the goal of minimizing transport of pollutants, via road ditches, to waters of the state. The Department further recommends review of DEQ rules relevant to this issue be included under Task #6, Rules, Ordinances and Guidance. If clarification in the rule is necessary it would be brought to the Commission with any other necessary revisions identified under Task #6.

Issue: Task #9, Jackson Bottom

Commentor(s): John Jackson, USA
Alan Goodman, Friends of Jackson Bottom

Comments: Mr. Jackson stated that requirements related to Jackson Bottom create confusion and should be removed from the schedule. He states that the requirements for development of reuse plans and management of STP effluent are covered under NPDES permits and other regulations and they should not be included in this compliance schedule as well. He is willing to work with DEQ toward a resolution of this issue. In written testimony submitted later, Mr. Jackson states that if work in Jackson Bottom must be included in this schedule it should reference the work needed and suggest that it be included in modifications to the NPDES permit for the Hillsboro West STP.

Mr. Goodman submitted written comments. He suggests that Task #9 should include objectives for any data gathering and should require submittal of a report, not just data and analysis. He believes that development of a plan to reduce the pollution coming from Jackson Bottom could be developed more quickly than is suggested in #9(e) and suggests 9/30/94 as a completion date. He believes that leakage from the large retention pond should receive more priority and be corrected on a shorter schedule. Finally he believes there should be requirements for public review and comment on reports and plans developed in Task #9.

Background: Jackson Bottom has been used for many years to irrigate effluent, at high application rates, from the Hillsboro West treatment plant during the dry season. It has been known for some time that surface flows entering the river from Jackson Bottom contain high concentrations of phosphorus (and relatively

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high chloride). There is also significant potential for sub-surface movement of excess irrigated effluent, or effluent leaking from ponds, to the river. There is a very large effluent retention pond located very near the river that is known to have unaccounted for loss of effluent. These issues have been discussed informally several times during the past few years.

Reclaimed water use plans are required in Division 55 of DEQ's rules. Discharge of effluent from the Hillsboro West STP is addressed in the NPDES permit for that facility. Neither the rules nor the permit address dates by which: reuse plans will be in effect; irrigation rates in Jackson bottom will be reduced to at or below agronomic rates; potential leakage from ponds containing effluent will be addressed; and pollution entering the river from Jackson Bottom will be reduced. The purpose of this task in the compliance order is to set specific dates by which these issues will be addressed and to include a data analysis and retention pond leakage evaluation that is not currently addressed in other documents. The Department does not agree that confusion results for having requirements in the Implementation/Compliance Schedule and in the Hillsboro West Permit. Requirements in the two documents do not contradict each other.

Department Action: The language in Task #9 has been revised to reference NPDES permits and reuse rules. A requirement for public participation in report review and plan development has been added to the current schedule language.

Issue: Task #10, Exemptions from On-Site Stormwater Treatment

Commentor(s): Douglas Roberts, Farmer, Tualatin, OR.
Bonnie Peterson, Tualatin, OR.
Sue Orlaske, Hillsboro business owner.

Comment: Mr. Roberts is concerned about the increasing amount of runoff that is being generated by urbanization and that much of that runoff is entering the river with no treatment. He stated that new developments are being built in the basin without constructing the on-site stormwater treatment facilities which were intended. In-lieu fees are charged but no off-site facilities have been built. Ms. Peterson feels that developers are often given an option of building on-site treatment facilities or paying a fee in-lieu (instead of treating the in-lieu fee as an exemption). She points out that there is no monitoring of the program and no accountability if improper exemptions are made. She is concerned that Task #10 still does not make it clear that use of the in-lieu mechanism to avoid building facilities on-site is to be an exception and it doesn't make it clear what DEQ will do if inappropriate exemptions are made. She points out that it has been five

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years since the rules were passed and she doesn't understand why we should wait until 1994 to begin a process to insure that the program works. She suggests that the delay in getting better on-site treatment now will lead to problems that will have to be fixed later at taxpayer expense. She suggests that no further exemptions should be allowed until issues are resolved.

Ms. Orlaske is also concerned about exemptions from the on-site stormwater treatment requirements. She points out that no regional facilities have been built even though many developments have received exemptions and paid in-lieu fees. Those facilities that have been proposed have all been in-stream facilities which invites delays because of water rights and other issues. She suggests that other options (out of stream or on-site) should be considered to speed up placement of facilities. Finally, she points out that every exemption that is allowed means we are losing ground and suggests that no further exemptions should be allowed until the issues have been resolved.

Background: This is an issue that has been raised several times over the past few years. DEQ rules (340-41-455(3)) require all new development to have permanent stormwater control facilities to reduce pollution loadings associated with the runoff from the development. Exemptions are allowed if an in-lieu fee is collected to pay for off-site facilities and, a determination has been made by the local jurisdiction, on a case-by-case basis, that because of size of the development, topography, or other factors, construction of an on-site treatment facility is impractical or undesirable. "No new development shall be granted an exemption if the jurisdiction is not meeting an approved time schedule for identifying the location for the off-site stormwater quality control facilities that would serve that development." Everyone agrees that exemptions are being granted. There is considerable uncertainty as to how many exemptions have occurred, why they occurred, and what their significance is. (This is because no record keeping or reporting was required.) USA has produced a draft inventory of proposed sites for regional facilities. But no regional facilities have actually been sited, no schedule has been established for siting or building facilities, and no off-site facilities have been built to date. USA has suggested that DEQ removal efficiency requirements are so stringent that the facilities would have to be too large to make them feasible on relatively small developments (15 single family dwellings or less). They have suggested that this requirement needs to be revised (via rule change) if there is to be more use of on-site facilities. In the most recent exchange of correspondence on this issue (April 16, 1993), DEQ requested information on the criteria they use for granting exemptions, a schedule and strategy for finalizing and implementing the proposed facilities site list, and how USA will account for the amount of runoff that is being exempted so that

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they can insure that equivalent treatment is being provided off-site. A date for submittal of this information was not specified. The Department has received no additional information.

Department Action: The Department believes Task #10 should remain in the schedule as written. The task is intended to resolve the issues which have been brought up. By the end of August of this year a tracking system will be in place to provide better information on the numbers of exemptions that are being granted, the reasons for the exemptions, and the mechanisms by which equivalent treatment will be provided off site. In early 1994 recommendations will be made for any necessary changes to state or local regulations. If changes to state rules are needed they can be brought to the Commission in a package along with any other revisions identified under Task #6.

Issue: 25 ft. buffers.

Commentor(s): Douglas Roberts, Farmer, Tualatin, OR.
Jack Broome, The Wetlands Conservancy
Susan Langston, Friends Beaverton's Johnson Crk.
Mark Hereim, Beaverton
Mike Houck, Urban Streams Council

Comment: Mr. Roberts stated that construction is occurring within 25 feet of the river.

Mr. Broome discussed the importance of maintaining buffers and commended the existence of the 25 ft. buffers but said he would like to have larger buffers.

Ms. Langston is concerned about destruction of the 25 ft. buffers by new development. She believes that cities frequently exempt developers from the requirement to protect the buffers. She would like to stop exemptions and close loopholes by addressing buffers in Tasks #3, Site Specific Problems, #4, Implementation of Management Practices, and #6, Rules, Ordinances and Guidance. She would like to see more enforcement of ordinances.

Mr. Hereim suggests that when a requirement for a minimum buffer width is set it, in effect, becomes the maximum width that will exist in developed areas. He says that because of the many exemptions that cities grant to these minimum requirements, the 25 ft. minimum doesn't exist.

Mr. Houck stated in written testimony that while regulations may be on the books to protect riparian areas, enforcement and compliance appears to be spotty. He suggests an independent analysis of the efficacy of regulatory measures to protect habitat, open space, and water quality.

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Background: The original Tualatin River Basin Completion and Implementation Schedules, adopted by EQC in 1990, included a task which required provision for protection of all streams, wetlands and ponds with adequate (preferably 100 feet) undisturbed buffers. The Department currently has no oversight of implementation of local buffer ordinances and no documentation of frequency of exemptions or violations.

A recent literature review indicates that riparian buffers have been shown to control nutrients. Reductions of nutrients in runoff have been noted with grass buffers as narrow as 12 feet. Most recommendations, however, are considerably wider ranging to over 140 feet and averaging about 70 feet. Larger buffers may be necessary for control of bacteria and sediment. Buffers of 75 feet or more are required in certain applications in California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, New Hampshire, North Carolina, Rhode Island, Washington, and Wisconsin.

Department Action: The Department suggests that review of the effectiveness of local buffer requirements be included under Task #6. The current draft of the compliance/implementation schedule has been revised to reflect that. The Department also suggests that citizens should be involved in the review.

Issue: Department approval of components required in schedule.

Commentor(s): Donna Hempstead, DMA Coordination Committee
John Jackson, USA
Daniel B. Helmick, Clackamas County

Comment: Ms. Hempstead suggests the last sentence on page one of the compliance schedule which states, "All plans, inventories, products, and performance requested in the compliance schedule are subject to Department approval," is too broad and allows DEQ to micromanage DMA programs. She believes the sentence should be deleted.

Mr. Jackson is also concerned about the requirement for DEQ approval. He suggests that DEQ approve a scope of work for each task before commencing that task and that deadlines for tasks consider time for completion of this scoping. Mr. Helmick objects to micromanagement by DEQ and apparently believes that DEQ approval of components required in the schedule amounts to micromanagement.

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Background: Early drafts of the compliance schedule stated DEQ's approval authority with each task and in most cases stated minimum requirements. For example it required "for DEQ approval, a single, coordinated watershed-wide monitoring plan." It specified the need for a quality assurance element, the minimum parameters to be measured, the minimum frequency of sampling, and the minimum set of site locations. The schedule also required "an acceptable, detailed written public awareness plan" and provided examples of the kinds of items that should be included. The schedule did not specify precisely how each task was to be accomplished but rather attempted to provide criteria and examples. The details were, and still are, left up to the management agencies with a caveat that provides for the needs of the Department with respect to state and federal water quality laws (i.e. be acceptable to the Department) The DMA Coordination Committee objected to that approach stating that DEQ was micromanaging their programs. They requested that the specific criteria be removed in order to give greater flexibility to deal with changing circumstances. They requested that the Department remove the approval statement from each task and produce a preamble to the schedule which states the purpose and authorities. Department legal counsel indicated that this approach was acceptable provided that the approval authority of the Department is clearly stated. The result is the current draft schedule.

Department Action: The Department believes that the approval statement must remain in the schedule. It is not the intent to micromanage local programs. The schedule does not dictate methods. The approval authority must remain, however, if the Department is to fulfill its responsibility for insuring compliance with state and federal water quality regulations and standards. The Department is willing to discuss scoping of work as implementation proceeds. This scoping must occur in a timely fashion, however, to allow completion of tasks within the identified time frames in the Implementation/Compliance Schedule and Order.

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Issue: Task #5, Riparian Area Management

Commentor(s): John Jackson, USA
Donna Hempstead, DMA Coordinating Committee
Mark Hereim, Beaverton, OR
John Hession, City of West Linn
Daniel B. Helmick, Clackamas County

Comments: Mr. Jackson suggests that riparian area management may be outside USA's authority.

Ms. Hempstead states that problems in riparian areas can be addressed through tasks #3, Site Specific Problems, and #4 Implementation of Management Practices. She suggests that including it as a separate task may lead to the impression that there will be a restoration program that would in effect create an entirely different program that is outside the scope of this schedule.

Mr. Hereim suggests that tasks #5 and #6, Rules, Ordinances and Guidance, ought to reflect the fact that the absence of riparian areas means that there will be poor water quality and so these areas should be explicitly protected.

Mr. Hession suggests that Task #5 should be removed from the schedule.

Mr. Helmick believes riparian management is necessarily included in Task #3, Site Specific Problems, and that including it as a separate Task #5 would require a program of comprehensive water quality/watershed restoration that goes beyond the TMDL requirements, which he believes are focused on phosphorus removal.

Background: Riparian areas have been severely altered throughout the watershed, particularly on the tributaries. It is well documented that removal of riparian vegetation and alteration of riparian areas has detrimental effects on water quality and that healthy riparian areas help to reduce sediment, nutrients, temperature, and other pollutant loads. This task was included because of the importance of riparian vegetation in water quality protection. The task was worded, in consultation with the DMAs, to make it clear that it is asking for the identification of opportunities to improve riparian areas and to work with landowners to act on these opportunities.

It is also important to recognize that the purpose of the efforts in the Tualatin River watershed are to improve water quality and protect beneficial uses. Reduction of nutrients is an extremely important component of that program but the intent has never been to focus solely on phosphorus. The TMDLs were

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established "in order to improve water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/l chlorophyll a action level." Compliance with other water quality standards is also required.

Department Action: The Department believes Task #5, Riparian Area Management, should remain in the schedule as currently worded.

Issue: Citizen/Community Involvement

Commentor(s): Mike Houck, Urban Streams Council

Comments: Mr. Houck submitted written testimony that points out that there is no clear provision for actual participation by citizen groups. He suggests that citizen representation should be included throughout the evaluation, monitoring and scheduling and in the activities themselves. He gives specific examples of how citizens could participate in monitoring efforts. He also suggests that in Task #2, Public Awareness/Education, there should be more emphasis on what individual citizens, neighborhood groups, and friends groups can do to make a difference.

Background: Citizen involvement has long been recognized by DEQ staff as essential to the success of all efforts to improve water quality. There was no intention to exclude them from participation. Mr. Houck is correct, however, that citizen participation is not specifically addressed in the draft of the compliance schedule that went out for public comment.

Department Action: The purpose statement in the current draft of the Implementation/Compliance Schedule and Order has been revised to include the intent to involve citizens.

Miscellaneous additional comments:

One letter suggested that a task to inventory the condition of septic systems be added to the compliance schedule. In response, under Task #3, Site Specific Problems, the Department has added failing septic systems to the list of examples of problems to be identified.

One letter suggests that gypsum wall board be prohibited from landfills in order to reduce leachate and promote recycling of gypsum wall board. The Department is aware of no evidence that gypsum wall board in landfills contributes to the water quality standard violations in the Tualatin River.

One letter suggests that a procedure for granting additional extensions beyond December 31, 1995, be addressed in the schedule. The annual reporting and status reports required in the proposed compliance schedule will be used to assess future compliance and determine future needs. If the watershed is still exceeding TMDL goals after 1995 a revised compliance schedule may need to be developed in a process similar to the one that has resulted in the current proposed schedule.

Conclusions

- ▶ Considerable progress has been made by Designated Management Agencies to begin to implement programs to reduce nonpoint source pollution in the Tualatin River watershed.
- ▶ In spite of this progress, the TMDL for Phosphorus in the Tualatin River was not met by the June 30, 1993 compliance date set in rule.
- ▶ The TMDL rule requires that no activities that contribute to exceedance of the TMDL shall be allowed after the compliance date without the specific authorization of the Commission. The Commission must take action if any contributing activities are to be allowed to continue. An appropriate action could be the authorization of continued activities provided that the DMAs comply with an order which specifies tasks and schedules for continued progress toward reducing pollution after June 30, 1993.
- ▶ The Department and the Designated Management Agencies have produced a proposed new Implementation/Compliance Schedule and Order.
- ▶ The public has been provided an opportunity to comment on the proposed schedule and the Department has responded to comments received.

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Recommendation for Commission Action

It is recommended that the Commission adopt alternative 1 as discussed above under Alternatives and Evaluation. This is consistent with the Commission's concurrence with the Department's preferred approach discussed at the January 29, 1993 EQC meeting. This approach will allow activities to continue in the Tualatin River Watershed while issuing an order that will require continued aggressive implementation of nonpoint source control efforts. At the end of the implementation/compliance schedule period (end of 1995) the status of the river and pollution control efforts would be reevaluated. Decisions related to authorization of future activities could be made at that time.

Attachments

- A. Tualatin River Nonpoint Source Management Plan Implementation Program Accomplishments Since 1990.
- B. Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order.
- C. Proposed New Compliance Schedule for Implementation of Pollution Control Efforts in the Tualatin River and Its Tributaries, Presiding Officer's Report on Public Hearing.

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Reference Documents (available upon request)

1. Statutory Authority
2. OAR 340-41-470(3), Tualatin River TMDL Rule
3. Agenda Item F, January 29, 1993, EQC Meeting -- Report on Tualatin Basin Nonpoint Source Control Program Implementation and Compliance Date.
4. A Chance to Comment on ... Proposed New Compliance Schedule for Implementation of Pollution Control Efforts in the Tualatin River and Its Tributaries.

Approved:

Section:

Alshardel

Division:

Michael Hones

Report Prepared By: Mitch Wolgamott

Phone: 229-6691

Date Prepared: June 24, 1993

DMW:crw
SW\WC11\WC11621.5
6 July 93

Tualatin River NonPoint Source Management Plan Implementation

Program Accomplishments Since 1990

Clackamas County

Planning and Special Studies

- ▶ Participated with other DMAs in production of Surface Water Quality Facilities Technical Guidance Handbook.
- ▶ Participated with other DMAs in production of and subsequent revisions of Erosion Control Plans Technical Guidance Handbook.
- ▶ Subbasin plans and special studies were completed as part of the Lake Oswego Master Plan. Areas included Rivergrove, unincorporated areas of Lake Grove and parts of Lake Oswego.

Demonstrations and Pilot Projects

- ▶ The SWCD, Oregon Department of Agriculture, and County are planning three agricultural projects to demonstrate Best Management Practices for livestock operations, crops, and nursery operations.

Public Involvement/Education

- ▶ Semi-annual newsletter - Mainstream
- ▶ Citizen's Committee - monthly meetings since April 1991
- ▶ Rivergrove Sewerage Feasibility Committee - monthly meetings since December 1992
- ▶ Workshops
 - Stormwater Management - Aug 16, 1991
 - Erosion Control - Nov 21, 1991, Mar 31, 1992
 - Program Overview/BMPs - Nov 5, 1992
 - Clean Water/River Rangers - Feb 22, 1993
- ▶ Brochures
 - Soil Savvy (erosion control)
 - Surface Water Management
 - The Tualatin River in Clackamas County
- ▶ Storm Drain Stenciling Program being planned

Clackamas County (continued)**Ambient Monitoring**

- ▶ A monitoring program has been established. The county monitors 15 sites. These sites were sampled for Total and Ortho- Phosphorus between 1990 and 1992. As of April of 1993 they are monitored at a frequency of one sample per month year round. Monthly reports and annual summaries are provided to DEQ.

Inventories of Potential Sources

- ▶ Reconnaissance monitoring has indicated four creeks may be contributing large amounts of phosphorus: Carter Creek, Saum Creek, no-name creek #7 (Johnson Rd.), no-name creek #12 (SW Shadowwood Rd.).
- ▶ Citizens monitoring program is being planned to help identify sources. Kits have been purchased; volunteers are being recruited.

Program Financing

- ▶ A Surface Water Management Agency has been established in Clackamas County for the purpose of providing water quality and quantity management. A fee, based on area of impervious surface, is assessed to fund the program. Budget for the Agency is \$117,000 per year.

Financial Assistance Programs

- ▶ Local regulation provides for service charge abatement to businesses or residents that install facilities on-site with capacity to contain on-site runoff from a 100 year storm event; reduction in fees is available for businesses providing stormwater facilities with capacities greater than the minimum requirements.

Regulation/Enforcement Provisions

- ▶ Adopted ordinance which requires new development to provide a buffer sufficient to protect water quality; minimum of 25 feet.
- ▶ Modified ordinances to require erosion control, consistent with DEQ rules, on construction sites.
- ▶ Adopted ordinance to require treatment of stormwater runoff from new development, consistent with DEQ rules.

Clackamas County (continued)

BMPs Required or Implemented on a Widespread Basis.

- ▶ Require erosion control BMPs (as identified in Erosion Control Plans Technical Guidance Handbook) on development sites.
- ▶ Require on-site storm water treatment for new development.

Capital Improvement Projects

No capital improvements identified at this time.

Maintenance and Operation

- ▶ The County performs O & M activities in the urbanized unincorporated portions of the County.

Municipal NPDES Storm Water Permit Activities

- ▶ Agreements have been signed between the County and Rivergrove, West Linn, and Lake Oswego for development of the NPDES Storm Water Permit.

Tualatin River NonPoint Source Management Plan Implementation

Program Accomplishments Since 1990

City of Lake Oswego

Planning and Special Studies

- ▶ Participated with other DMAs in production of Surface Water Quality Facilities Technical Guidance Handbook.
- ▶ Participated with other DMAs in production of and subsequent revisions of Erosion Control Plans Technical Guidance Handbook.
- ▶ Lake Oswego Study -- participated with other DMAs in development of spreadsheet simulation model capable of analyzing effects of varying flows and lake operations on the total phosphorus loadings to the lake.
- ▶ Lake Oswego Surface Water Management Plan - Includes modeling of stormwater runoff volumes and pollutant loadings, subbasin plans, and identification of potential sites for pollution reduction facilities.
- ▶ Natural Resource Inventory -- an inventory and evaluation of the City's wetlands, tree groves, and stream corridors.

Demonstrations and Pilot Projects

- ▶ Melrose Street stream restoration. Reconstruction of a stream channel in conjunction with a half street improvement.
- ▶ Ball Creek stream restoration. Placement of riparian vegetation with partial funding from Metro Greenspaces.

Public Involvement/Education

- ▶ Four brochures related to water quality published:
 - Tips for Landscaping
 - Tips for Erosion Control
 - Tips for People Along Streams
 - Tips for Auto Care, Driveways, and Sidewalks
- ▶ Catch basin stenciling program. Approximately 12 groups have stenciled 250 storm drain catch basins and distributed 2500 informational door hangers.
- ▶ "Waterways" newsletter distributed within City
- ▶ Through intergovernmental agreement with the City, Lake Oswego School District provides programs for catch basin stenciling, River Rangers, Streamwalk, and water quality monitoring.

Lake Oswego (continued)**Ambient Monitoring**

- ▶ The City takes monthly grab samples for total phosphorus analysis from ten locations. Results are reported to DEQ with the monthly progress reports.

Inventories of Potential Sources

- ▶ Identified stream reaches in need of stabilization (in SWM Master Plan).
- ▶ Streamwalk program has inventoried approximately 12 stream reaches

Program Financing

- ▶ A Storm Water Drainage Utility has been established. A fee, based on area of impervious surface, is collected to fund the program. Funding by fiscal year is as follows:

88/89	\$408,000
89/90	\$620,000
90/91	\$662,000
91/92	\$531,000
92/93	\$759,000

- ▶ A SWM System Development charge of \$106 per Equivalent Service Unit (3,030 square feet of impervious surface) is charged for new development.
- ▶ Erosion control inspection fee of \$25 is charged for each building permit issued.
- ▶ a \$300 fee is charged for NPDES Permit for general construction activities at sites with 5 acres or more of disturbed area.

Financial Assistance Programs

- ▶ Beginning in FY 92/93 the City Parks and Recreation Department implemented a grant program (annual funding of \$25,000) to assist citizens in restoring stream corridors, wetlands, and open spaces.

Regulation/Enforcement Provisions

- ▶ The City has Development Standards for drainage, stream corridors, wetlands, erosion control, and flood plains.
- ▶ The City has a Utility Code for water, sanitary sewers, and surface water management.

Lake Oswego (continued)

BMPs Required or Implemented on a Widespread Basis.

- ▶ Erosion control BMPs (as identified in Erosion Control Plans Technical Guidance Handbook) on development sites.
- ▶ On-site storm water quality facilities for new development (designed in accordance with the Water Quality Facilities Technical Guidance Handbook).

Capital Improvement Projects

No projects have been built to date. Seven pollution reduction CIPs are identified in the SWM Master Plan.

Maintenance and Operation

- ▶ Catch basins cleaned twice each year
- ▶ Curbed arterial streets swept monthly; collectors and neighborhood streets swept bimonthly.

Municipal NPDES Storm Water Permit Activities

- ▶ Part 1 application submitted as a co-applicant with Clackamas County.
- ▶ Part 2 application in preparation (as co-applicant with Clackamas County).

Tualatin River NonPoint Source Management Plan Implementation

Program Accomplishments Since 1990

Multnomah County

Planning and Special Studies

- ▶ Participated with other DMAs in production of Surface Water Quality Facilities Technical Guidance Handbook.
- ▶ Participated with other DMAs in production of and subsequent revisions of Erosion Control Plans Technical Guidance Handbook.

Demonstrations and Pilot Projects

- ▶ The County is monitoring an existing 15 acre detention pond to demonstrate its effectiveness at removing pollutants. Preliminary results indicate it is effective at removing suspended solids; some phosphorus reduction has been noted.
- ▶ The County is monitoring erosion control measures on construction sites to demonstrate effective control measures.

Public Involvement/Education

- ▶ An information package is under development for distribution at a public meeting that will present the results of aerial imaging that has been done to identify NPS problems.
- ▶ Multnomah County is involved in the Department of Agriculture's public process through the local Soil and Water Conservation District.

Ambient Monitoring

- ▶ A monitoring program has been established. The county monitors 5 sites at a frequency of one sample per month during the dry season. The program focuses on solids, nutrients, and fecal coliform. A first flush sample is also collected each fall to test for metals, fertilizers and pesticides. Data is reported to DEQ.

Inventories of Potential Sources

- ▶ Detailed aerial imaging was recently completed. This data will be used to inventory NPS pollution sources on a site by site basis.

Multnomah County (continued)**Program Financing**

- ▶ The program is funded from the County's general fund. Funding by fiscal year is as follows:

FY 91/92	\$ 71,500
FY 92/93	\$124,200

Financial Assistance Programs

- ▶ Agricultural operations in the County are eligible for federal cost share programs.

Regulation/Enforcement Provisions

- ▶ Hillside Development and Erosion Control ordinance
 - ▶ Grading and Erosion Control Permit
- These ordinances allow no land disturbing activity within 100 feet of a waterbody, require erosion control on construction sites consistent with DEQ rules, and require treatment of stormwater runoff from new development, consistent with DEQ rules.

BMPs Required or Implemented on a Widespread Basis.

- ▶ Require erosion control BMPs (as identified in Erosion Control Plans Technical Guidance Handbook) on new development sites.
- ▶ Require on-site storm water treatment facilities for new development with guidance provided by the Surface Water Quality Technical Guidance Handbook.

Capital Improvement Projects

Capital improvement projects are not expected to be necessary within the County portion of the Tualatin Basin, which falls entirely within the headwaters of the overall watershed. Due to relatively low pollutant levels in stream segments, efforts are focused on source control.

Maintenance and Operation

- ▶ The County contracts with the City of Portland for O & M activities in the urbanized unincorporated portions of the County.
- ▶ County road crews perform maintenance of roadway ditches. Improved measures and BMPs will be implemented consistent with NPDES stormwater requirements.

Multnomah County (continued)

Municipal NPDES Storm Water Permit Activities

- ▶ Although the County's portion of the Tualatin subbasin lies outside the NPDES permitting area for the region, many of the identified BMPs for the NPDES program are implemented in the County right of way. Similarly, erosion control BMPs for NPDES purposes are being implemented.

Tualatin River NonPoint Source Management Plan Implementation
Program Accomplishments Since 1990

Oregon Department of Agriculture

Planning and Special Studies

- ▶ Special tributary monitoring on reaches of Burris and Christiansen Creeks to identify pollution sources.
- ▶ OSU/SCS special study on tributaries, winter 1992, to characterize pollutants in runoff.
- ▶ Agricultural BMP effectiveness monitoring in a sub-area of the Dairy-McKay Hydrologic Unit Area is being conducted by Oregon Graduate Institute and expected to continue for several years.
- ▶ A literature review of land use and phosphorus sources completed by OSU. Management implications for agriculture were to "keep soil and water on the site."

Demonstrations and Pilot Projects

- ▶ ODA has conducted cover crop and mulching demonstrations that have documented substantial reductions in phosphorus and sediment in runoff.
- ▶ Animal waste handling and stream corridor management on small farms demonstration underway coordinated by OSU and ODA, funding from EPA/DEQ.
- ▶ SCS and DEQ are cooperating to demonstrate streambank stabilization using bioengineering techniques.
- ▶ Currently attempting to site a leaf compost facility for rural stormwater runoff treatment demonstration.

Public Involvement/Education

- ▶ Rural landowner survey conducted by OSU extension to assess awareness of agricultural NPS pollution, and of technical and financial assistance available.
- ▶ A multi-agency agricultural water quality newspaper insert was produced and distributed to over 36,000 rural Washington County residents in October 1992. OSU coordination, DEQ/ODA funding.
- ▶ OSU coordinated a phosphorus workshop in December 1992. Numerous other workshops, seminars, meetings held.
- ▶ Numerous farm tours and presentations to 4-H groups, horse clubs, etc., have been conducted.
- ▶ Water quality displays have been placed at the Washington County Fair.
- ▶ A flyer "Water Quality Ideas for Small Farms with Livestock" has been published and distributed.

Department of Agriculture (continued)**Ambient Monitoring**

No routine monitoring program has been established in the agricultural areas, however, a number of short term studies and synoptic surveys have been done.

Inventories of Potential Sources

- ▶ Aerial survey of all 52 permitted Confined Animal Feeding Operations (CAFOs) in the watershed. Follow-up inspections of operations judged to have high probability of non-compliance. Where non-compliance is documented schedules to achieve compliance are being developed.
- ▶ An inventory of sites needing nutrient and/or erosion control in the Burris, Christensen and McFee Creek drainages has been conducted. Sites in each drainage have been listed in priority order.
- ▶ Aerial inventory of container nurseries is being conducted.

Program Financing

To date, the program has been funded through grants, ODA staff, and USDA-SCS staff. Bills currently before the Legislature may provide a mechanism for stable program staffing and funding.

Financial Assistance Programs

- ▶ Dairy-McKay Hydrologic Unit Area (HUA) - a federal program (USDA) that provides technical assistance and cost sharing to agricultural producers for structural BMPs in the Dairy-McKay subbasin. This area covers approximately half of the agricultural land and most of the forested land in the Tualatin watershed. \$4.2 million over 5 years; currently in 3rd year.
- ▶ Water Quality Incentive Program (WQIP) - a federal program (USDA) that provides incentive payments for agricultural producers to implement management systems in the Dairy-McKay HUA. Funded at \$100,000 in 1992 and \$180,000 in 1993.
- ▶ Federal cost share rates have been increased for some practices and the list of eligible practices has been broadened in the Dairy-McKay HUA.

Farm operations throughout the watershed continue to be eligible for federal cost share through the Agricultural Conservation Program (ACP) and Food Security Act (FSA).

Department of Agriculture (continued)**Regulation/Enforcement Provisions**

No new requirements have been placed on agriculture to date. Existing DEQ permitting authorities for CAFO and container nurseries have received increased attention. Bills currently before the Legislature may provide additional authorities.

BMPs Required or Implemented on a Widespread Basis.

- ▶ Waste management systems, required by CAFO permit program, have been planned and are being constructed on permitted CAFOs throughout the watershed.
- ▶ Irrigation tailwater recycling and water management strategies have been implemented on container nurseries.
- ▶ Wetland conservation and erosion control plans are in place on highly erodible lands (HEL) that participate in FSA cost share programs.

Capital Improvement Projects

Not Applicable

Maintenance and Operation

- ▶ SCS monitors implementation of erosion control plans and wetland conservation plans on HEL lands that participate in FSA cost share.
- ▶ ODA performs follow-up inspections of CAFOs to verify compliance with permit conditions and enforcement orders.
- ▶ ODA inspects container nurseries to verify compliance with irrigation water management plans.

Municipal NPDES Storm Water Permit Activities.

Not Applicable

Tualatin River NonPoint Source Management Plan Implementation

Program Accomplishments Since 1990

Oregon Department of Forestry

Planning and Special Studies

- ▶ Phosphorus and Forest Streams: The Effects of Environmental Conditions and Management Activities. Review of existing literature commissioned by ODF and conducted by OSU. Completed December 1991.
- ▶ Oregon Department of Forestry Enhanced Monitoring Project Plan, Tualatin River Basin, 1991 and 1992. Field work completed October 1992.

Demonstrations and Pilot Projects

None

Public Involvement/Education

- ▶ Tualatin interim monitoring results presented at OSU College of Forestry conference "Improving Natural Resource Management Through Monitoring. March 1992.
- ▶ ODF participated (along with several other of the DMAs) in the Oregon Rivers Council "Tualatin River Conference." May 1992.

ODF routinely provides education/information materials through written guidelines, recommendations, inspections, etc. provided through the Forest Practices Program.

Ambient Monitoring

- ▶ Ambient monitoring has been conducted at 17 sites during May to October, 1989-1992. Parameters tested for included: total and dissolved phosphorus, nitrates/nitrites, ammonia nitrogen, chloride, turbidity, total suspended solids, pH, and temperature.

Inventories of Potential Sources

Forest Practice Foresters routinely note problem sites.

Program Financing

Existing Forest Practices Program Funding: 40% Forest Products Harvest Tax and 60% General Funds. Estimated program expenditures 1989-1993: \$185,000.

Department of Forestry (continued)

Financial Assistance Programs

ODF assists ASCS in administering the federal Stewardship Incentive Program (SIP) which provides cost share funds to non-industrial private forest landowners.

Regulation/Enforcement Provisions

No new regulatory requirements; the Forest Practice Program administrative rules require use of BMPs and provide regulatory and enforcement mechanism.

BMPs Required or Implemented on a Widespread Basis.

No additional BMP requirements have been developed for the Tualatin subbasin. The Forest Practices Program BMPs are required throughout the state on state and private forest lands. Program water classification and protection rules are currently under review with adoption of refined rules planned by August 1993.

Capital Improvement Projects

Not Applicable

Maintenance and Operation

▶ Annually, ODF inspects and average of 500 field inspections of forest operations in the Tualatin watershed. Compliance with required BMPs is found in 97 percent or more of operations. Forest landowners and operators must comply with existing Forest Practices Program BMPs for maintenance of roads and landings.

Municipal NPDES Storm Water Permit Activities.

Not Applicable

Tualatin River NonPoint Source Management Plan Implementation
Program Accomplishments Since 1990

City of Portland

Planning and Special Studies

- ▶ Participated with other DMAs in production of Surface Water Quality Facilities Technical Guidance Handbook.
- ▶ Participated with other DMAs in production of and subsequent revisions of Erosion Control Plans Technical Guidance Handbook.
- ▶ Natural Resource Evaluation of Pollution Reduction Facilities and Stream Tributaries in Portland's Tualatin Basin; completed April, 1991.

Demonstrations and Pilot Projects

- ▶ During summer of 1990 conducted a pilot study on effectiveness of reseeding roadside ditches with low growing grasses after maintenance. The project was successful when hydroseeding operations were used and enough moisture was available for germination.
- ▶ Studying the effectiveness of street sweeping by different methods and frequencies city wide. Results will indicate if different street sweeping criteria should be applied in the Tualatin subbasin.
- ▶ Monitoring sediment manhole and catch basin facilities to determine effectiveness of this BMP. Results expected in late 1993.
- ▶ Conducting leaf compost stormwater facility demonstrations in the Fanno Creek basin. (Similar to USA's 185th Ave demonstration.) Results expected in late 1993.

Public Involvement/Education

- ▶ Bureau of Environmental Services present classroom presentation in Portland schools on clean water issues.
- ▶ City wide storm drain stenciling in progress.
- ▶ Conducted voluntary EPA streamwalk classes/techniques.
- ▶ Developed interactive computer game for children that teaches what pollution is and how it is caused: Clean River Quest.
- ▶ Developed two education plays for use in public schools: "SuperDude Fights for Clean River or All Washed Up" for elementary classes, and "The Murky Water Caper, A Real Fish Story" for High School.

Portland (continued)

- ▶ Two educational pilot projects in process:
Watershed & Wetland Awareness Program: incorporates a school's wetland into class rooms.
After School Waterworks: for ages 7-10; builds environmental awareness in a community setting.

Ambient Monitoring

- ▶ The City monitors 8 sites. Seven are sampled once per month from May through October. One site is sampled Weekly. Analysis parameters are: Total Phosphorus, ortho-phosphorus, ammonia, nitrate, TKN, conductivity, fecal coliform, enterococci, fecal strep., pH, TDS, TSS, TS, turbidity.

Inventories of Potential Sources

- ▶ Stream assessment by Scientific Resources Inc.
- ▶ Fans of Fanno stream watch.
- ▶ Streamwalk program.

Program Financing

- ▶ Established a Surface Water Management (SWM) utility and associated fees based on area of impervious surface

Financial Assistance Programs

Not applicable.

Regulation/Enforcement Provisions

- ▶ Adopted minimum 25 foot buffer requirement between development and streams or other significant waters.
- ▶ Modified ordinances to require erosion control, consistent with DEQ rules, on construction sites.
- ▶ Adopted ordinance to require treatment of stormwater runoff from new development, consistent with DEQ rules.

BMPs Required or Implemented on a Widespread Basis.

- ▶ Require erosion control BMPs (as identified in Erosion Control Plans Technical Guidance Handbook) on development sites.
- ▶ Adopted new standards for neighborhood streets allowing for reduced pavement width (less impervious surface).

Portland (continued)

Capital Improvement Projects

No capital improvement projects have been constructed to date. Five stormwater treatment wetland facilities are in various stages of design. Final design and construction has been delayed because of difficulties of obtaining final permit approval by the state. Water rights for diversion of in-stream flows is the key issue delaying these projects.

Maintenance and Operation

- ▶ During spring and fall, roadside ditches are reseeded with low growing grasses after maintenance.
- ▶ Completed construction and interagency agreement for emergency valve system that eliminates sewer overflows into Fanno Creek.

Municipal NPDES Storm Water Permit Activities

- ▶ Part one application submitted.
- ▶ Part two application in preparation.

Tualatin River NonPoint Source Management Plan Implementation

Program Accomplishments Since 1990

Unified Sewerage Agency of Washington County

Planning and Special Studies

- ▶ Participated with other DMAs in production of Surface Water Quality Facilities Technical Guidance Handbook. USA provide partial funding: \$20,000
- ▶ Participated with other DMAs in production of and subsequent revisions of Erosion Control Plans Technical Guidance Handbook. USA provided partial funding: \$15,000.
- ▶ Hedges Creek and Buttenut Creek Subbasin plans completed. \$286,000.
- ▶ Draft Potential Surface Water Management Regional Facility Site Inventory. \$8000
- ▶ Developed list of possible BMPs being considered in subbasin strategies as they are developed.

Demonstrations and Pilot Projects

- ▶ A compost Stormwater Treatment System was installed on SW 185th Avenue in Washington County. Average removal rates for first flush events are encouraging: Total phosphorus removal averaged 40% and was as high as 77%. Suspended solids removal averaged 95% and turbidity removal averaged 84%. Additional demonstrations under construction. USA and Wash. Co. Costs so far: \$84,700.
- ▶ Sampling pollution removal efficiency of a wetpond. Average removal rates for first flush are encouraging: Total phosphorus 35% to 70%. Suspended solids removal 90-95%. Turbidity removal 76-80%. \$21,000 expended.
- ▶ Jackson Bottom Experimental Wetland for effluent polishing. There is also a demonstration grass swale at Jackson Bottom. \$286,000.
- ▶ Cooperate with NSF funded Student Watershed Research Project; a demonstration on the utility of schools to help develop water quality data for professionals.

Public Involvement/Education

Television (\$35,000):

- ▶ Produced a video for broadcast on local cable.
- ▶ Three public service announcements promoting citizen behavior changes.

Unified Swerage Agency (continued)**Public involmnet/Education (continued)**

Publications (\$95,000):

- ▶ "Tualatin River Watch" twice yearly, and more recently quarterly, newsletter. Total of 450,000 copies distributed.
- ▶ Surface water management brochure.
- ▶ Recycled Wastewater Brouchure.
- ▶ Glimpses of Tualatin Brouchure.
- ▶ Fanno Creek Brochure.
- ▶ Citizens' Guide to Protecting Streams.
- ▶ Door-hangers: debris, pet wastes, yard debris.
- ▶ Informational inserts in city/agency billings.

Billboards:

- ▶ SWM detention pond educational sign @ Edy Road.
- ▶ SWM education mini-billboards across basin.

Murals (\$3000)

- ▶ Six murals on USA large vehicles promote awreness.

Education Programs (\$23,500)

- ▶ Tualatin River Rangers water education program reaches 5000 4th graders each year.
- ▶ USA staff integrate water quality curriculum in Washington County Outdoor School.
- ▶ Customize the video game, EcoQuest, to fit Tualatin.

Meeting, Events, Tours, etc (\$50,000+)

- ▶ Staff presentations at community meetings and groups: Community groups, CPOs, Chambers of Commerce, etc.
- ▶ Staff participation in wide variety of events: Earth Day events, commuity celebrations, stream clean-up days, parades, tours, library displays, recycling, etc.

Ambient Monitoring

- ▶ An extensive ambient monitoring program has been established encompassing the main stem river and it's urban tributaries within Washington County. An average of 65 sites are sampled monthly (some in cooperatin with agriculture and forestry agencies). Major parameters analyzed include: Total phosphorus, ammonia nitrogen, fecal bacteria, suspended solids, total dissolved solids, temperature and pH. Data submitted to DEQ monthly. Average annual cost: \$200,000.

Inventories of Potential Sources

- ▶ Conducted Aerial Evaluation of Nonpoint Source Pollution in 9 subbasins. Report includes identification and preliminary priorities for specific sites in need of attention. (\$48,000)

Unified Sewerage Agency (continued)**Program Financing**

- ▶ Established a Surface Water Management (SWM) utility and associated fees based on area of impervious surface.
- ▶ Established erosion control permit and inspection fees.
- ▶ Established water quality facility review fees.

Financial Assistance Programs

- ▶ Contribute funds to organizations for projects that promote USA programs and concepts (e.g. Student Watershed Research Project, Friends groups).

Regulation/Enforcement Provisions

- ▶ Adopted 25 foot buffer requirement between development and streams, wetlands or other significant waters.
- ▶ Modified ordinances to require erosion control, consistent with DEQ rules, on construction sites.
- ▶ Adopted ordinance to require treatment of stormwater runoff from new development. Exemptions are allowed when an in-lieu fee is paid.

BMPs Required or Implemented on a Widespread Basis.

- ▶ Require erosion control BMPs (as identified in Erosion Control Plans Technical Guidance Handbook) on development sites.
- ▶ Require use of on-site BMPs for stormwater treatment on new development (as identified in Surface Water Quality Facilites Technical Guidance Handbook) unless exemption is obtained and in-lieu fee is paid.
- ▶ Assisted METRO and DEQ in obtaining phosphate detergent bans.

Capital Improvement Projects

Capitol improvement program to be implemented as the subbasin strategies are implemented. None constructed so far. This is partly due to difficulties and delays related to obtaining water rights and permits to divert water and construct in wetlands. Site specific BMP and CIP designs and specifications will be provided prior to construction.

Unified Sewerage Agency (continued)

Maintenance and Operation

- ▶ Implementing repair/maintenance/construction of existing drainage system. Currentl maintain 150 public owned faciliteis. Approx. 22,000 miles of streets have been swept and approx. 9,000 catch basins cleaned since 1990. Average annual USA budget for O&M is \$850,000. Cities estimated annual budget is \$500,000.

Municipal NPDES Storm Water Permit Activities

- ▶ USA and co-applicants (Washington Co. and ODOT) have been identifying BMPs to be used. Part 1 application has been submitted. The part two application will be submitted in May. Cost of permit development and monitoring: \$800,000.
- ▶ Have accepted delegation and are implementing the general NPDES permit for erosion control on 5+ acre developments.

Tualatin River NonPoint Source Management Plan Implementation
Program Accomplishments Since 1990

City of West Linn

Planning and Special Studies

- ▶ Participated with other DMAs in production of Surface Water Quality Facilities Technical Guidance Handbook.
- ▶ Participated with other DMAs in production of and subsequent revisions of Erosion Control Plans Technical Guidance Handbook.
- ▶ Storm Drainage Master Plan update in progress.

Demonstrations and Pilot Projects

- ▶ The City is using utilizing stormwater quality facilities constructed on private development to evaluate effectiveness of such facilities.

Public Involvement/Education

- ▶ Surface Water Management newsletter (quarterly to approx. 6000 utility customers).
- ▶ Update; monthly newsletter to approx. 7,000 City of West Linn residences.
- ▶ 1992 Sunset Primary School 5th grade leadership program.
- ▶ Storm drain stenciling program implemented by Girl Scouts.
- ▶ METRO Greenspaces grant to Sunset Primary School for "Our Backyard and Beyond, Exploration of the Camassia Watershed Area.

Ambient Monitoring

No monitoring has been established, however, the City is willing to work with DEQ to develop a program.

Inventories of Potential Sources

- ▶ Complete storm system inventory being conducted; includes visual inspection for potential sources.

West Linn (continued)**Program Financing**

- ▶ Implementation of a storm water utility based on a monthly service charge of \$3.75/ESU. Annual revenue of \$345,000 funds all city storm water programs including: Tualatin Nonpoint Source Management Program, NPDES permits, operations and maintenance, public education, development of ordinances and design standards, erosion control, and engineering review.

Financial Assistance Programs

- ▶ The storm water utility has provision for both credits and waivers of the service charge for customers that can demonstrate and quantify that they are not served by the city's storm water program.

Regulation/Enforcement Provisions

- ▶ Adopted ordinance which requires new development to provide a buffer with a minimum width of 25 feet from wetlands and streams.
- ▶ Adoption and implementation of an erosion control ordinance, August, 1991. Stringent erosion control standards have been implemented on 68 building permits and 4 subdivision developments within the Tualatin subbasin since implementation of the ordinance.
- ▶ Adoption and implementation of a storm water quality control ordinance, August, 1991. Only one development application, to which the ordinance applies, has been submitted since July, 1990. Three other developments requested approval extensions and the City required that they meet the standards.

BMPs Required or Implemented on a Widespread Basis.

- ▶ Erosion control BMPs (as identified in Erosion Control Plans Technical Guidance Handbook) on development sites.
- ▶ On-site storm water treatment for new development.

Capital Improvement Projects

None so far. Capital improvement projects will be identified and prioritized with the update of the Storm Drainage Master Plan, 93/94.

West Linn (continued)

Maintenance and Operation

- ▶ Established and budgeted a two person storm crew to implement a maintenance program (prior to July, 1992, there was no permanent funding for storm system M&O). Program includes storm system inspection and cleaning, sampling, investigation and complaint response, and public education.

Municipal NPDES Storm Water Permit Activities.

- ▶ Submitted Part 1 NPDES Permit Application with co-applicant, Clackamas County.
- ▶ Preparation and submittal of Part 2 NPDES Permit Application with Co-applicant, Clackamas County. West Linn's share of cost: \$25,000.

Tualatin Sub-basin Nonpoint Source Management
Implementation/Compliance Schedule and Order
for Designated Management Agencies (DMAs)

Designated Management Agencies:

Unified Sewerage Agency of Washington County (representing
participating cities)
Clackamas County & River Grove Multnomah County
Washington County City of Portland
City of Lake Oswego City of West Linn
Oregon Department of Agriculture Oregon Department of Forestry

Purpose:

Because of chronic violations of water quality standards for dissolved oxygen and pH, Total Maximum Daily Loads (TMDL), Waste Load Allocations and Load Allocations for nutrients in the Tualatin River were established in 1988 as required under 40 CFR 130.7. Oregon Administrative Rules (OAR 340-41-470) were amended "In order to improve the water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/l chlorophyll a action level..." The rule revisions established compliance concentrations at several points along the main stem of the river and at the mouths of major tributaries. The same rule required development of plans to control nonpoint source (NPS) pollution from urban runoff, agricultural, and forest lands to help achieve the compliance concentrations by the compliance date of June 30, 1993. While considerable progress in the implementation of those plans has been made, full compliance with the phosphorus TMDL will not be achieved by that date. The purpose of the following compliance schedule is to help insure continued implementation of ongoing efforts to achieve the goal: "improve the water quality within the Tualatin River subbasin."

The compliance schedule lists tasks and responsibilities of the various Designated Management Agencies (DMAs) in controlling nonpoint source water pollution in the Tualatin River Watershed between the dates of June 30, 1993 and December 31, 1995. The intent is to improve water quality and achieve all applicable standards and limits through the implementation of a comprehensive, watershed-wide program. Another goal is to promote continuation of the communication that has evolved among jurisdictions involved in pollution control in the watershed. All of the management agencies and the Department will continue to work cooperatively to implement these NPS control efforts.

It is intended that, to the extent possible, neighborhood groups, friends groups, interest groups, and other citizen groups be involved in the implementation of this schedule. This is particularly important in the areas of monitoring, public awareness and education, and review of rules, ordinances, and reports/data analysis. All plans, inventories, products, and performance requested in the compliance schedule are subject to Department approval.

TASKS FOR ALL DMAs

<u>DATE</u>	<u>TASK</u>
	#1 MONITORING
Ongoing	a) Continue existing monitoring programs and plans; submit data to DEQ quarterly.
January of each year	b) DEQ and DMAs review & evaluate existing monitoring data, Identify gaps and needs. Include monitoring by DMAs and evaluation/verification of models. Set minimum monitoring and reporting requirements through December 1995.
April of each year	c) Develop, in cooperation with DEQ, a single, coordinated, watershed-wide monitoring plan which identifies sites to be sampled, frequency of sampling, parameters to be measured, mechanisms of reporting results to DEQ, quality assurance mechanisms. Sites should include the mouth of each of the tributaries and each of the specified points along the mainstem of the Tualatin River listed in OAR 340-41-470. Also re-evaluate and modify monitoring plans as needed within 90 days of any revisions to load allocations.
5/94-12/95	d) Implement the revised monitoring plan.

#2 PUBLIC AWARENESS/EDUCATION

- ongoing a) Continue ongoing public involvement and education programs.
- 12/31/93 b) Revise and submit to DEQ a detailed public awareness plan. The plan should reflect a coordinated, basin-wide effort that includes specific activities of all DMAs to be implemented by 12/95.
- 1/94-12/95 c) Implement the public awareness plan according to the agreed upon schedule.

#3 SITE SPECIFIC PROBLEMS

- 07/30/93 a) A number of inventories have been conducted in the Tualatin watershed using aerial evaluation, streamwalk, or other techniques. Insure that written documentation has been submitted to DEQ. Include such items as streambank erosion sites, pipes of unknown origin discharging to stream, removal of vegetation, illegal dump sites, animal waste entering stream, failing septic systems, etc. Identify location and nature of problem and rank all problems identified.
- 09/30/93 b) DMAs and DEQ coordinate on a watershed-wide basis and identify all areas of the basin that have not yet been inventoried. DMAs and DEQ cooperate to determine whether there is a need for other kinds of inventories such as accurate inventories and pollution potential assessment for specific kinds of operations (e.g. in-ground nurseries or lawn chemical application). Establish a schedule which will lead to completion of needed inventories and prioritization of all stream segments by 12/95.
- 06/30/94 c) Visit all high ranking sites identified in 3a above and correct the identified problem, or establish a firm schedule that will either result in correction of the problem by 12/95, or identify the problem as part of a long term comprehensive watershed restoration program by 12/95.

It is recognized that additional ordinances and procedures may be needed dependant upon the nature of the problems identified and the actions necessary for their correction. (See task #6.)

06/30/95

e) In coordination with DEQ, develop recommended course of action and schedules for other priority sites identified in 3a and 3b above. Submit to DEQ a schedule which identifies and ranks all problems and identifies dates by which corrective actions will take place.

**#4 IMPLEMENTATION OF MANAGEMENT PRACTICES
(Best Management Practices/Systems)**

Ongoing

a) Continue efforts to insure widespread adoption and implementation of management measures and improved management of riparian areas. Include such management measures as:

Measures for Agriculture

erosion and sediment control
facility wastewater & runoff management
nutrient & pesticide management
wetland/riparian protection
irrigation water management

Measures for Forestry

streamside management areas
road construction/maintenance management
timber harvest practices
revegetation of disturbed areas
wetland/riparian protection

Measures for Urban Areas

new development management
erosion and sediment control
road and street runoff systems
lawn/landscape chemical management
wetland/riparian protection
On-site disposal systems

Examples of appropriate practices that should be in place are included in (but are not limited to) the following documents:

Forest Practices Rules and
Implementation Guidelines
SCS Technical Guidance Manual
Surface Water Quality Facilities
Technical Guidance Handbook
EPA Coastal Nonpoint Pollution Control
Program Guidance

January of
each year

b) As part of annual reporting (Task 7 below) report on progress toward getting area-wide adoption of management practices and riparian area management. To the extent possible, estimate percent coverage. For example: Out of total number of units harvested during the year, how many received on-site inspection and of those, what percent were not implementing all needed practices?

#5 RIPARIAN AREA MANAGEMENT

06/30/94

a) Because of their filtering, shading, and buffering functions, healthy riparian areas are important components of water quality protection. Based on existing watershed inventories (task 3 above), identify and prioritize opportunities for enhancement and restoration of riparian areas. Develop management or restoration strategies for high priority riparian areas. Establish a schedule and begin implementation of efforts in priority areas. (This task should be completed in cooperation with landowners, local government, neighborhood groups, fish and wildlife interests, friends groups, etc.)

06/30/95

b) Inventory, prioritize, and establish target schedules for the management of riparian areas in the rest of the watershed.

#6 RULES, ORDINANCES and GUIDANCE

Ongoing

a) Continue erosion control programs, plans, and enforcement activities.

09/30/93

b) Complete current efforts to review erosion control programs for development activities. Make recommendations on any necessary revisions to relevant DEQ rules or local ordinances. Report recommendations to DEQ. Make recommendations on needed changes to Erosion Control Plans Technical Guidance Handbook. Revise guidance as necessary.

12/31/93 c) Investigate authorities/needs for local control of erosion and runoff from non-development activities throughout the watershed. Make recommendations on any necessary revisions to DEQ rules and/or local ordinances related to erosion, exemptions from on-site stormwater treatment, road maintenance, buffer requirements, or other relevant requirements. Report recommendations to DEQ.

05/01/94 d) Initiate a formal process to adopt new or refine existing ordinances as necessary according to findings of 4(b) and 4(c).

#7 ANNUAL REPORTING

January of
each year a) Submit to DEQ a status report on implementation activities. Specifically address public awareness/education (task 2), resolution of site specific problems (task 3), implementation of management practices (task 4), revision of rules, ordinances and guidance (task 6), and any other responsibilities identified under Tasks for Individual Agencies below.

#8 TUALATIN RIVER STATUS REPORT

April of
each year Cooperate with DEQ in the production of an annual status report for the Tualatin River Watershed. The report will incorporate items from the DMA annual reports (task 7(a) above) and will cover the compliance status of the river and it's tributaries, and the accomplishments of the DMAs during the preceding year.

ADDITIONAL TASKS FOR INDIVIDUAL AGENCIES

Unified Sewerage Agency of Washington County (representing participating cities)

<u>DATE</u>	<u>TASK</u>
	#9 JACKSON BOTTOM WETLAND
09/01/93	a) Submit, for DEQ approval, a comprehensive Waste Water Reuse Implementation Plan for all USA's existing and proposed future reuse projects, as required by OAR 340-55 (including the Jackson Bottom Wetland and new lands acquired on the west side of Hwy 219 or other lands acquired for disposal of effluent from the Hillsboro West STP).
10/30/93	b) In consultation with DEQ, review all available data related to pollution, including phosphorus, entering the Tualatin River from or through the Jackson Bottom wetland. Include both surface water and groundwater characterization and potential for contamination of surface water or groundwater from irrigation and leakage from the large effluent retention pond (and other ponds) in Jackson Bottom. Provide all data, data analysis, and interpretation to the Department. Determine any additional data needs and produce a plan and schedule, acceptable to the Department, to gather such information.
01/01/94	c) Achieve agronomic irrigation rates, and begin operating in compliance with the DEQ approved wastewater reuse implementation plan for Jackson Bottom (9a above) consistent with OAR Chapter 340, Division 55 and NPDES permits.
12/31/94	d) Submit to DEQ any additional data and data analysis produced as a result of 9(b) above and a report, which reflects public review and comment, that interprets the collected data.
03/31/95	e) Submit a plan, acceptable to the Department, to reduce or control pollution entering the Tualatin River from or through the Jackson Bottom wetland, under USA management, as identified in 9(b) and 9(d) above.

#10 EXEMPTIONS FROM ON-SITE STORMWATER TREATMENT

- 08/31/93 a) In cooperation with DEQ and participating cities, develop a mechanism of tracking and reporting, on a quarterly basis, all development that is granted exemption from the on-site stormwater treatment requirements. The report should identify each development that is granted exemption, identify the reason for the exemption, demonstrate that a program is in place to provide equivalent and timely off-site treatment. Quarterly reports due in October, January, April, July.
- 02/28/94 b) In coordination with DEQ and using data produced by the first quarterly report (10a above), assess the current situation with regard to exemptions from on-site treatment, in-lieu fee collection, and provisions for off-site treatment. Make recommendations for any necessary changes to state or local regulations to provide improved assurance that newly generated urban runoff receives adequate treatment. Begin a formal process to adopt any needed changes.

Oregon Department of Agriculture

<u>DATE</u>	<u>TASK</u>
	#11 CAFO
Ongoing	a) Perform follow-up inspections and respond to complaints on permitted CAFOs and, as needed, develop enforceable schedules that will result in compliance with permit conditions. As part of annual report to DEQ (task 7 above) identify all permitted CAFOs and their compliance status, identify all actions taken or to be taken.
12/31/94	b) Develop and begin implementation of a program to reduce pollution originating from animal operations that are not permitted under the existing CAFO program. Report status in annual report; include estimate of number of operations in the basin and percentage of those that need improved practices.

#12 NURSERIES

Ongoing a) Perform follow-up inspections and respond to complaints on containerized nurseries, during irrigation season, to determine compliance with container nursery requirements. As part of annual report to DEQ (task 7 above), identify all container nurseries in the basin and their compliance status.

#13 ASSURANCE OF IMPLEMENTATION

12/31/94 a) Coordinate with local agencies (for example SWCDs, irrigation districts, municipalities, etc.) and DEQ to develop mechanisms to insure necessary practices are applied. Implement program through enabling legislation or other state or local authorities.

Clackamas County
Multnomah County
Washington County
Oregon Department of Agriculture
Oregon Department of Forestry

DATE

TASK

#14 COUNTY ROAD DITCHES

01/01/94 Working cooperatively with DEQ, ODF, and ODA, counties develop and begin implementation of a program to, on a priority basis, maintain county roadside ditches in such a way to minimize transport of sediment, nutrients, and other pollutants to waters of the state. Include provisions to establish and maintain vegetative cover on non-road surface county road right-of-way between road ditches and adjoining land uses. Where possible, convert ditches to vegetated swales and direct road ditch discharges into passive treatment facilities (infiltration basins, wet ponds, detention ponds, etc.) prior to entering waters of the state. Submit an acceptable report to DEQ identifying the program elements.

Attachment C
Agenda Item F
July 23, 1993 EQC Meeting

State of Oregon
Department of Environmental Quality

Memorandum

Date: June 23, 1993

To: Environmental Quality Commission

From: Andrew Schaedel, Surface Water Section, WQ Division / *AS*

Subject: Presiding Officer's Report for Hearing
Hearing Date and Time: June 10, 1993, beginning at 7 p.m.
Hearing Location: Portland General Electric Auditorium,
14655 S.W. Old Scholls Ferry Road,
Beaverton, Oregon.

Title of Proposal: Proposed New Compliance Schedule for
Implementation of Pollution Control Efforts in the
Tualatin River and Its Tributaries

Public information meetings were held on two evenings (May 24 and 25, 1993) prior to the formal hearing. The hearing on the above titled proposal was convened at 7:10 p.m. 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.

Approximately 35 people were in attendance, Eleven people gave oral testimony.

Prior to receiving testimony, Mitch Wolgamott, NPS Specialist with the Surface Water Section, briefly explained the water quality problems of the Tualatin River, the accomplishments to date of the management agencies involved, and the proposed new implementation and compliance schedule, and responded to questions from the audience.

People were then called to testify and presented testimony as summarized below.

Bonnie Hayes, Chair, Washington County Board of Commissioners, Chair, Unified Sewerage Agency Board of Directors.

Speaking as Chair of Washington County Board of Commissioners:

The County supports the implementation and compliance schedule as drafted, in general. The County believes the draft schedule should clarify the scope of responsibilities that are subject to it.

The County believes that DEQ's rules that identify the County as a Designated Management Agency (DMA) do so only with respect to "a program plan for urban storm runoff" to comply with TMDL limits for phosphorus and ammonia. The program plan that was submitted for Washington County by the Unified Sewerage Agency (USA) and approved by the EQC in August, 1990, specifically limits the scope of the program plan to the urban areas of unincorporated Washington County that are within the boundaries of USA. Without clarification of the language in the schedule, it could be inferred that the County has potential authority, responsibilities, and obligations outside of the USA boundaries. Washington County believes it has met its responsibility as a DMA by virtue of its agreement with USA. The County wants the draft schedule to explicitly state that Washington County is responsible only for urban storm water within the USA boundaries.

The County proposes deleting Task 14 altogether. Their concern is that they don't want to be seen as being responsible for controlling runoff from private lands into roadside ditches. They believe they should only be responsible for runoff from the county road right-of-way. They feel that, since they are required to address roadside ditches under the NPDES Storm Water permit process anyway, there is nothing to be gained by including this requirement here and that doing so may create confusion. The County feels that the rural area TMDL management is the responsibility of Oregon Departments of Agriculture and Forestry. The County asserts that they have already enhanced their maintenance procedures, including those for rural roads, and that this requirement would have a disrupting effect on the county's internal budget process.

Speaking as Chair, Unified Sewerage Agency Board of Directors:

USA supports the proposed schedule and the shared goals for clean up of the Tualatin River. Detailed comments will be submitted in writing.

USA feels that there must be a common, shared vision for the future of the Tualatin River that brings all the stakeholders together. They have begun working for a Basin Council to pursue that goal. They are looking for an integrated strategy for water quality, recreation, and riparian corridor management.

Chair Hays also submitted written testimony (attached) for both Washington County and Unified Sewerage Agency.

John Jackson, Planning Division Manager, Unified Sewerage Agency.

USA wants to see a meshing of TMDL, NPDES Stormwater and Wastewater Permit requirements and local needs to create a water quality program that is effective, protective of the environment, and is still a responsible use of public resources.

Because of concern with potential enforcement actions by DEQ, USA expresses three needs it has for the document and gives an example for each.

1. It is necessary to ensure a clear understanding of what is expected of the regulated community.

For example, USA wants a definition of "Department approval" as used in the section titled "Purpose." Until they know what is meant by the term, they intend to submit a "scope of work" document for each task and not begin work on a task until they receive written approval of that "scope of work." They also want the timeline adjusted to allow time for that scoping process.

2. They cannot accept a compliance task that is outside of USA's authority to implement.

Task 5 is an example of a task that is outside of USA's authority. USA is prepared to implement Task 5 only if there is a clear understanding that the lack of vegetation is polluting the stream, that this lack of vegetation clearly violates existing law, and if they have a cooperating landowner.

3. USA wishes to avoid the confusion that arises when similar requirements are demanded in two or three different regulatory documents.

For example, Task 9 creates confusion and duplication of effort. USA requests Task 9 be removed from the Schedule because:

a. use of treated effluent from Hillsboro is governed exclusively by that plant's NPDES permit. This task is in conflict with those requirements.

b. DEQ and EQC have no authority to impose or modify conditions of effluent reuse by order in this TMDL process. The appropriate mechanisms for changing those conditions would be through the reuse rules and the permit.

Actually, many of the items in Task 9 have already been accomplished and USA needs to get that information to DEQ.

Mr. Jackson later submitted written comments (attached) elaborating on his points and providing a rebuttal to comments made by other witnesses relating to riparian buffers.

Dan Logan, Washington County Soil and Water Conservation District Board Chair.

Mr. Logan provided a summary of the history of his organization's involvement in water quality issues. The District is submitting a proposal to DEQ and ODA, in anticipation of the passage of Senate bill 1010, as to the leadership they are willing to accept for Non-point Source issues in the Tualatin Basin.

Mr. Logan also provided written testimony and mailed a copy of District proposed program budget, funding mechanism, and water quality ordinance (attached).

Jack Broome, Citizen.

Mr. Broome testified several years ago in support of a short implementation timetable, arguing "if we give everybody ten years they'll take ten years...." Mr. Broome has since been involved with several of the Citizen Advisory Committees and now acknowledges that he hadn't understood the magnitude of the problem. He is convinced we need to extend the schedule and supports the revised schedule. He believes that the biggest problem and most important issue is public education, and observed that public attitudes take time to change.

Douglas Roberts, Farmer, riverside resident of unincorporated Washington County.

Mr. Roberts is concerned with the dramatic increase in surface runoff across the county and the chemical load carried by that runoff because of inexperienced and untrained applicators (i.e., homeowners) of pesticides, herbicides, etc. He is also concerned about new developments going in along the river that strip riparian and upland vegetation while paying in lieu fees that do not seem to be used to benefit the river. This is putting cleanup off into the future and he wants to see it done now. He says it is wrong to let the cities and developers off so easy.

Donna Hempstead, Tualatin Basin Coordinator for Multnomah County, speaking for the Tualatin Basin DMA Coordinating Committee.

Ms. Hempstead states that the DMAs support the goals of the Draft Schedule in general, but there are two concerns that remain. The first is the requirement for DEQ approval for all plans. This language could be interpreted to require DEQ approval of every element of the programs, even down to passing on each brochure produced as part of the Public Education elements. She proposes deleting the last sentence of the section titled "Purpose." Secondly, the DMAs question the need for Task 5. She asserts the issues addressed by this Task are adequately addressed in Tasks 3 and 4. All DMAs plans already, or soon will, include prioritization of problem areas, including riparian areas and they do not understand why Riparian Management should be singled out like this. She suggests that restoration efforts will require a separate, comprehensive, large scale program with an extensive planning process, and a much longer timeline than is allowed in the Draft Schedule.

Ms. Hempstead also provided written comments (attached).

Susan Langston, Friends of Beaverton's Johnson Creek.

Ms. Langston is concerned that the 25 foot buffer zone is continuously being destroyed by development. In her view, it is much too easy for a developer to obtain a variance from the city or county that allows intrusion into the buffer. She wants to see this practice of granting of variances stopped. She also would like to see Johnson Creek included in the sampling program because of these concerns. She states that her organization is willing to volunteer to assist in public education efforts. She suggests directing a part of the public education effort towards city and county government officials.

Ms. Langston also delivered written comments on behalf of Friends of Beaverton's Johnson Creek (attached).

Mark Hereim, Citizen.

Mr. Hereim thinks the list of management measures in Task 4 are all good ideas, but would like to see more detail on how they will be implemented. He would also like a more explicit statement that the absence of riparian vegetation is detrimental to water quality and that there is a clear linkage between development and impacts on the streams.

Bonnie Peterson, Citizen, Riverside resident of unincorporated Washington County.

Ms. Peterson raises questions regarding the lack of enforcement mechanisms in the Draft Schedule. She observes that if past performance is the basis of evaluating the effectiveness of controls, that there are certain areas that need to be rectified before granting an extension. First, on-site facility requirements must be enforced and the in lieu fee mechanism must be terminated. Second, the consequences of not properly using the in lieu fees need to be spelled out. She observed that it will be much more efficient and effective to build these systems right the first time. Third, city government personnel need to be educated on these issues.

Leonard Stark, Citizen, Lake Oswego, Business Owner, Hillsboro.

Mr. Stark observes that everyone in the basin is responsible for the pollution of the river and everyone should be responsible for paying for the cleanup. He also emphasized the importance of public education.

Mr. Stark also provided written comments (attached).

Sue Orlaske, Hillsboro Business Owner, Gaston.

Ms. Orlaske observes that the river has been studied to death and that it is time to get the job done.

Regarding Task 10, she observes that, to date, no regional facilities have been constructed. She asserts that USA has collected these in lieu fees together with other fees and now has \$1.2 million in a Capital Fund. While a couple sites have been studied, they would not be able to serve much of the need for storm water runoff. She is of the view that in lieu fees should be stopped entirely until regional facilities have been built to address those sites for which in lieu fees have already been collected.

Ms. Orlaske also provided written comments (attached).

Memo To: Environmental Quality Commission
Presiding Officer's Report
June 23, 1993 Hearing
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The following people mailed or delivered written comments (copies attached) prior to the close of the comment period, but did not present oral testimony:

Neil Rambo, Extension Agent, Washington County
Michael C. Houck, Urban Streams Council a program of The Wetlands Conservancy
Bob Hyland, President Gypsum Wallboard Recycling
Alan S. Goodman, President The Friends of Jackson Bottom
John M. Hession, P.E., City of West Linn
Daniel B. Helmick, Clackamas County
David Degenhardt. Oregon Department of Forestry

There was no further testimony and the hearing was closed at 8:55 p.m. Written comments were accepted through 5:00 p.m. on June 17, 1993.

Attachments:

Written Testimony Submitted for the Record.



WASHINGTON
COUNTY,
OREGON

June 10, 1993

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

Dear Mr. Hansen:

Washington County appreciates the opportunity to comment on the proposed EQC order that would revise the nonpoint source implementation and compliance schedule for program plans submitted by "designated management agencies" pursuant to OAR 340-41-470 (3) (g). Washington County understands that the order will, pursuant to OAR 340-41-470(3)(a) and (b), specifically authorize activities to be allowed and wastewater to be discharged to the Tualatin River and its tributaries notwithstanding the failure to achieve compliance with the TMDL standards set forth in those rules subsections. The county looks forward to working with DEQ staff to provide appropriate findings for such an order, but these comments focus on the need to clarify the June 1993 Draft Implementation and Compliance Schedule before it is adopted by the EQC. In particular, the draft should clarify the scope of responsibilities that are subject to the implementation and compliance schedule.

The federal Clean Water Act and implementing regulations provide for establishment of TMDLs and for water quality management plans that address specific nonpoint sources, including "urban stormwater". The derivative state rules that identify Washington County as a designated management agency do so only with respect to "a program plan for urban storm runoff" within its jurisdiction to comply with the TMDLs for phosphorus and ammonia. The program plan submitted for Washington County by the Unified Sewerage Agency, which was approved by the EQC based on the recommendations of its staff in August 1990, specifically limits the scope of the program plan to the urban areas of unincorporated Washington County that are within the territorial boundaries of the Unified Sewerage Agency ("USA"). These boundaries are generally, but not precisely, congruent with the urban growth boundary established through the states land use regulatory program. Washington County has met its responsibilities as a designated management agency through agreements with USA, which has adopted stormwater management ordinances and has been responsible for implementing the program plan approved by the EQC. To be consistent with the EQC's

earlier action and with three years of water quality management activity based on that action, the proposed new implementation and compliance schedule should clearly state that the tasks to be performed by Washington County relate only to urban storm runoff within USA's territorial boundaries.

Washington County suggests that proposed Task #14 be deleted altogether to avoid the inference that the three counties are obliged to install treatment facilities in their county roadside ditches to remove sediments, nutrients and other pollutants that enter the ditches from outside the right-of-way. At a minimum, Task #14 should clarify that a program to maintain county roadside ditches is to address urban storm runoff from the road surface, and is not a mechanism for removing pollutants that enter the ditches from adjoining farms, forests or other private properties outside the right-of-way. The counties, as well as the state Department of Transportation and cities, are required through the NPDES permit program to develop and implement appropriate best management practices for stormwater in roadside ditches. Because the water quality management planning program is required by federal law to be consistent with NPDES permit program, Task #14 adds nothing substantive to the effort to clean up the river, but creates undesirable confusion regarding the scope of the counties' responsibilities.

While Washington County is reluctant to be bound to the conditions of the timetable for the rural area, we feel that we are attempting to meet the intent of the goals to reach the TMDL constraints.

We are fully committed to maintenance practices that enhance water quality in both the urban and rural areas. Increasing population and changing land use characteristics have required us to modify past procedures and we have worked with the Oregon Department of Agriculture and with the Department of Forestry in support of the goals of this program.

For background purposes a few statistics are necessary:

Washington County population		320,000 (approx.)
	Urban	91%
	Rural	9%
Road mileage		1,237 miles
	Urban	636 miles
	Rural	601 miles
Drainage and Vegetation Budget		\$1,000,000
Area	Urban	110 sq. mi.
	Rural	620 sq. mi.

This disproportionate split of urban population road mileage and land area versus rural population mileage and area creates significant and disparate demands on maintenance budgets. The

Mr. Fred Hansen
June 10, 1993
Page 3

urban roads, with their higher traffic volumes, demand more and more dollars for upkeep and safe operation. This causes direct competition with the rural road mileage, mileage that was built for slower, lighter vehicles and much less traffic than presently occurring.

The goals of the compliance schedule are desirable but may not be attainable under the proposed schedule. We all agree that a clean and healthy Tualatin River is necessary for a clean and healthy Washington County. Washington County supports this program as displayed by current and proposed efforts. We believe, as cited above, that the existing order does not assign DMA responsibilities in the rural area to Washington County.

In spite of this, Washington County has already implemented the following maintenance practices:

Increased usage of grass buffer strips placed intermittently in existing ditchlines during ditch maintenance operations.

Herbicide treatment for road side vegetation control has been reduced to applications only on the shoulders. The bottoms and backslopes of ditches, as a general rule, are no longer sprayed by county forces.

Use of hydromulching for seed application in areas exposed because of reconstruction or repair of slides.

Use of erosion control measures in all earth disturbing activities.

We will develop a prioritized ditching operation to mitigate the effects of known problem areas.

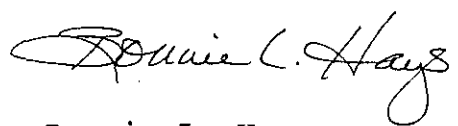
Increased mowing and reduced reliance on herbicides for roadside maintenance.

Of course these improved practices haven't come free. At the very least, they will require both an increase in maintenance frequency and an increased effort in surface maintenance resulting from less hydraulically efficient ditchlines. Today we spend in excess of \$1,000,000 annually for direct drainage and vegetation maintenance projects on a county-wide basis. With traffic congestion, safety and physical condition of the urban roads becoming more and more of an issue with the urban population, an increased allocation of maintenance funds to the rural area will result in accelerated degradation of the urban road network serving more than ninety percent of the population.

Mr. Fred Hansen
June 10, 1993
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In conclusion, we will continue to upgrade the quality of our rural drainage and vegetation maintenance practices. We recognize the need for this additional attention in order to enhance the quality of life in Washington County and the region. However, we feel strongly that agricultural and forestry practices which contribute more significantly in runoff volume, sedimentation, and nutrients to the drainage ditches than do the county roads should bear a major responsibility for water quality in the rural area. We will continue to work with these agencies and assist them in their efforts to enhance the quality of the water in the county.

Sincerely,



Bonnie L. Hays
Chairman



UNIFIED SEWERAGE AGENCY OF WASHINGTON COUNTY

June 10, 1993

Mr. Fred Hansen, Director
Department of Environmental Quality
811 SW 6th Avenue
Portland, Oregon 97204

Dear Mr. Hansen:

SUBJECT: TMDL COMPLIANCE SCHEDULE

USA is here today to offer comment on and general support of the proposed compliance schedule. The Agency is strongly committed to continue progress toward our mutual goal of improving water quality in the Tualatin River.

Included within USA are more than 120 square miles of area within the Urban Growth Boundary of Washington County and a small portion of Multnomah County. Also within the Agency's service area are a variety of urban streams including Fanno, Beaverton, Rock, Hedges and Butternut Creeks.

Nearly 60 miles of river are influenced by urban runoff and wastewater treatment plant discharges. More than 300,000 citizens and numerous industries rely upon the Agency to manage stormwater and sewerage to protect water quality in the Tualatin River while accommodating that growth which is consistent with adopted land use plans.

Beyond its role in the urban area, USA plays a significant role in overall water quality management of the Tualatin through the management of streamflows. The Agency owns substantial amounts of water in Hagg Lake which it discharges to the Tualatin to maintain minimum streamflows. USA is also participating in the Barney Reservoir expansion which should increase its capacity to augment low flows.

Much has been accomplished since the Environmental Quality Commission established the TMDLs in 1988. (Attached is a more complete list which was submitted to DEQ prior to public hearings in May.)

Progress has been made to abate both point and non-point sources of pollution.

Fred Hansen
June 10, 1993
Page 2

At our treatment plants we have:

- * Invested nearly \$200,000,000 to implement some of the most sophisticated treatment technologies in the country which have reduced ammonia and phosphorus loads to levels at or below those required.
- * Improved dissolved oxygen levels in the river though periodic problems remain.
- * Initiated expansion of the storage projects within the basin to augment instream flows.

In the area of Surface Water Management we have:

- * Created a new drainage utility managed by USA.
- * Instituted cooperative agreements with 12 cities and are administering regulations on erosion, on-site water quality improvements (approximated 150 have been constructed) and buffering strips in developments
- * Generated necessary program revenues via impervious area fees
- * Implemented an international award winning Tualatin River Rangers program and have utilized other communication techniques ranging from door hangers to newspaper inserts
- * Implemented demonstration and pilot projects to refine pollution control strategies.
- * Undertaken cooperative river studies
- * USA's Board of Director's leadership resulted in a regional limitation on phosphate detergent which was later extended state wide by the legislature
- * Application has been made for the NPDES Stormwater Permit to further control quality of urban runoff.

These are just a few highlights of what has been done. None of these efforts have been inexpensive, without controversy or lacking in public involvement.

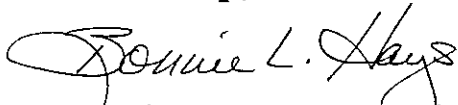
Yet, more work remains to be done. We, therefore, support the goals addressed by the compliance schedule. More importantly, we need to recommit ourselves to the idea of creating a clear vision for the Tualatin River which first surfaced during the public hearings on the Agency's Facilities Plan. Such a vision can benefit all who have participated in our programs -- those along the Tualatin and those who drain to it. The public can more readily grasp the utility of water quality initiatives when the initiatives are tied to their vision of the landscape. The vision could be a combination of wildlife corridors, access points, or trails in some locations, but it would all focus on our water resource -- the Tualatin River.

Fred Hansen
June 10, 1993
Page 3

Positive action on a shared vision begins with dialogue. I have already approached the idea of creating a basin council with our communities, businesses and other jurisdictions. It is my hope that this can lead to an integrated strategy for water quality, recreation and riparian corridor management.

We are well aware that the Department is likewise interested in comprehensive strategies for basin management and look forward to collaborating with you on this subject.

Sincerely,



Bonnie L. Hays, Chairman
Board of Directors

/kds

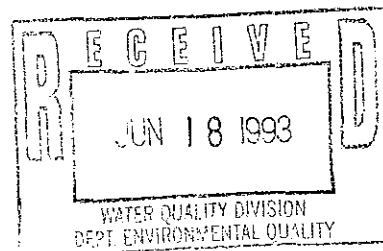


UNIFIED SEWERAGE AGENCY OF WASHINGTON COUNTY

June 16, 1993

FACSIMILE: 229-6124

Mitch Wolgamott
Department of Environmental Quality
Water Quality Division
811 S.W. 6th Avenue
Portland, Oregon 97204



RE: COMMENTS TO EQC ON TMDL COMPLIANCE SCHEDULE

Dear Mr. Wolgamott:

We respectfully submit the following comments on the TMDL Compliance Schedule, draft June 1993. These comments are submitted to further emphasize oral comments made by USA representatives at the hearing on June 10, 1993 and to provide further information on testimony you received from others at the same hearing.

We have been involved in and support the concept and most of the details of the draft compliance schedule. It has been our goal to mesh the TMDL requirements, the NPDES (stormwater and wastewater treatment plant) requirements and the local needs into a program for water quality that makes sense, is effective, and protects the environment while insuring efficient use of time and money.

We believe much progress has been made to abate both point and nonpoint sources of pollution. The list of accomplishments of USA, submitted into the hearings record on June 10, 1993 is testimony to our efforts since 1988. River data demonstrates significant improvements in water quality.

Our collective challenge in the coming years is to continue progress made thus far. We are prepared to recommit ourselves to the idea of creating a clearer vision for the Tualatin River which first surfaced during the public hearings on the Agency's Wastewater Facilities Plan and continued during the development of the first two subbasin strategies in our Surface Water Management Plan.

Such a vision can benefit all who have participated in our programs -- those along the Tualatin and living elsewhere in the basin. People more readily identify with water quality initiatives when those efforts are tied to individuals' vision of the landscape. The vision could be a combination of wildlife corridors, access points, or trails in some locations, but it should all focus on our water resource -- the Tualatin River. We have already begun the process of developing that vision by initiating discussions with interested parties.

EQC/TMDL Compliance
June 16, 1993
Page 2

With this end, we want to emphasize some points made in oral testimony by USA and others on June 10, 1993.

1) Since we are discussing a "compliance" schedule we need the following to more effectively comply with the specified tasks:

- a) Clear statements of tasks and expectations. We ask the DEQ to define the term "Department approval". If there is to be a shared vision of the Tualatin, the DEQ and USA must come to nearly understanding of that vision. The vision can be embodied in what is considered an "approvable" task. Therefore, we will ask the DEQ for approval of a scope of work for each task prior to commencing that task. The deadlines for each task will then have to consider time to complete this scoping.
- b) DEQ requested tasks must be within USA authorities. We support the concept of Task 5 as currently written. Even though the goal of Task 5 is laudable, its tie to the phosphorus TMDL process might be successfully challenged by affected parties if it were altered to mandate the exercise of eminent domain to force restoration projects. The current emphasis on cooperative efforts is therefore appropriate.
- c) Reduction of duplication of requirements among many regulatory documents. Task 9 is a good example of how confusion can be created by multiple requirements in multiple documents. We suggest that if work in Jackson Bottom must be included in this document, that it reference the work needed for inclusion in our NPDES permit for the Hillsboro West wastewater treatment plant. We suggest the following wording be considered:

As provided by OAR 340-55-015(3), through modification or renewal of and the NPDES Waste Discharge Permit for the USA Hillsboro West Wastewater Treatment plant, negotiate tasks and deadlines to accomplish the following:

- 1) An approved Wastewater Reuse Implementation Plan for USA operations in Jackson Bottom and adjoining lands that reduces and controls water pollution entering the Tualatin River.
- 2) A DEQ/USA coordinated water quality monitoring plan that includes both surface and groundwaters.
- 3) Achieve agronomic rates of application in Jackson Bottom and adjoining lands by a specified date.
- 4) Develop and implement a water quality data transfer and review mechanism.

EQC/TMDL Compliance
June 16, 1993
Page 3

2) In response to testimony provided by members of the Friends of Beaverton's Johnson Creek, we submit the following information.

Immediately after the hearing, USA investigated the "complaint" of the Friends that, "Beaverton City officials disregard the buffer ordinance by measuring the 25 feet requirement from the center of the creek and in some places ignore the buffer requirement". The development identified by the persons testifying is the Sexton Mountain Meadows Subdivision. Upon review of the proposed development with city officials, we have the following information to submit:

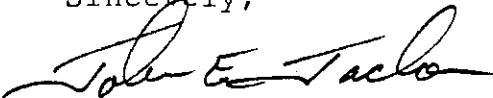
- a) The proposed buffer is wider than 25 feet through most of the development. The buffer adjoining four lots does require greater review however. USA did advise the city to review the actual buffer width adjoining these lots.
- b) The city will not be measuring the required buffer width from the center of the creek as was feared by the Friends group. The city will measure from the edge of the creek as specified in USA ordinances.
- c) The proposed mitigation of a wetlands will create a net improvement over what wetlands currently exist in a minor tributary to Johnson Creek. The existing wetlands is located in a horse pasture which has been seriously degraded.

At the City's request, we will be following this development proposal as the plans enter the final approval stages.

3) USA appreciates the assistance of Friends groups in identifying potential concerns and is working actively to facilitate their interaction with the Agency. Comments submitted by members of some of these groups broach a number of interesting possibilities in this regard that the Agency is exploring in greater detail.

Thank you for the opportunity to submit comments on the Compliance Schedule. Please call me at 648-8644 if you have questions on this testimony.

Sincerely,



John E. Jackson
Planning Division Manager

/bk



Soil and Water Conservation District

June 10, 1993

BLDG B STE B-2
1080 SW BASELINE
HILLSBORO OR 97123-3823
(503) 648-3014

Washington County Soil and Water Conservation District Board of Directors, Dan Logan, Chair

I'll begin by giving some history of the Washington County Soil and Water Conservation District (SWCD) activities in water quality in the Tualatin Basin. The District assisted the Soil Conservation Service (SCS) in developing Best Management Practices (BMP's) for farm plans. We were actively working to prevent soil erosion since the formation of the District. This was not done in the name of water quality but better water resulted.

After the lawsuit and court order the Districts' role in water quality was expanded. We began sampling in 1988 in cooperation with Unified Sewerage Agency (USA), Oregon Department of Forestry (ODF), and Tualatin Valley Irrigation District (TVID). 16 sites were monitored for a two year period.

With grant assistance the Board drafted the Tualatin Watershed Management Plan. The plan was a comprehensive effort to provide a solution to rural non-point source pollution.

The District worked with nurseries to develop and implement water management plans.

The SCS and the District established and received funding for the Dairy/McKay Hydrologic Unit Area (HUA).

The District actively participated in the Washington County Water Management Committee (WAMCO).

Our Boards future plan are to continue our work as in the past and to prepare for implementation of SB1010. We wish to remain active in water quality issues as long as we are challenged. We are submitting a proposal to Department of Environment Quality (DEQ) and ODA in anticipation of SB1010 passage as to the leadership we are willing to accept for non-point in the Tualatin Basin.

Agencies who have provided assistance:

Oregon Graduate Institute (OGI)
Multnomah County SWCD
Clackamas County SWCD
Yamhill County SWCD
Washington County Agricultural Stabilization and
Conservation Service (ASCS)
United States Geological Service (USGS)
OSU Extension Service thru HUA
NW Resource Conservation & Development (RC&D)
USA
TVID
SCS
ODA
DEQ



Soil and Water Conservation District

BLDG B STE B-2
1080 SW BASELINE
HILLSBORO OR 97123-3823
(503) 648-3014

TO: Department of Environmental Quality
Oregon Department of Agriculture

FROM: Dan Logan, Washington Co. SWCD



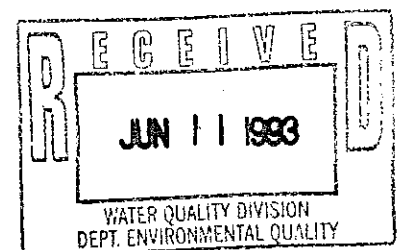
RE: Rural Non-Point Source Pollution

DATE: June 4, 1993

This proposal is being submitted because of a need for an agency to take the leadership in non-point source pollution control in rural Washington County. The Washington County Soil and Water Conservation District (SWCD) has worked for several years cooperating with landowners, agencies, and other organizations to gather information needed to start the program. We did the initial water quality sampling in cooperation with the TVID and USA. All work done by the SWCD has been in cooperation with other groups supplying some of the technical services and the SWCD supplying the time, as they have not been able to secure the funding needed to develop the complete program.

Legislation is being prepared that will allow the Oregon Department of Agriculture to contract with Washington County SWCD to make them the designated management agency for water quality in Washington County. This agency's primary responsibility would be for agricultural land that is outside the boundaries of commercial forestry which is managed by the Oregon Department of Forestry, and the urban boundaries that are being managed by the Unified Sewerage Agency. The District is also willing to cooperate with the Unified Sewerage Agency to address Agriculture within the UGB.

The issue of the impact of on-site sewage systems (septic tanks) in the rural or agricultural area has been raised at numerous meetings. The Washington County SWCD has tried to address this issue, but lacks the resources to do so. Questions needing to be addressed are: Is this a problem? How many such systems are known to exist within the basin? What percentage is close to or could impact water bodies flowing eventually into the Tualatin River? How many of these are not functioning properly? etc. This issue would be better addressed by the County Health Department.



This proposal includes a preliminary budget, fee structure, and a proposed ordinance to implement the plan. Best management practices will be included, and will be provided with the technical assistance from the SCS. As they develop farm management plans for conservation practices, they will include water quality as a part of the plan. The SWCD will then review and approve the plans.

If the SWCD is given the responsibility, it is our intention to hold additional public meetings to determine the needs of the landowners and secure their input on all phases of the program. This will provide a way to have two-way communication and sharing of information that will be needed to secure the cooperation needed for this plan to be successful. All affected agencies will be asked to provide assistance in this process.

Please find enclosed a proposed ordinance, budget, and fee structure to fund the plan.

LIST OF AGENCIES EXPECTED TO PARTICIPATE:

- Soil and Water Conservation Districts
- Agriculture Stabilization and Conservation Service
- Soil Conservation Service
- Oregon Department of Forestry
- Oregon Department of Agriculture
- Department of Environmental Quality
- Tualatin Valley Irrigation District
- OSU Extension Service
- Washington County Government
- Unified Sewerage Agency

COMMUNITY ORGANIZATIONS:

- Farm Bureau
- Oregon Nursery
- Grange
- CPO'S

DRAFT
WASHINGTON COUNTY RURAL NPS POLLUTION CONTROL
FIVE-YEAR BUDGET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
<u>ADMINISTRATION</u>					
Personnel	\$ 102,000	\$ 106,000	\$ 110,500	\$ 115,000	\$ 119,750
Director's expenses	7,000	7,000	7,000	7,000	7,000
Overhead	10,000	10,000	10,000	10,000	10,000
Info./Education	<u>7,500</u>	<u>7,500</u>	<u>8,500</u>	<u>8,500</u>	<u>10,000</u>
SUBTOTAL	\$ 126,500	\$ 130,500	\$ 136,000	\$ 140,500	\$ 146,750
<u>CONTRACT</u>					
Research / GIS	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 35,000
Laboratory fees	<u>100,000</u>	<u>100,000</u>	<u>100,000</u>	<u>100,000</u>	<u>100,000</u>
SUBTOTAL	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 135,000
<u>COST - SHARE</u>					
Federal Programs - (NOT ELIGIBLE)	<u>\$ 30,000</u>	<u>\$ 30,000</u>	<u>\$ 30,000</u>	<u>\$ 30,000</u>	<u>\$ 30,000</u>
SUBTOTAL	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
TOTAL	\$ 306,500	\$ 310,500	\$ 316,000	\$ 320,500	\$ 311,750

DRAFT
WASHINGTON COUNTY
RURAL NPS POLLUTION CONTROL

FEE SCHEDULE

9,000 Houses to be charged \$25 / year = \$ 225,000 (per year)

200,000 acres charged at \$.50 / acre = \$ 100,000 (per year)

TOTAL PER YEAR = \$ 325,000

DRAFT

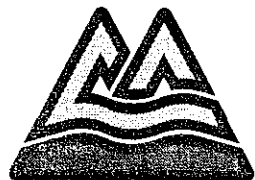
RURAL NPS POLLUTION CONTROL
FOR
WASHINGTON COUNTY, OREGON

(1) For agricultural land management practices, individual operators shall implement approved farm plans that include best management practices (BMP's) or systems that meet United States Department of Agriculture Soil Conservation Service technical standards for control of erosion and runoff, protection of surface waters, protection of groundwater, protection of streambanks, riparian area management, nutrient management, and pesticide management. Individual operators who do not have adequate farm plans on record will be allowed to continue operating while developing such plans so long as BMP's are being implemented and provided that plans are in place prior to June 30, 1995. Extension of that date may be allowed if BMP's are being implemented. Operators implementing approved farm plans, which specifically address water quality concerns, will be considered to be in compliance with TMDL requirements set by DEQ unless there is a documented exceedence of a water quality standard resulting from activities on the operation.

(A) Plan approval authority shall lie with the Washington County Soil and Water Conservation District.

(2) For non-commercial farm operations and rural residences, no visible runoff contaminated by animal wastes or erosion shall be allowed to enter waters of the State or enter any ditches connected to waters of the State. Landowners may request assistance from the Soil and Water Conservation District Board in developing management plans. No activities shall be allowed to cause an increase in the erosion rate of any streambank controlled by the landowner or on any abutting lands.

(3) Any landowner not having a plan or failing to implement a plan in compliance with the Federal Clean Water Act is subject to fines by the regulatory agency.



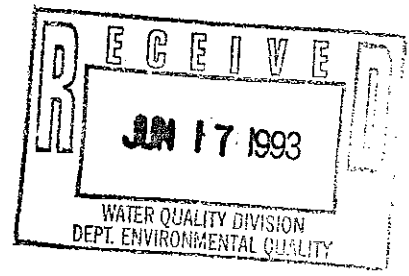
MULTNOMAH COUNTY OREGON

DEPARTMENT OF ENVIRONMENTAL SERVICES
TRANSPORTATION DIVISION
1620 S.E. 190TH AVE.
PORTLAND, OREGON 97233
(503) 248-5050

BOARD OF COUNTY COMMISSIONERS
GLADYS McCOY • CHAIR OF THE BOARD
DAN SALTZMAN • DISTRICT 1 COMMISSIONER
GARY HANSEN • DISTRICT 2 COMMISSIONER
TANYA COLLIER • DISTRICT 3 COMMISSIONER
SHARRON KELLEY • DISTRICT 4 COMMISSIONER

June 17, 1993

Mitch Wolgamott
Water Quality Division
811 SW 6th Ave.
Portland, OR 97204



RE: WRITTEN COMMENTS OF MULTNOMAH COUNTY

**REGARDING THE PROPOSED NEW COMPLIANCE SCHEDULE FOR
THE IMPLEMENTATION OF POLLUTION CONTROL EFFORTS
IN THE TUALATIN RIVER AND ITS TRIBUTARIES**

We appreciate the amount of time you and Mr. Schaedel have spent as DEQ coordinators to jointly develop the proposed new Completion and Implementation Schedule with the Designated Management Agencies over the past eight months. As a Designated Management Agency, Multnomah County plans to continue the advancements made in solving the TMDL problems for phosphorus and ammonia, and to improve water quality through the implementation of a comprehensive watershed-wide program. Although initially slow, the program accomplishments since 1990, and especially since 1991 have been great. [See your summary of Program Accomplishments for Multnomah County in the public notice memorandum dated May 17, 1993].

The tasks and responsibilities of the DMA's and of DEQ to continue to improve water quality through the implementation of a comprehensive watershed-wide program were developed to maintain the effort necessary to achieve all applicable water quality standards and limits, and we support these goals entirely. However, there are lingering and important concerns we have with the content of the new schedule, which are outlined below.

1. The purpose statement of the Draft Schedule states at the bottom: "All plans, inventories, products, and performance requested in the compliance schedule are subject to Department approval". Multnomah County has objected to Department approval of each product of each Task, as it is subject to excessive discretionary standards. We continue to object to what appears to be micro-management of the jurisdictional programs. For example, the way the proposed statement reads, DEQ would have approval

authority over every public education brochure or program the DMA was presenting. We believe this is not what was intended, and that the purpose statement should end with the previous sentence which reads "All of the management agencies and the Department will continue to work cooperatively to implement these NPS control efforts."

2. The new proposed schedule would be enhanced by including specific requirements to be included in the annual report. The annual report would serve as the basis for evaluating compliance and re-evaluating the overall program.

3. A task should be included which specifies baseline practices, techniques and controls to achieve compliance. Performance requirements are not currently specified. Rather, Load Allocations for nonpoint source discharge, which do not appear to include separate background levels, have been the driving force. By maintaining the numerical limit as the measure of compliance, the DMA's find themselves in continual unavoidable violation of the standard. Requiring specific practices, techniques and controls targeting the specified pollutants impairing water quality would be the measure of compliance.

4. Multnomah County strongly objects to the inclusion of Task #5 in the proposed new compliance schedule. This task titled "Riparian Area Management" is effectively covered in Task #3 "Site Specific Problems", and in Task #4, Implementation of Management Practices. We specifically object to the use of the word "restoration". Comprehensive watershed restoration would encompass an entirely different program, which would require a much longer time-frame. Requiring restoration strategies in a short compliance schedule with mandatory control techniques we believe is outside the scope of the TMDL rules and regulations. It is unclear to us why riparian management has been singled out as a separate mandatory task.

It is our interpretation of Task #5 that riparian area management will be prioritized as part of Task #3, site specific problems, which addresses degraded riparian zones and mandates solutions for sites of high priority which are compared with all other problem area sites.

The County agrees with the need to protect riparian zones within the context of the TMDL program and within the context of a broader program. We understand the need to protect riparian vegetation to reduce temperature for the health of the stream; we understand the lack of vegetation and ensuring erosion may harm overall water quality; and we support the activities in our management plans which allow enforcement against polluters within sensitive streambank areas. The DMA's are willing to work with landowners for overall streambank protection, while continuing the mandatory control techniques for areas violating current water quality standards.

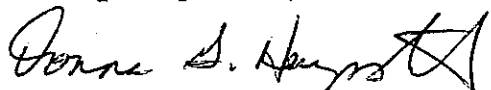
We believe comprehensive watershed restoration would encompass an entirely different program. It is difficult when implementing restoration activity to immediately evaluate the impact on receiving water quality and to establish a direct cause and effect of a particular activity. To achieve a program with restoration activities will require a significantly longer time frame than the TMDL schedule allows, from both a technical planning and regulatory standpoint. Riparian management involves complex land use planning issues, fish and wildlife issues, and the like which would be better served in a well thought-out planning process. Requiring restoration strategies in a short compliance schedule with mandatory control techniques we believe would not meet the program objectives.

As presently structured, the proposed compliance schedule is generally acceptable except for the objections noted above. It is our continuing objective and goal to achieve reasonable water quality standards using the best technology and financially feasible control methods possible. The new proposed schedule cannot include Task #5 as a broad undefined program and expect to achieve its objectives.

Thank you for the opportunity to present our concerns.

Very truly yours,

LARRY F. NICHOLAS, P.E.
County Engineer/Director



Donna G. Hempstead, J.D.
Tualatin Basin Coordinator

May 16, 1993

Oregon Department of Environmental Quality
Attn. Mitch Wolgamott
Water Quality Division
811 S. W. 6th Ave.
Portland, OR 97204

Dear Mr. Wolgamott,

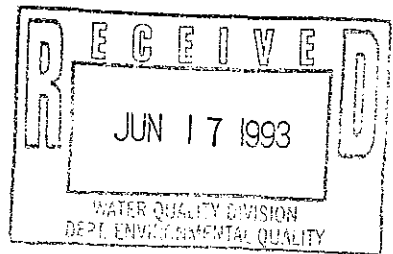
The Friends of Beaverton's Johnson Creek (FBJC) is a grassroots organization which was formed to protect and preserve Johnson Creek. The Creek originates on Cooper and Sexton Mountains and drains most of west Beaverton. One of our goals is improving the health of the creek which includes the improvement of water quality, wildlife habitat, vegetation in the riparian area, and consistent water flow in the creek's main channel.

FBJC has reviewed the *Tualatin Sub-basin Nonpoint Source Management Implementation and Compliance Schedule for Designated Management Agencies*. We are very interested in this plan because it appears that we have mutual goals regarding water quality and could help each other in accomplishing some of the goals. However, FBJC does have some concerns in the areas of ordinance and rule enforcement; acknowledgment of the link between development and water quality; and the need to look at the basin as its problems as a whole instead of addressing various piece parts. The details of our concerns are as follows:

- 1. Task #2: We applaud the inclusion of *Public Awareness/Education* in your schedule. We feel that this is imperative in order to change the attitude of the public regarding our waterways. However, we feel that some of that emphasis should include the education of city councils, county commissions, and planners.

[Note: If you provide any educational/awareness materials, FBJC is willing to assist in distributing them to the residents along Beaverton's Johnson Creek.]

- 2. Task #4 Implementation of Management Practices: We agree that measures need to be adopted in order to insure the implementation of management measures, etc. However, this task does not indicate any specifics of how the implementation and enforcement of these measures will be accomplished.
- 3. Task #5 - Riparian Area Management: We strongly concur with the statements made in this task. The restoration and enhancement of the riparian area is important. But we feel that the plan is weak in detailing the specifics of how these goals will be met and addressing the enforcement of the current rules and ordinances, such as the 25 foot buffer zone.



In addition, development has a direct impact on water quality. Replacing previously permeable surfaces with impermeable surfaces causes the following problems:

- a). Increases the velocity of runoff which in turn increases the likelihood of erosion.
- b). Reduces the available surface for filtration.
- c). Increases the incidence of deleterious substances into the water shed. For example Petroleum products, pesticides, herbicides and fertilization.

The document should reflect this connection between development and water quality. Any plan to cleanup the Tualatin River should recognize the impact on water quality and should address this issue.

4. Task #6 - Rules, Ordinances and Guidance.

In our monitoring efforts on Johnson Creek, we frequently observe erosion and sediment requirements being ignored by developers. Often we see that developers do not keep their siltation fences in repair or allow them the overflow without any correction to the problem. This is another example of current rules (Oregon Administrative Rules, Chapter 340, Division 41) being ignored or not enforced. Therefore, we agree with Task #6 but wonder how you plan to enforce these activities when they are not being enforced today.

We also believe that when the current erosion control programs for development activities are reviewed, penalties for developers' noncompliance with the "erosion control plan" for that site should be included in the rules and ordinances. Or, a bond associated with the enforcement erosion control plan should be significant enough to deter developers from neglecting the plan during the project. In addition, the DEQ/USA/City or County should not hesitate to exercise the use of the bond if the developer does not comply.

The designated 25 foot buffer zone along creeks and rivers is constantly being pushed by city and county planning and engineering. Past history indicates that it is not uncommon for the city/county to easily grant "exceptions" to a developer. As a result urban runoff loses what little natural filtering exists. We feel that these ordinances should be strictly enforced and that the cities and counties should not be able to grant exceptions without the permission of United Sewerage Agency. In addition, we feel that the 25' is inadequate protection and would like to see it increased to the 100' stated in the original plan.

FBJC does not agree with the USA provision that allows an exemption to the treatment of storm water runoff from new development when an in-lieu fee is paid. We believe that the "in-lieu fee" is not appropriate unless storm water treatment facilities already exist for the area being developed. In addition the "in-lieu fee should be significant enough to provide the cost of the runoff treatment and include an inflation factor that covers the life of the project.

5. An area that seems to be lacking in this plan, is the importance of looking at a waterway as a complete system, as opposed to addressing each development site, each road construction, each small wetland, etc. The impact of an activity needs to be looked at from the view of the entire waterway and its riparian area. Currently city/county planners seem to look at how it affects only the immediate area where the activity is taking place. The impact may seem insignificant until you look at the consequences on the entire corridor. An example is channelization of the stream with a culvert instead of a small bridge. The culvert allows the water to flow, but the dirt that is built around the culvert destroys the stream corridor and some of the associated natural filtration. In addition, debris build up behind the embankment causing additional problems. A side issue is that this type of channelization also interrupts the natural greenways for water dependent wildlife.

Currently our urban waterways are under intense development pressure. The quality of Johnson Creek and other streams and rivers is rapidly degrading due to neglect and destruction from development in the watershed. We believe that this degradation affects the health and livability of our communities. As growth escalates, it brings an extensive increase of impervious surfaces which has a direct affect on water quality by preventing the natural storm water filtering through soils and vegetation. FBJC believes that a comprehensive plan is needed in order to accomplish the goals of water quality. This 2 year plan is a good start, but a decisive long term land use plan which incorporates water quality issues needs to be put into place. Without such a plan, in three-four years we will be back revisiting this issue. In addition, the tightening up and enforcement of current ordinances and rules, also seems to be essential in order to meet the required goals of water quality in the Tualatin River Basin.

If you have any questions about this document, please contact Susan Langston on 242-5675, or Mark Hereim on 520-2718.

Sincerely,

Friends of Beaverton's Johnson Creek

WEDNESDAY JUNE 14, 1993
LEWIS OSWALD, ORIGIN
LEONARD G. STANKE

(1)

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
ATTENTION MITCHELL WOLANOFF
WATER QUALITY DIVISION

611 S.W. 6TH AVENUE,

PORTLAND OREGON 97204

SUBJECT TULLY'S SUB-BASIN

NEW POINT SOURCE INVENTORY (JUNE 1993)

DEAR DEQ TULLY'S ISSUE:

FOLLOW UP OF PUBLIC HEARING

Held at PORTLAND CIVIC CENTER
1465 S OLD SCHOOL FERRY ROAD on JUNE
17, 1993 at 7:00 PM with Quality
Division to be followed by the
official records. MUST BE RECEIVED
BY 5 PM ON JUNE 17TH 1993.

NOTE I ATTENDED THE

THE PUBLIC HEARING ON JUNE 16, 1993
AT PORTLAND CIVIC CENTER

I WISH TO BE NOTED THAT MY

INPUT WAS FIRST PINK LILY OK AND CIVIC
CENTER. THE LAST PART WAS SOME

NOTES GOING DOWN FOR A REPORT

BEFORE I WILL BE ABLE TO KNOW LATER

(2)

COULD HAVE BEEN BITTEN
(KNEW THE RIVER WOULD
RAISE THEM. FARMERS PLANTING

CORN CROPS, AND FEW WOULD
ALL THE TIME WITHIN OF TIGHT
AND PAYING THEM SINCE. ADD
TIGHTEN UP ON WATER IN
DRY PERIOD TO RETURN DOWN ALLEY

① IMPROVE THE TRAIL RIVER
SIPHONING GUM THE IS OUTSIDE

② LOOK INTO OPTIMIZING WITH
FROM THE BIG WINDMILL.

③ DO NOT THINK OF
BUILDING THE BIG DAM AT CLIFTON
ON THE TIGHTEN.

④ ENSURE RESOURCES FROM
BUILDING SMALL DAMS IN OTHER
CANYONS THAT WOULD HISTORY FARMERS
AND ESTABLISH CIVILIZATION

⑤ DON'T THINK OF PIPING
WATER FROM THE WINDMILL
TO SCHOOLS, WOULD CERTAIN WATER NO
BITTER. WOULD BE COSTLY AND AS
THEY LEARN GUILD BELTS BY WINDMILL

⑥ ANOTHER THOUGHT TAKING WATER
FROM COLUMBIA BUT TOO COSTLY.

⑦ DEDICATE PEOPLE TO SAVE
SOME LAWS, WHY MORE?

HOW RUBANK KNOWS THE

DRAFT JUNE 1993

IMPLEMENTING THE COMPLIANCE
SCHEDULES WILL BE A BILL TITLE
AND "PROVICING" THE DATES SET
JUNE 30, 30, 1993 AND DEC 31, 1995
DATES ARE FINE BUT MARKING
THAT IT WILL BE SET OF '95
WILL TAKE A LOT OF WORK.

MONITORING AS CALLED FOR
WILL REQUIRE A LOT OF PUBLIC/
LAWYERS AND RECEPTION THIS
COSTS RIGHT BILL TO IDENTIFICATION
OF THE PUBLIC. VARIOUS ISSUE
GROUPS PUBLIC LAWYERS SPILLING
IN SIMPLE IDENTIFICATION AND
PICTURES AND SLIDES. A PICTURE
SOME TIMES WILL DO BETTER
THAN HUNDREDS OF WORDS AND
THEY DON'T HAVE ON UNPUBLISHING
SPECIFIC PROBLEMS PROVISION
CAN BE COMPLETED NORMALLY IF
THE INDIVIDUAL PROPERTY OWNERS
NON POINT SOURCES AND HAVE
TO EMPLOY A LOT OF TIME
AND NON PUBLISHING, SUCH AS WATER

THEY COME FROM SITTLES (4)

BASINS ON FILTERING AND LAWS
ADDITIONAL ORDINANCES ARE SOMETIMES
JUST ANOTHER LAW TO ENFORCE.

PAGE 4 AGRICULTURE (2, 17)

PEOPLE'S THINGS THINK #1 PROBLEM
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BIRDS THAT HILL DOWN SUBJECT
AND YOU BIRD THAT AIR EN

POLLUTION TO PROPER FRUIT REC
BASINS PLANTING LIND WITH WITHIN
POT KILLING THYING THAT TO KILL
GUP PLANTED ~~WATER~~ THO RIVER.

PAGE 5 RIPA PARTIS FILTRATION

DOES A LOT OF GOOD IN INDIA
PLANTING LINDAS WITHIN NEW POLLUTION
IS CAUSING LEADS HIGHLY PLANTING
RUB OFF. EXAMPLE COMMUNITY REPORT
THAT LEADS RIGHT BACK TO POLLUTION
FROM PLANTING LOTS AND HIGHWAY

WATER CONTROLLED SITTLES BASINS
SHOULD BE INSTALLED AND CONTRACTED

PAGE 6 ADWELL WEST IS SOUTHERN

RAPIDINE TO RETURNS WITHIN
RUB OFF GOES BUT RIVER SUCH
AS SW RIVER GROUP AND TUPHIA

ARRIVE WITHIN 47 ALMOST EXPOSURE
TO CONTROL AROUND RIVER BANKS
TRY FINDING WHAT GOOD IS

THAT WITHIN RIVER CAN REACH
PLUTON TO GROUND TO RIVER
LIVING SOUTH TOWN IRRIGATOR
CONSTRAINED CONDITION (MANUAL PILE)

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COMPLICATED SUBCIRCULAR DRILLING
SYSTEM TO DISPOSE OF THE
ANIMAL WASTE WITHIN A LOT
OF PLACE (DAILY FININGS) RIVER IT
FROM THE BULKY BULLDOZER AND
FROM THE CHANNEL TO WIND (THE WIND
WIND) IN PUMP. PUMP NOT DIED
TO THE FIELDS LIKE WINDING!

PRICE IN CHINA AND NOT FINING
HALL AN ILLUMINATE SYSTEM
TO DISPOSE WITHIN THE RIVER
- ON OR TO RECYCLE AGAIN.

PRICE YOU CAN SEE THAT
ALL 3 COUNTRIES HAVE A REPUBLICAN
A DETER TO THE TO CONTROL
THE RIVER BANKS (ILLUMINATE)
ALONG WITH TRANSACTIONS SYSTEM
AND LOCAL REGULATIONS TO NOW
RELATING TO THE TOWN RIVER.

(5)

POLLUTION AT A LIPER LEAF
 JOB FOR ALL OF US TO TAKE HIS
 ONE OWN LEAF. SINCE THE
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 WILLY HILL BATH POLLUTION, ALL
 HUMAN BEINGS CONTRIBUTE TO THE
 POLLUTION. IT DOES REQUIRE CUSTODY
 POLICING WITH ENDOGENOUS
 OUR INDIVIDUAL POLLUTION TO OUR
 AREA.

WILMINGTON COUNTY HAS DONE
 A OUTSTANDING JOB TWO BIG
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 ROCK CHINA ALL THE REST OF LIFE OUR
 CLARK COUNTY 8 MILES OR
 LOWER TULLITH CANARY PUT IN
 A SIGNIFICANT SYSTEM THEY CAN GET
 THE TAYLOR CHINA SILVER PLANT
 THE PITCHER SALON LINE TO
 COLUMBIA RIVER PIPE LINE, THE
 LIFE OSWEGO LISTS, THINKS TO THEM

THE 9 PIER DRIFT WAYS A LOT
 MORE STOPPING TO MAKE AT TO
 ALL TO COMPLY WITH BY ALL.

THINKS GOD BLISS *Leonal Stand*
 5050 CUMM ROAD LIKE OSWEGO 97035-8022
 (HAPPY FATHERS DAY) 639-2807

27701 NW Olson Road
Gaston OR 97119

Environmental Quality Commission
Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland OR 97204

June 16, 1993

Dear Commissioners:

I am writing to comment on the proposed compliance schedule for pollution control efforts in the Tualatin River watershed. Although I live in Gaston, I own a business in Hillsboro and am a Unified Sewerage Agency (USA) rate payer. I am also active in the protection and management of local wetland preserves. I am concerned about the overall health of the Tualatin River watershed, not just for human use but also for wildlife. I support the improvement of water quality in the Tualatin basin, and I feel that all residents, businesses, and government agencies have a responsibility to achieve that goal.

I am addressing Task Item #10 (Exemptions from on-site storm water treatment) and my concern that this particular exemption is being abused in the basin. Most cities and Washington County have been exempting many developments from building on-site water treatment facilities for storm water run-off. Developers are allowed to pay an in-lieu fee rather than treat their project's run-off. This fee is collected by USA and is intended to be used to build regional storm water treatment facilities; however, to this date, none have been built.

USA has combined these fees with other storm water fees and now has collected a capital improvement fund of approximately 1.2 million dollars. USA has looked at various potential treatment sites and has paid for two studies on two tributaries (Hedges and Butternut Creeks) as possible locations, but no further work has been done. USA is proposing that treatment at these two sites would be located in-stream, but admits that "None constructed . . . due to difficulties and delays related to obtaining water rights and permits to divert water . . .". (See Agency's list of accomplishments since 1990, pg. 3). There are also no plans to pipe water from other basins to these proposed facilities.

There are several problems with these proposed treatment facilities:

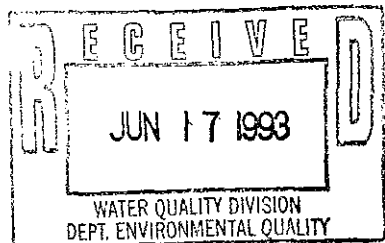
- 1) Exempted sites which are not on tributaries being considered for facilities - such as Butternut Creek - will not necessarily be treated for storm water run off at all, now or in the future.
- 2) The two study basins are relatively small tributaries which are not necessarily near the most developing areas of the county.
- 3) Planning in-stream facilities invites delays (due to water rights issues), and perhaps other options should be examined to rapidly achieve the goal of storm water treatment. These options may include a) planning facilities which are not in-stream, and b) requiring on-site facilities to be built, in the spirit of the rules set down to improve water quality.

In summary, each development site exempted from storm water treatment means we are (literally) losing ground in urban areas; each exempted development not treated by a regional facility will contribute pollution to the river. On site exemptions should be eliminated entirely, until regional facilities are constructed which will treat storm water run off from developments in all of the river's basins.

Thank you for your consideration.

Sincerely,

Sue E. Orlaske
Sue E. Orlaske



June 2, 1993



OREGON STATE UNIVERSITY

Mailing Address:
Courthouse
Hillsboro, Oregon
97124

Located at:
Branch County Building
2448 SE Tualatin
Valley Highway

Telephone
503-681-7007
Fax
503-681-7028

TO: Mitch Wolgamott
Water Quality Division
811 SW Sixth Avenue
Portland OR 97204

FR: *Neil Rambo*
Neil Rambo
Extension Agent, Washington County

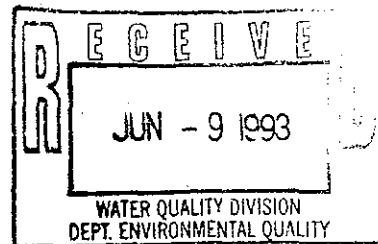
RE: Tualatin Sub-basin Non-point Source Management
Implementation and Compliance Schedule

I believe that a Septic Systems Task should be added to the individual agencies task list. A representative area in the Tualatin River Basin should be inventoried for system condition.

The Oregon Sate University Extension Service survey of landowners in the Dairy-McKay Hydrologic Unit Area showed that 87 percent of the respondents have such systems.

We don't have any measure of the impact of ineffective septic systems on rural water quality, and collecting appropriate data would help place septic systems in the Tualatin River Basin cleanup priorities.

NR:mct
1-letter.txt



Agriculture, Home Economics, 4-H Youth, Forestry, Community Development, Energy, and Extension Sea Grant Programs, Oregon State University, United States Department of Agriculture, and Oregon counties cooperating. The Extension Service offers its programs and materials equally to all people.

Urban Streams Council

a program of
The **Wetlands** Conservancy

June 13, 1993

Environmental Quality Commission
811 SW Sixth
Portland, Oregon 97204

Dear Chairman Wessinger and Commissioners,

I would like to submit the following comments regarding the proposed New Compliance Schedule for the Implementation of Pollution Control Efforts in the Tualatin River and Its Tributaries on behalf of the Urban Streams Council, a program of The Wetlands Conservancy. With the caveat that:

1. All DMA's are, in fact, making concerted efforts to meet TMDL and non-point pollution goals.
2. That the Compliance schedule and activities will be approached on a watershed basis, as outlined in DEQ's draft Compliance Schedule.
3. That DEQ and the DMA's address concerns of local neighborhood and stream "friends" groups.

the Urban Streams Council does not object to extending the June 30 deadline for compliance with Non-point source pollution in the Tualatin River and its tributaries.

Our primary concern is point three above. After consulting with local citizen groups, it is our opinion that there is inconsistent application of land use regulations governing removal of riparian vegetation and alteration of wetlands throughout the Tualatin River watershed. Many of our comments regarding your draft Compliance Schedule and its recommended actions will reflect this concern. If there is one issue that stands out concerning stormwater management it is lack of enforcement, monitoring and consistency of riparian habitat protection along tributaries to the Tualatin River. I assume you will hear more on this topic from local stream groups. We make some suggestions on how to resolve this problem, which we agree is very real, in the course of our comments.

My comments are broken into two components. The first comments relate to the draft compliance schedule itself and the 14 categories DMA for action. The second set of comments relates to specific DMA comments and program descriptions.

Compliance Schedule:

Post Office Box 1195
Tualatin, Oregon 97062
Phone: (503) 245-1880



Citizen/Community Involvement: It is not clear from reading the Purpose of this program what DEQ and the DMA's are doing with respect to involvement of neighborhood groups and Friends groups in the evaluation and analysis of the Compliance Schedule. DEQ states that "All of the management agencies and the Department will continue to work cooperatively to implement these NPS control efforts." It is also stated that "Another goal is to promote continuation of the communication that has evolved among jurisdictions..." I see nowhere a provision for actual participation by citizen groups in the evaluative process. Citizens seem to be relegated to being passive receivers of information and participants in environmental education and monitoring efforts. While these latter programs are important and worthy components of an overall strategy, we would suggest that citizen representation throughout the evaluation, monitoring and re-design of Compliance Schedules and activities would benefit the process.

We strongly support the comprehensive, watershed-wide nature of the program as indicated in the Purpose statement.

Tasks:

#1 Monitoring: Citizen input and involvement in this task is critical. Many citizen and school groups are currently collecting data. The DMA's should put money and technical expertise into assisting citizen and school involvement in data collection. However, collection of data for its own sake should be discouraged. Citizens should know that their data will be used to improve conditions. We recommend that the DMA's coordinate with Portland State University's Center for Urban Studies and provide funding to establish a centralized data and monitoring center for citizen involvement. This will help ensure that Tualatin River watershed data collection and monitoring is consistent with similar efforts throughout the metropolitan region. Contact Steve Johnson, Center for Urban Studies to discuss this concept.

#2 Public Awareness/Education: There should be more emphasis here on what individual citizens, neighborhood groups and friends groups can do to make a difference. Everyone wants to do something to make a positive environmental change. The DMA's do have a variety of citizen involvement efforts that address this issue, but it does not appear in this task. DMA's should be required to provide start up funds and a modest level of continued funding to 501 (c) 3 organizations to ensure their involvement. The Urban Streams Council is committed to assisting in this effort with DEQ and the DMA's. There should be an active friends group for every watershed, both urban and rural, throughout the Tualatin watershed.

#3 Site Specific Problems: DEQ discusses inventories. We recall that USA had the entire watershed flown with a variety of wavelength photography as well as video coverage. During the development of SWM strategies a Washington-based group presented data that would allow USA to pinpoint both point and non-point

pollution sources. How has that data been utilized to date? This inventory format would also allow USA and other agencies to determine the current health of riparian zones and wetlands since it was all digitized on a Geographic Information System. Our recommendation is that all DMA's cooperate in an effort to characterize current riparian and wetland habitat condition on all tributaries to the Tualatin as well as on the mainstem. This data should be shared and analyzed with Metro's Metropolitan Greenspaces and Region 2040 Programs.

In point c) it is stated that "additional ordinances and procedures may be needed..." It is our impression that this is surely the case, especially with respect to riparian zone protection within the cities and counties. While they may have regulations on the books, enforcement and compliance appears to be spotty at best. We recommend that DEQ require an independent analysis of the efficacy of Goal 5 and other regulatory measures which are intended to protect fish and wildlife habitat, open space and water quality. They should start with an independent study that was begun by 1000 Friends of Oregon and is now underway at the Audubon Society of Portland. Information from this study should be incorporated into an independent analysis of regulatory programs.

#4 Implementation of Management Practices (BMP's/Systems): Again, it is our contention that DEQ should require an independent audit of the effectiveness and consistency of application throughout the Tualatin watershed. I am not sure why you did not include local land use regulations among the four examples of appropriate practices.

#5 Riparian Area Management: See previous comments and recommendations.

#6 Rules, Ordinances and Guidance: See previous comments and recommendations.

#12 Nurseries: Why don't DEQ and the DMA's pursue a native nursery program with local nurseries that would provide an incentive for local native nursery stock which would be used in local restoration efforts? An incentive program could be developed and model riparian and wetland programs could be incorporated into this effort. There will be an increased need for local native stock for restoration projects and it would be beneficial to begin now to grow the necessary plants for soil bioengineering projects.

Tualatin River NonPoint Source Management Plan Implementation Program Accomplishments Since 1990:

The Urban Streams Council and The Wetlands Conservancy have worked cooperatively with each jurisdiction DMA and we are pleased to see much of the progress that has been made in the arena of public awareness and involvement. There are specific issues, however, which continue to arise with respect to protection of riparian

corridors and wetlands that need to be addressed by DEQ and the DMA's. Our recommendations in the Compliance Schedule and below address those concerns.

Clackamas County: We have worked with Clackamas County on production of a Mt Scott/Kellogg Creek brochure and we acknowledge that they are actively pursuing citizen education as stated. We would like to see Clackamas County directly involve citizen groups in the review and analysis of its Demonstration and Pilot Projects. There seems to be widespread concern about lack of riparian and wetland protection in Clackamas County and the cities within the county. While not in the Tualatin watershed, this is especially in Oregon City which has only recently undertaken a Goal 5 inventory.

We do not agree that a minimum 25 foot buffer is adequate to protect water quality and other beneficial uses of the County's streams, rivers and water bodies. The efficacy of this buffer width should be reviewed by DEQ.

Multnomah County: We have received numerous comments from local citizen groups regarding the application of land use regulations to protect riparian corridors and wetlands in Multnomah County. Is the aerial imaging that the County is engaged in consistent with the work that USA is doing and can their data be shared with one another and Metro?

It is stated that "These ordinances allow no land disturbing activity within 100 feet of a waterbody." Again, on-the-ground experience would call this statement into question. Can Multnomah County document achievement of this Regulation/Enforcement Provision?

City of Portland: Although the City of Portland has expended a great deal of effort to adopt E-Zone regulations for its major watersheds there is evidence that protection of riparian corridors is inadequate to prevent soil erosion and other pollutants from entering streams. A recent example is forest removal along a tributary to Fanno Creek. The effectiveness of the City's E-Zone to protect riparian corridors should be incorporated into a Tualatin-wide analysis.

Unified Sewerage Agency of Washington County: Here too, we have heard many citizen groups criticize the County's enforcement of land use regulations, which points out the need for an analysis of the application of regulations on the ground. There also needs to be an analysis of ease of "exemptions" from these regulations.

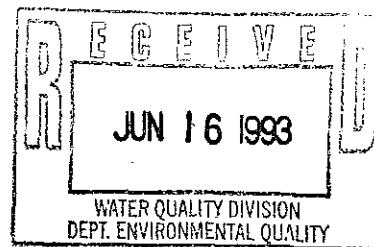
It is stated that USA "Contribute(s) funds to organizations for projects that promote USA programs and concepts." We can corroborate that statement as we were involved in conferences, workshops and production of an urban streams brochure for Fanno Creek which USA assisted in funding. However, they give specific figures for other elements of their work plan. How much funding is provided local friends and watershed groups? We would argue

that a significant amount of money should be allocated to this very cost-effective effort. While many of these groups may be uncomfortable to work with at times, it is essential for the success of this program that citizen groups be **actively** involved, not passive recipients of information or education programming. USA should ensure there are active friends groups in every watershed, urban and rural, within its jurisdictions. As stated previously, the Urban Streams Council has established this as a goal as well and intends to work with USA to achieve this objective.

Michael C Houch

June 16, 1993

Mr. Mitch Wolgamott
Oregon DEQ
Water Quality Division
811 SW 6th Avenue
Portland, OR 9 7204



Dear Mr. Wolgamott:

Regarding the proposed new compliance schedule for pollution control efforts in the Tualatin River and its tributaries, I offer the following comments:

1. Unlined landfills near the river will leach hydrogen sulfide into the river where one-half part per million is toxic to fish. The principal cause of this leachate is gypsum wallboard waste (a.k.a. sheetrock, drywall, gyproc, plasterboard). Therefore, I strongly recommend that all such landfills immediately prohibit gypsum wallboard. The greater Portland area generates 30-50 thousand tons of gypsum waste wallboard annually. It is one percent or more of the total waste stream.
2. Because of the harm to fish and the "rotten egg" odor which gypsum wallboard waste produces, several Canadian provinces have prohibited it in their landfills. When it can be recycled back into new wallboard and new wallboard paper at the same cost or less than landfilling it, there is no excuse for landfilling it, especially since the law mandates the DEQ enhance recycling. House Bill 3213 is designed to accomplish that goal. The Canadians in British Columbia traced the problem of water quality and fish problems to gypsum waste in unlined landfills.
3. There are several studies which show gypsum wallboard waste is a problem that won't go away until it is recycled. These studies made over the past ten years reveal that because it is non-inert, rapidly biodegradable (16-20 percent sulphur and 1/2 percent starch) and highly putrescible that it will chemically cook and produce toxic gases and leachates for over 50 years when there are large quantities of it. When it is next to rivers it will have to be removed.

Seattle's Midway Landfill is a case in point and is now a forty-five million dollar superfund site. Please confirm this by calling Ray Hoffman, Senior Recycling Planner for the Seattle Solid Waste Utility 1-(206) 684-7655.

Please also contact Ray Robb, Industrial Section, Province of British Columbia, Ministry of Environment and Parks, Waste Management Lower Mainland Region at 1-(604) 582-5200, Alan Shore the Landfill Engineer, 1-(604) 582-5271 and Rich Laird, Construction Debris Technician at 1-(604) 582-5308. They will tell you that even the 2% percent

drywall allowed in any given load of demolition waste is a serious problem.

- 4. In addition to the hydrogen sulfide leachates, gypsum wallboard waste has many other chemical ingredients used as binders, glues, acids, hardeners, foaming agents, dispersants, retardants, fungicides and preservatives. Most of these additives are water soluble and will leach into the groundwater in any unlined landfill.

Further, gypsum wallboard waste is up to 11 percent paper which I have been informed is 100 parts per trillion dioxin. I am also told it is well above the oregon DEQ limit in effluent and it too will leach into the groundwater and rivers.

- 5. The greatest present danger to the water quality of the Tualatin River that I am aware of is the Grabhorn a.k.a. Lakeside Reclamation Landfill which has accepted thousands of tons of gypsum waste wallboard including demolition and related waste despite the fact its DEQ permit prohibited putrescible material. It is an unlined landfill and I suggest it will become a superfund site like Seattle's C&D Landfill. Gypsum wallboard and related waste should be stopped immediately.

The demolition waste contains large quantities of wallboard joint compounds which until 1989-90 was manufactured with 5.45 parts per million mercury which will also leach into the Tualatin.

The Hillsboro landfill also accepts tens of thousands of tons of gypsum wallboard and related waste and it too will leach since it is unlined. It too should be stopped from taking wallboard.

I have already provided some studies to Deanna Mueller-Crispin and Bob Guerra of the DEQ and if necessary I can provide you with those same studies.

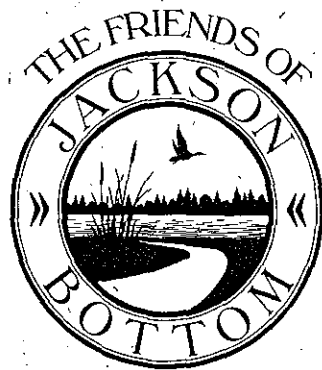
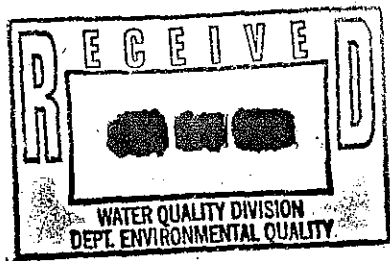
Additionally, the Vancouver, Toronto and Canadian Home Builders Associations all support gypsum wallboard recycling with no reservations and I can provide you with the names and phone numbers of the principals to call if you wish.

Cordially,

Bob Hyland

Bob Hyland, President
 Gypsum Wallboard Recycling,
 a Division of Western International Homes, Inc.,
 An Oregon Corporation
 11120 SW Industrial Way, Bldg. #9,
 Tri-County Industrial Park
 Tualatin, OR 97062
 (503) 691-9765

PS: Because of the water quality problem, the material mandated by law that must be recycled in British Columbia is: Gypsum Waste the ONLY



C-55

P.O. Box 114
Hillsboro, OR 97123

June 17, 1993

Environmental Quality Commission
811 S.W. Sixth Ave.
Portland, OR 97204

Dear Commission Members:

I am writing to comment on the proposed compliance schedule for water pollution control efforts in the Tualatin River Watershed, including specifically the Jackson Bottom Wetlands.

The Friends of Jackson Bottom is a non-profit organization dedicated to enhancing the Jackson Bottom Wetlands Preserve as a wildlife refuge, educational resource and community focus. We are an active participant on the Jackson Bottom Steering Committee.

The Jackson Bottom Wetland is an integral part of the Tualatin River watershed. Hence, the environmental health of Jackson Bottom affects water quality in the river.

This letter addresses two issues. First, we request that USA conduct comprehensive baseline studies of property which is proposed to be newly irrigated with treated effluent. This includes land to the west of Highway 219 recently purchased by USA. Baseline studies should be done in 1993, before irrigation proceeds, so that better assessment of the effects of irrigation can be made.

Second, we request the compliance schedule for Task #9 be revised to complete the necessary work earlier and the scope of work of Task #9 be modified to ensure all significant issues are being addressed. Specifically:

1. Task #9(b) should include a clear definition of the objectives of any further data gathering. These should be established by DEQ, consistent with all applicable state and federal requirements.

2. Task #9(d) should require submittal of a **report**, not just data and analysis. Further, a draft report should be submitted by 4/30/94 and a final report should be submitted by 6/30/94. We believe these timeframes are reasonable and

achievable and necessary to ensure the habitat restoration accomplishments at Jackson Bottom are not undermined.

3. We believe the plan contemplated in Task #9(e) could and should be completed earlier. We believe 9/30/94 is achievable, consistent with the schedule proposed in paragraph 2 above.

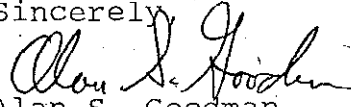
4. The problem associated with the large quantity of effluent leaking from the retention pond in Jackson Bottom ultimately to the Tualatin River should receive a higher priority of attention than the effects of irrigation practices. Consequently a separate and shorter schedule for problem identification and prompt resolution should be established.

5. Public review and comment opportunities on the plans and data required by Task #9 should be clearly spelled out.

Finally, we request to receive further notices of issues concerning Jackson Bottom and the Tualatin River cleanup.

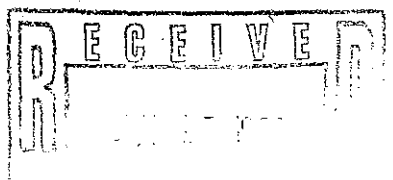
Thank you for the opportunity to present our comments and your consideration of them.

Sincerely,

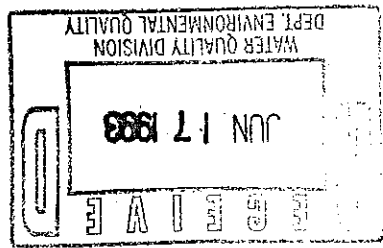


Alan S. Goodman
President

cc: Jackson Bottom Steering Committee



West Linn



Engineering

June 16, 1993

Oregon Department of Environmental Quality
Attn. Mitch Wolgamott
Water Quality Division
811 SW Sixth Avenue
Portland, Oregon 97204

RE: Written testimony:
Proposed new compliance schedule for implementation of
pollution control efforts in the Tualatin River and its
tributaries.

Dear Mr. Wolgamott:

This letter is submitted as formal written testimony regarding
the draft Tualatin Sub-basin Nonpoint Source Management
Implementation and Compliance Schedule, dated June 1993.

In March 1990, the City of West Linn submitted the Nonpoint
Source Watershed Management Plan - Lower Tualatin River and
Oswego Lake Subbasins as required by OAR 340-41-470(3)(g). The
plan presents a strategy to reduce phosphorus and other nonpoint
source pollution within the Tualatin River Basin. The focus of
the City's plan is on nonstructural pollutant control measures.
Implementation of the control measures identified in the plan
was anticipated to reduce phosphorus loadings that would result
in total phosphorus concentrations below the criteria
established in OAR 340-41-470(3)(a) by June 30, 1993.

The City's plan was approved by the EQC in August 1990. The
approval of the plan included a completion and implementation
schedule that identified tasks and completion dates. The
schedule was established to insure implementation of the
required program plans. The DEQ staff report, dated August 10,
1990, recommending approval of the program plans stated: "A
periodic evaluation of the likelihood and the need for extension
of the compliance date should occur. The Commission should be
aware that an extension request may be proposed, now or in the
future, by some or all the agencies."

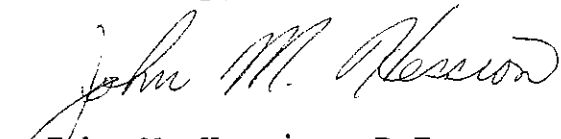
It is expected that the Tualatin River will not meet the
criteria for total phosphorus concentration by June 30, 1993.
Significant accomplishments have been made by the DMAs in the
implementation of program plans. Current monitoring efforts and
modelling projects have raised questions on the accuracy of the

interim load allocations established for the Tualatin River.

The City of West Linn supports the extension of the compliance date by the adoption of the proposed schedule, with revisions. Tasks 1 through 8, excluding task 5, reflect extensions, with modifications, of tasks identified in the existing schedule. Task 5, riparian area management, targets one specific area of the plan and places more importance on it than the other areas of the plan. Riparian area management is also included in tasks 3 and 4. Task 3, site specific problems, addresses riparian area management with respect to existing riparian area problems such as streambank erosion, removal of vegetation and illegal dump sites. Task 4, implementation of management practices, specifically addresses the protection and management of riparian areas. The City has a well established riparian area protection program and it is described in the City's Part 2 Municipal NPDES Storm Water Permit Application. Riparian area management is adequately addressed in tasks 3 and 4. Task 5 should be removed from the proposed schedule.

The proposed modifications of existing tasks are premature with extensive studies incomplete. The schedule should address the procedure for revision with the new data from the results of current sampling and modelling efforts. The schedule should also address the procedure for additional extensions beyond December 31, 1995, if necessary. This is very important since the efforts for the current extension request have taken more time than needed because no procedure was established for extending the original schedule. This additional time has taken staff and budget away from the implementation of programs. Compliance dates on the schedule should also be adjusted when DEQ action is required and not completed.

Sincerely,


John M. Hession, P.E.
Storm Water Specialist

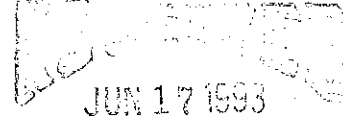


CLACKAMAS COUNTY

Department of Utilities
People serving people with PRIDE

June 17, 1993

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
HELENE K. LIGHTMAN
DIRECTOR



Mr. Fred Hansen
Director
State of Oregon
Department of Environmental Quality
811 S. W. Sixth Avenue
Portland, Oregon 97204-1390

OFFICE OF THE DIRECTOR

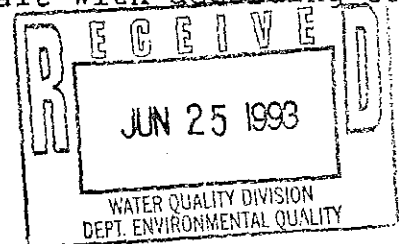
Re: Tualatin Sub-Basin Non Point Source Management Implementation
and Compliance Schedule
OAR 340-41-470 (3)

Dear Mr. Hansen:

Clackamas County, acting by and through the Surface Water Management Agency of Clackamas County, a county service district whose boundaries include the City of Rivergrove, is a Designated Management Agency for non point source management in the Lower Tualatin Sub-Basin. We have been diligently working with DEQ staff on an individual basis as well as with the Designated Management Agencies Coordinating Committee. We support the proposed compliance schedule, but have two areas of concern, which are the same concerns voiced by the Coordinating Committee.

First, we object to "micromanagement" of the program by DEQ. We have been designated as the responsible agency, therefore within our jurisdiction we must have the ability to develop and employ our own techniques to implement the program without necessity of each aspect being approved by DEQ. We understand the value of DEQ reviewing our overall program and efforts to meet the compliance date, but the methods of implementing the program must be left to our discretion.

Second, Task No. 5 entitled "Riparian Area Management" is necessarily included in Task No. 3, "Site Specific Problems". While we are obligated to meet water quality standards, this TMDL is focused on phosphorous removal. Our management program will include, and set forth in order of importance, problem riparian areas through Task No. 3, as that task requires inventories of high priority (phosphorous) areas. To the extent that problem riparian areas are identified and ranked against other significant contributors of phosphorous, they will be dealt with according to their ranked significance.

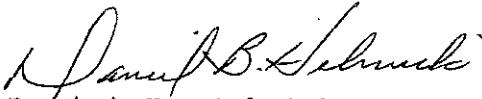


Mr. Fred Hansen
June 17, 1993
Page 2

We are concerned that the inclusion of separate Task No. 5 and a broad interpretation thereof, requires a program of comprehensive water quality/watershed restoration. That goes way beyond the phosphorus TMDL program. Riparian management under Task No. 5 requires comprehensive coordination and program development between DEQ and the realms of land use, fish and wildlife, forestry and agriculture. Comprehensive basin management and water quality improvement is undefined and impossible to achieve within the context of this TMDL mandate. A program of this magnitude cannot be successfully implemented by the appendage of Task No. 5.

As indicated we are in general support but ask that the rules be modified to take into account our concerns.

Very truly yours,



Daniel B. Helmick
Manager, Fiscal & Regulatory Affairs

Oregon

General File 6-0-8-132

DEPARTMENT OF
FORESTRY

June 17, 1993

STATE FORESTERS OFFICE

Andrew Schaedel
Surface Water Program Manager
Oregon Department of Environmental Quality
811 SW Sixth
Portland, Oregon 97204



"STEWARDSHIP IN
FORESTRY"

Dear Andy:

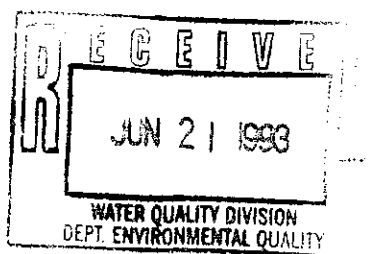
Oregon Department of Forestry (ODF) plans to continue working cooperatively with the Department of Environmental Quality (DEQ) to improve water quality in the Tualatin River basin. To that end, ODF joined DEQ and the other Tualatin River basin designated management agencies (DMAs) in preparing the proposed Implementation and Compliance Schedule for July 1993 to December 1995. ODF plans to fulfill the tasks listed in the Schedule by continuing to implement the Forest Practices Program.

Given our collective understanding of the proposed Schedule, ODF endorses its general representation of actions planned in the basin. ODF's continuing goal is to achieve appropriate water quality objectives using technically and economically efficient best management practices. We look forward to working together with DEQ and forest landowners and operators to maintain and improve water quality in the basin.

Sincerely,

David Degenhardt
Forest/Water Issues Coordinator

DD

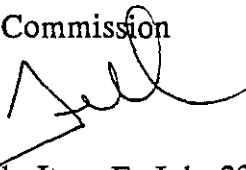


2600 State Street
Salem, OR 97310
(503) 378-2560

State of Oregon
Department of Environmental Quality

Memorandum†

Date: July 21, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director 
Subject: ADDENDUM to Agenda Item F, July 23, 1993, EQC Meeting

Clarification of Language in Tualatin River Watershed Nonpoint Source Management Implementation/Compliance Schedule and Order

Statement of Purpose

A number of issues were raised during the public comment period on the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule. These issues are identified and responded to in the Staff Report for Agenda Item F which was mailed to the Commission. Discussions with the Designated Management Agencies (DMAs) involved with implementation of pollution control activities, and with the Department of Justice, have continued and have resulted in some further clarification of language associated with tasks 3, 5, 9, and 14 of the compliance schedule. The purpose of this memo is to explain the changes to the Commission and provide a revised copy (attached) of the complete Implementation/ Compliance Schedule and Order. In the revised schedule, language to be deleted has been struck out and language to be added is underlined. It is the revised schedule provided here that the Department recommends be adopted by the Commission.

Background

Response to comments received and subsequent discussions have led to clarification of the language in the compliance schedule relating to Task #5, Riparian Area Management, Task #9, Jackson Bottom Wetland, and county responsibilities under Task #14, County Roads Ditches and Task #3, Site Specific Problems. Each of the issues are discussed below:

†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
July 23, 1993 Meeting
Page 2

Task #5, Riparian Area Management

During the negotiations on the new compliance schedule several of the DMAs expressed concern that a specific task related to riparian areas could create confusion and lead to expectations of a program that would go beyond the requirements of the phosphorus TMDL. These concerns were raised again during the public comment period. The Department responded by explaining the importance of riparian areas in water quality protection and recommended that the task remain in the schedule. Subsequent discussions have focused on the intent of the task. The Department and the DMAs have agreed that task #5 is intended primarily to be part of efforts to reduce nutrients in the Tualatin River and its tributaries. Other water quality improvements and related benefits that may be realized, such as improved wildlife habitat, are secondary. Successful implementation of this task will be dependant on landowner cooperation. A sentence was added to the task to clarify that high priority areas will be those that provide the greatest water quality benefit with particular emphasis on phosphorus.

Task #9, Jackson Bottom

Unified Sewerage Agency (USA) of Washington County has raised concerns that including a task related to Jackson Bottom in the compliance schedule would create confusion and potential inconsistencies with the National Pollution Discharge Elimination System (NPDES) permit for the Hillsboro West wastewater treatment plant which irrigates effluent in Jackson Bottom during the dry season. The Department disagrees that confusion will occur and does not see conflict with existing NPDES requirements. Concerns have persisted, however, and USA has indicated that placing the compliance schedule requirements in the NPDES permit would be a more desirable resolution. The Department is not opposed to placing the requirements of task #9 in the NPDES permit. Language has been added to the compliance schedule to indicate that DEQ will initiate modifications of the NPDES permit. This process will take several months. In the interim the compliance schedule, if adopted by the Commission, will apply. Once the NPDES permit has been modified the permit will supersede the compliance schedule.

Task #14, County Road Ditches and Task #3, Site Specific Problems

Roads are sources of nonpoint pollution and road ditches can transport these pollutants, along with pollutants that originate on adjacent lands, to waters of the state. The Department placed task #14 in the schedule to address this important pollution source; especially in rural areas where stormwater permits are not required. Washington County has pointed out that the TMDL rule (OAR 340-41-470) assigns responsibility to the county for "controlling the quality of urban storm runoff." The County believes that this language limits county responsibility under the TMDL authority to areas inside the USA service area. The Department suggested that the task remain in the schedule and that, if necessary, the rule be revised to clarify responsibility for non-agricultural and non-forestry activities in rural areas. The County has continued to be concerned about this issue stating that until the rule is changed the tasks and schedules for Washington County should be limited to those geographic areas within the territorial jurisdiction of the Unified Sewerage Agency of Washington County (USA). The Department has responded by clarifying the language of task #14 so that the County is encouraged, rather than directed, to develop and begin implementing a program to minimize transport of pollution to waters of the state via county road ditches. A line is also added indicating that future rulemaking by the Commission may result in the task becoming a requirement.

The Department suggests that the Commission direct DEQ to clarify in the rule the responsibility of counties with respect to county roads and possibly other non-agriculture and non-forestry activities in rural areas.

Washington County raised similar concerns about the inclusion of septic tanks, possibly in rural areas, in the inventories requested under task #3a. Similar language clarifications have been made.

Finally, language is added to the end of the purpose statement, on page 2 of the compliance schedule, to clarify that revisions to relevant rules may result in modifications to the compliance schedule at a later date.

Memo To: Environmental Quality Commission
Agenda Item F
July 23, 1993 Meeting
Page 4

Department Recommendation

It is recommended that the Commission consider the revised version of the Implementation/Compliance Schedule and Order (attached) during discussions of Agenda Item F. If the Commission chooses to adopt the Department recommendation of alternative 1 as stated in Agenda Item F, this revised Order should be considered to be the "currently written" version of the Order.

Attachments

Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order (Revised July 21, 1993).

Approved:

Section:

Al Schudel

Division:

Michael Down

Report Prepared By: Mitch Wolgamott

Phone: 229-6691

Date Prepared: July 21, 1993

*** (Author: Typist)
*** (File Name/Number)
*** (Date Typed)

REVISED July 21, 1993

Attachment B
Agenda Item F
July 23, 1993 EQC Meeting

Tualatin Sub-basin Nonpoint Source Management
Implementation/Compliance Schedule and Order
for Designated Management Agencies (DMAs)

Designated Management Agencies:

Unified Sewerage Agency of Washington County (representing
participating cities)

Clackamas County & River Grove
Washington County
City of Lake Oswego
Oregon Department of Agriculture

Multnomah County
City of Portland
City of West Linn
Oregon Department of Forestry

Purpose:

Because of chronic violations of water quality standards for dissolved oxygen and pH, Total Maximum Daily Loads (TMDL), Waste Load Allocations and Load Allocations for nutrients in the Tualatin River were established in 1988 as required under 40 CFR 130.7. Oregon Administrative Rules (OAR 340-41-470) were amended "In order to improve the water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/l chlorophyll a action level..." The rule revisions established compliance concentrations at several points along the main stem of the river and at the mouths of major tributaries. The same rule required development of plans to control nonpoint source (NPS) pollution from urban runoff, agricultural, and forest lands to help achieve the compliance concentrations by the compliance date of June 30, 1993. While considerable progress in the implementation of those plans has been made, full compliance with the phosphorus TMDL will not be achieved by that date. The purpose of the following compliance schedule is to help insure continued implementation of ongoing efforts to achieve the goal: "improve the water quality within the Tualatin River subbasin."

The compliance schedule lists tasks and responsibilities of the various Designated Management Agencies (DMAs) in controlling nonpoint source water pollution in the Tualatin River Watershed between the dates of June 30, 1993 and December 31, 1995. The intent is to improve water quality and achieve all applicable standards and limits through the implementation of a comprehensive, watershed-wide program. Another goal is to promote continuation of the communication that has evolved among jurisdictions involved in pollution control in the watershed. All of the management agencies and the Department will continue to work cooperatively to implement these NPS control efforts.

It is intended that, to the extent possible, neighborhood groups, friends groups, interest groups, and other citizen groups be involved in the implementation of this schedule. This is particularly important in the areas of monitoring, public awareness and education, and review of rules, ordinances, and reports/data analysis. All plans, inventories, products, and performance requested in the compliance schedule are subject to Department approval. Any revision of DEQ rules relevant to this order may result in modification of this compliance schedule in order to make it consistent with such rule change. Such modification may occur at any time during the compliance period covered by this schedule.

TASKS FOR ALL DMAs

<u>DATE</u>	<u>TASK</u>
	#1 MONITORING
Ongoing	a) Continue existing monitoring programs and plans; submit data to DEQ quarterly.
January of each year	b) DEQ and DMAs review & evaluate existing monitoring data, Identify gaps and needs. Include monitoring by DMAs and evaluation/verification of models. Set minimum monitoring and reporting requirements through December 1995.
April of each year	c) Develop, in cooperation with DEQ, a single, coordinated, watershed-wide monitoring plan which identifies sites to be sampled, frequency of sampling, parameters to be measured, mechanisms of reporting results to DEQ, quality assurance mechanisms. Sites should include the mouth of each of the tributaries and each of the specified points along the mainstem of the Tualatin River listed in OAR 340-41-470. Also re-evaluate and modify monitoring plans as needed within 90 days of any revisions to load allocations.
5/94-12/95	d) Implement the revised monitoring plan.

#2 PUBLIC AWARENESS/EDUCATION

- ongoing a) Continue ongoing public involvement and education programs.
- 12/31/93 b) Revise and submit to DEQ a detailed public awareness plan. The plan should reflect a coordinated, basin-wide effort that includes specific activities of all DMAs to be implemented by 12/95.
- 1/94-12/95 c) Implement the public awareness plan according to the agreed upon schedule.

#3 SITE SPECIFIC PROBLEMS

- 07/30/93 a) A number of inventories have been conducted in the Tualatin watershed using aerial evaluation, streamwalk, or other techniques. Insure that written documentation has been submitted to DEQ. Include such items as streambank erosion sites, pipes of unknown origin discharging to stream, removal of vegetation, illegal dump sites, animal waste entering stream, ~~failing septic systems~~, etc. Inclusion of failing septic systems is also encouraged. Identify location and nature of problem and rank all problems identified.
- 09/30/93 b) DMAs and DEQ coordinate on a watershed-wide basis and identify all areas of the basin that have not yet been inventoried. DMAs and DEQ cooperate to determine whether there is a need for other kinds of inventories such as accurate inventories and pollution potential assessment for specific kinds of operations (e.g. in-ground nurseries or lawn chemical application). Establish a schedule which will lead to completion of needed inventories and prioritization of all stream segments by 12/95.
- 06/30/94 c) Visit all high ranking sites identified in 3a above and correct the identified problem, or establish a firm schedule that will either result in correction of the problem by 12/95, or identify the problem as part of a long term comprehensive watershed restoration program by 12/95.

It is recognized that additional ordinances and procedures may be needed dependant upon the nature of the problems identified and the actions necessary for their correction. (See task #6.)

06/30/95

e) In coordination with DEQ, develop recommended course of action and schedules for other priority sites identified in 3a and 3b above. Submit to DEQ a schedule which identifies and ranks all problems and identifies dates by which corrective actions will take place.

**#4 IMPLEMENTATION OF MANAGEMENT PRACTICES
(Best Management Practices/Systems)**

Ongoing

a) Continue efforts to insure widespread adoption and implementation of management measures and improved management of riparian areas. Include such management measures as:

Measures for Agriculture

erosion and sediment control
facility wastewater & runoff management
nutrient & pesticide management
wetland/riparian protection
irrigation water management

Measures for Forestry

streamside management areas
road construction/maintenance management
timber harvest practices
revegetation of disturbed areas
wetland/riparian protection

Measures for Urban Areas

new development management
erosion and sediment control
road and street runoff systems
lawn/landscape chemical management
wetland/riparian protection
On-site disposal systems

Examples of appropriate practices that should be in place are included in (but are not limited to) the following documents:

Forest Practices Rules and
Implementation Guidelines
SCS Technical Guidance Manual
Surface Water Quality Facilities
Technical Guidance Handbook
EPA Coastal Nonpoint Pollution Control
Program Guidance

January of each year b) As part of annual reporting (Task 7 below) report on progress toward getting area-wide adoption of management practices and riparian area management. To the extent possible, estimate percent coverage. For example: Out of total number of units harvested during the year, how many received on-site inspection and of those, what percent were not implementing all needed practices?

#5 RIPARIAN AREA MANAGEMENT

06/30/94 a) Because of their filtering, shading, and buffering functions, healthy riparian areas are important components of water quality protection. Based on existing watershed inventories (task 3 above), identify and prioritize opportunities for enhancement and restoration of riparian areas. Develop management or restoration strategies for high priority riparian areas. High priority areas are those which would have the greatest beneficial effect on water quality with particular emphasis on phosphorus. Establish a schedule and begin implementation of efforts in order of priority areas. (This task should be completed in cooperation with landowners, local government, neighborhood groups, fish and wildlife interests, friends groups, etc.)

06/30/95 b) Inventory, prioritize, and establish target schedules for the management of riparian areas in the rest of the watershed.

#6 RULES, ORDINANCES and GUIDANCE

Ongoing a) Continue erosion control programs, plans, and enforcement activities.

09/30/93 b) Complete current efforts to review erosion control programs for development activities. Make recommendations on any necessary revisions to relevant DEQ rules or local ordinances. Report recommendations to DEQ. Make recommendations on needed changes to Erosion Control Plans Technical Guidance Handbook. Revise guidance as necessary.

12/31/93 c) Investigate authorities/needs for local control of erosion and runoff from non-development activities throughout the watershed. Make recommendations on any necessary revisions to DEQ rules and/or local ordinances related to erosion, exemptions from on-site stormwater treatment, road maintenance, buffer requirements, or other relevant requirements. Report recommendations to DEQ.

05/01/94 d) Initiate a formal process to adopt new or refine existing ordinances as necessary according to findings of 4(b) and 4(c).

#7 ANNUAL REPORTING

January of each year a) Submit to DEQ a status report on implementation activities. Specifically address public awareness/education (task 2), resolution of site specific problems (task 3), implementation of management practices (task 4), revision of rules, ordinances and guidance (task 6), and any other responsibilities identified under Tasks for Individual Agencies below.

#8 TUALATIN RIVER STATUS REPORT

April of each year Cooperate with DEQ in the production of an annual status report for the Tualatin River Watershed. The report will incorporate items from the DMA annual reports (task 7(a) above) and will cover the compliance status of the river and it's tributaries, and the accomplishments of the DMAs during the preceding year.

ADDITIONAL TASKS FOR INDIVIDUAL AGENCIES

Unified Sewerage Agency of Washington County (representing participating cities)

<u>DATE</u>	<u>TASK</u>
	#9 JACKSON BOTTOM WETLAND
0911/01/93	a) Submit, for DEQ approval, a comprehensive Waste Water Reuse Implementation Plan for all USA's existing and proposed future reuse projects, as required by OAR 340-55 (including the Jackson Bottom Wetland and new lands acquired on the west side of Hwy 219 or other lands acquired for disposal of effluent from the Hillsboro West STP).
10/30/93	b) In consultation with DEQ, review all available data related to pollution, including phosphorus, entering the Tualatin River from or through the Jackson Bottom wetland. Include both surface water and groundwater characterization and potential for contamination of surface water or groundwater from irrigation and leakage from the large effluent retention pond (and other ponds) in Jackson Bottom. Provide all data, data analysis, and interpretation to the Department. Determine any additional data needs and produce a plan and schedule, acceptable to the Department, to gather such information.
01/01/94	c) Achieve agronomic irrigation rates, and begin operating in compliance with the DEQ approved wastewater reuse implementation plan for Jackson Bottom (9a above) consistent with OAR Chapter 340, Division 55 and NPDES permits.
12/31/94	d) Submit to DEQ any additional data and data analysis produced as a result of 9(b) above and a report, which reflects public review and comment, that interprets the collected data.
03/31/95	e) Submit a plan, acceptable to the Department, to reduce or control pollution entering the Tualatin River from or through the Jackson Bottom wetland, under USA management, as identified in 9(b) and 9(d) above.

Within 30 days of adoption of this Compliance Schedule, DEQ will initiate modification of the Hillsboro treatment facility NPDES permit to further address effluent reuse and potential pond leakage concerns within the Jackson Bottom area as specified in this schedule above.

Until such time as the permit is modified, in the event of any inconsistency between the terms of the Hillsboro treatment facility NPDES permit and this Compliance Schedule, the more stringent requirements shall govern.

Upon the effective date of any such modification to the Hillsboro treatment facility NPDES permit, Task #9 of this compliance Schedule shall be superseded by applicable permit provisions.

#10 EXEMPTIONS FROM ON-SITE STORMWATER TREATMENT

08/31/93

a) In cooperation with DEQ and participating cities, develop a mechanism of tracking and reporting, on a quarterly basis, all development that is granted exemption from the on-site stormwater treatment requirements. The report should identify each development that is granted exemption, identify the reason for the exemption, demonstrate that a program is in place to provide equivalent and timely off-site treatment. Quarterly reports due in October, January, April, July.

02/28/94

b) In coordination with DEQ and using data produced by the first quarterly report (10a above), assess the current situation with regard to exemptions from on-site treatment, in-lieu fee collection, and provisions for off-site treatment. Make recommendations for any necessary changes to state or local regulations to provide improved assurance that newly generated urban runoff receives adequate treatment. Begin a formal process to adopt any needed changes.

Oregon Department of Agriculture

<u>DATE</u>	<u>TASK</u>
	#11 CAFO
Ongoing	a) Perform follow-up inspections and respond to complaints on permitted CAFOs and, as needed, develop enforceable schedules that will result in compliance with permit conditions. As part of annual report to DEQ (task 7 above) identify all permitted CAFOs and their compliance status, identify all actions taken or to be taken.
12/31/94	b) Develop and begin implementation of a program to reduce pollution originating from animal operations that are not permitted under the existing CAFO program. Report status in annual report; include estimate of number of operations in the basin and percentage of those that need improved practices.
	#12 NURSERIES
Ongoing	a) Perform follow-up inspections and respond to complaints on containerized nurseries, during irrigation season, to determine compliance with container nursery requirements. As part of annual report to DEQ (task 7 above), identify all container nurseries in the basin and their compliance status.
	#13 ASSURANCE OF IMPLEMENTATION
12/31/94	a) Coordinate with local agencies (for example SWCDs, irrigation districts, municipalities, etc.) and DEQ to develop mechanisms to insure necessary practices are applied. Implement program through enabling legislation or other state or local authorities.

Clackamas County
Multnomah County
Washington County
Oregon Department of Agriculture
Oregon Department of Forestry

<u>DATE</u>	<u>TASK</u>
	#14 COUNTY ROAD DITCHES
01/01/94	<u>Counties are strongly encouraged to</u> Working cooperatively with DEQ, ODF, and ODA, esuntiesto develop and begin implementation of a program to, on a priority basis, maintain county roadside ditches in such a way to minimize transport of sediment, nutrients, and other pollutants to waters of the state. Include provisions to establish and maintain vegetative cover on non-road surface county road right-of-way between road ditches and adjoining land uses. Where possible, convert ditches to vegetated swales and direct road ditch discharges into passive treatment facilities (infiltration basins, wet ponds, detention ponds, etc.) prior to entering waters of the state. Submit an acceptable report to DEQ identifying the program elements. <u>Future rulemaking may result in this task becoming mandatory.</u>

Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item G
July 22, 1993 Meeting

Title:

Review of Issues Regarding Instream Water Right Application Submission to the Water Resources Department for the Pudding, Tualatin, and Yamhill River Basins

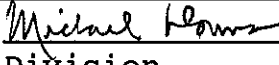
Summary:

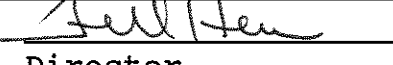
Submission of applications for instream water rights is controversial. The Department has identified pollution abatement minimum flows for several main stem and tributary stream reaches of the subject basins. It is necessary to submit these applications for instream water rights (attachment A) to obtain some guarantee that these identified minimum flows are available in the receiving stream to minimize the impact of wastewater discharges on water quality.

Department Recommendation:

It is recommended that the Commission direct the Director to sign and submit the instream water rights applications as presented in attachment A of the Department Staff Report.


Report Author


Division
Administrator


Director


July 6, 1993

†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: July 6, 1993

To: Environmental Quality Commission
From: Fred Hansen, Director 
Subject: Agenda Item G, July 22, 1993, EQC Meeting

Review of Issues Regarding Instream Water Right
Application Submission to the Water Resources
Department for the Pudding, Tualatin, and Yamhill River
Basins

Statement of the Issue

Submission of these applications have and will result in public controversy over non-consumptive uses of waters of the state.

Department staff have identified pollution abatement flows for several main stem and tributary stream reaches of the subject basins through a process of minimum stream flow and receiving stream carrying capacity modeling. It is necessary to submit these applications for instream water rights to obtain some guarantee that these identified minimum flows are available in the receiving stream to minimize the impact of wastewater discharges on water quality.

Background

Prior to 1987, water rights were issued only for out-of-stream uses of water. Senate Bill 140, adopted in 1987, gave DEQ the authority to request instream water rights for pollution abatement. That bill also granted the Oregon Department of Fish and Wildlife (ODF&W) the authority to request instream rights for fish and wildlife and granted the State Parks and Recreation Department the authority to protect stream flows for recreation.

In December 1991, DEQ established an in-stream water rights program, and rules for requesting water rights were adopted by the Environmental Quality Commission (EQC). DEQ's objective in requesting instream water rights is to ensure that an adequate amount of stream flow remains in a stream to maintain water quality standards and protect beneficial uses. DEQ intends to use instream water rights to help protect water quality while simultaneously pursuing the primary goal of controlling and reducing pollution loads.

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

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This first priority of the in-stream water rights program is to address those basins which have been identified as water quality limited and for which the EQC has set Total Maximum Daily Load (TMDL) limits. A result of setting these TMDL limits, the National Pollution Discharge Elimination System (NPDES) permit holders in these basins are making large investments of public and private funds in wastewater treatment systems that can remove pollutants from the waste stream to a much greater extent than past practices could achieve. The instream water-rights program is intended to protect these investments by ensuring an adequate supply of water to allow dilution of pollutants from point and non-point sources.

If an adequate supply of water is not available to dilute these pollutant loads then NPDES permit holders (municipalities & industry) will have to reduce or alter their discharges which would affect production and economic growth and cost both the private and public sectors enormously.

The three basins addressed in this round of application have been identified as Water Quality Limited basins. The Department has assigned TMDL based on statistical estimations of minimum instream flows, the dilution rule of 10 parts receiving stream water to 1 part wastewater discharge, carrying capacity of the water body at and computer modeled TMDLs that can be discharged to the receiving stream from both point and non-point sources. In those instances where instream flows are a result of upstream dam releases the minimum flow is defined by the harmonic mean flow. The TMDL allocations for the basin include a reserve carrying capacity (buffer) intended to include background and a safety margin.

The TMDLs are set on a sliding scale, so, as each receiving stream approaches the minimum flow the allowed pollutant discharge load becomes smaller, requiring NPDES permittees in the basin to increase the level of treatment performed before discharge. Costs of treatment and the possibility of impact on instream water quality increase as the level of instream flows decrease.

Stream flows can reach a point where the receiving stream is not capable of diluting the discharged waste loads from both non-point sources and point sources. If such instream conditions are reached (continued drought, excessive consumptive uses) the Department by rule, would be forced to require reduced discharges of waste

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loads to the stream. This could result in shutdown of NPDES permitted point source discharges. (The Department does not have the regulatory structure to regulate non point sources as needed to address these problems.)

These applications for instream flow reflect the flows used to define the TMDLs for each of the basins. The action of reserving instream flows through instream water rights for pollution dilution is intended as a solution to the problems defined above. However, it must be clearly understood that applying for instream water rights may not result in a solution in those basins where existing consumptive water rights currently exceed requested instream flows. The water rights doctrine of "first in time - first in right" prevails in Oregon.

Applications are submitted to the Oregon Water Resources Department (WRD). WRD evaluates each request and decides whether to grant the water right on a case-by-case basis. Instream water rights are not additive. That is, that if all three agencies apply for and are granted instream water rights on the same stream reach, the WRD does not provide for the total of all applications, but issues a certificate which grants the largest of the flows and identifies lesser flows as secondary. In this way, if the largest flow is extinguished by the requesting agency then the next largest flow would become the enforced flow of the particular certificate.

The certificates of instream water rights are held by WRD for the people of the State and can be extinguished when it is determined that the need for instream rights to protect the public's health, safety and welfare no longer exists. By rule DEQ will review all of its approved instream water rights every five years to determine if the need for those rights still remains.

Authority to Address the Issue

This is the first time the Department will submit application for instream water rights. The submission of applications for instream water rights to WRD is supported in rule by OAR 340-56-000 and provided for under ORS 537.332 - 537.360. The same legislative authority applies to the Departments of Fish and Wildlife and Parks, both of which have applied for instream water rights in the past.

Alternatives and Evaluation

There is a broad range of alternatives the limits of which can be defined by the worst case scenario and the best case scenario. The worst case scenario is to take no action to protect a minimum instream flow. This action may result in reaching the point at which an instream flow is below the ability of the receiving water body to abate minimum pollutant loads without violating water quality standards. This would require the Department to take enforcement actions such as requiring point sources to:

- Establish TMDLs for the river basin;
- Treat waste streams to higher levels of quality before discharge to the receiving stream. This would be expensive;
- Stop discharging. In many instances this is not possible; or,
- Remove the discharge from the receiving stream. In many instances this is not possible.

Each of these enforcement actions would most likely result in sources curtailing or shutting-down operations; removing the discharges from the receiving stream or, treating effluent to very high and expensive levels of water quality.

The best case scenario is the voluntary basin wide management of water quality. The scenario would result in sources developing alternative methods of water use that reduce the need to discharge wastewater to the waters of the state thus reducing the use of instream flows for pollution dilution purposes.

Summary of Any Prior Public Input Opportunity

On June 14, 15 and 16 of this year, the Department held public information meetings in the cities of McMinnville, Woodburn and Beaverton (one meeting in each of the subject basins). The results of these meeting follow.

McMinnville; June 14, 1993 - 7:00 pm - Community Center:

In attendance were several members of the general public, a member of the Yamhill County Board of Commissioners, representatives of Water Watch, Northwest Environmental Defense Center and Water for Life.

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The discussion centered on what WRD's interpretation of water law would be as a result of these instream water rights applications and how that interpretation would affect existing and future water rights. There seems to be a general consensus that protecting the public use of surface water was a good idea. Yet the use of instream water rights to resolve the issue seems to intensify the conflict between competing interests uses of the state's waters. No solution to this dichotomy was offered.

Dennis Goecks, Yamhill County Commissioner, though supporting the concept of protecting the public use, made it very clear that the process of instream water rights was further aggravating the conflicts for use of water in the Yamhill basin. His discussion suggested that water in the Yamhill basin has become a limited resources. He suggested very clearly that the state needed to be moving in the direction of basin planning and long term allocation of water through a process of identification of all needs within the basin and prioritization of use (rights). He indicated that Yamhill and Polk counties were working together to develop just such a basin plan for the North and South Forks of the Yamhill basin. He expressed hope that the legislature through current proposed legislative action (HB 2215 A-Engrossed) would support such planning action and direct the State's Departments to work together with local and federal interests to develop new methods of water allocation through basin planning.

Woodburn; June 15, 1993 - 7:00 pm - City Hall:

In attendance were several members of the general public and the superintendent of the wastewater treatment plant for the City of Woodburn.

The questions centered on how the process for determining the minimum stream flows worked. The general consensus was that protecting the public use of surface water was a good idea and that the use of instream water rights to resolve the issue seems as good a process as any.

Beaverton; June 16, 1993 - 7:00 pm - City Hall:

In attendance were two members of the general public, WRD Watermaster and the superintendent of the Tualatin Valley Irrigation District.

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The questions centered on how the process for determining the minimum stream flows worked. The general consensus was that protecting the public use of surface water was a good idea but the use of instream water rights to resolve the issue was not the solution of choice.

The superintendent for the Tualatin Valley Irrigation District expressed his opposition to the DEQ applying for instream water rights and asked me "to express his opinions as clearly as possible in this staff report"; indicating that he "would be submitting written comments because he did not trust that I would present his arguments without bias".

The superintendent brought to my attention that the WRD in cooperation with DEQ and several other state agencies had set minimum instream flows for the Tualatin basin in 1975-76. He felt that it was not necessary to add an additional layer of Instream Water Rights on top of what was already there.

He also indicated that by his knowledge (20 years of operations in the Irrigation District) the 7Q10 flows asked for in the applications for Scoggins and Gales Creeks were far above what he knew to be much lower flows. He went on to suggest that the process used by staff to develop the requested 7Q10 numbers was terribly flawed and has resulted in a waste of time and the public's tax dollar. He indicated that in his opinion the DEQ was "out in the ozone" on these instream water right applications. He felt that the numbers used were based on political whim and not good scientific investigations and were just simply wrong; reflecting badly on DEQ's staff's and management's qualifications as unbiased environmental scientists. He indicated that in his opinion the Department was "a poor manager of water quality" because decisions made by the Department and Commission are "biased by political whim and manipulated, misinterpreted, and incomplete data" and that these requests for instream water rights were "just one more example of this mismanagement". Superintendent Wilson concluded; "It's no wonder that the people of this state have no respect for government when political prostitutes like you make decisions that make no sense and waste money."

Written Comments Received in Response to the Public Meeting Notice:

Northwest Environmental Defense Center & WaterWatch of Oregon:
They "strongly support the establishment of instream flows necessary to protect the quality of water in Oregon's rivers and streams. However, the amount of water requested by DEQ is

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inadequate." They indicate that due to the 100 year history of water rights already held on the waters of the state these much junior rights will do little to abate pollution.

They support their opinion that DEQ should be asking for greater flows by first demonstrating that higher flow requests are consistent with the Instream Water Rights Act and the OARs. They argue that instream flows for pollution dilution should be based on a mean flow that provides a buffer of flow to absorb those inadvertent discharges without violating water quality standards in the stream rather than setting flows at the worst case condition where no buffer exists. The letter concludes that higher flows should be requested by stating:

"the loading capacity of the water is based upon 'the greatest amount of loading that a water can receive without violating water quality standards.' OAR 340-56-100(7). So, if a point source or non point source discharger has not met its assigned discharge limit, the waters will be unable to assimilate the overload. Even if a discharger has met its assigned discharge limits, if the stream flow is diminished due to insufficient legal protection of flow, the waters will still be unable to assimilate the loading. Thus, the instream water right request should allow assimilation of the actual loadings regardless of whether or not the polluters are in compliance with the proposed loading requirements."

Jennie & Allan Otley - Princeton, Oregon

The Otleys express their opposition to the Department receiving instream water rights indicating that such action would cause grievous harm to the agricultural community. They feel that because of Department action farmers in the three basins would be "deprived of their existing historic water rights". The Otleys express the opinion that "this act by the DEQ is unconstitutional".

W. Richard Verboort, P.E. Civil Engineer - Water Resources

Mr. Verboort attended the June 16th meeting in Beaverton and indicated that he would be submitting written responses but was unable to get them in by the June 17th deadline. Mr. Verboort's comments were received by the Department June 22, 1993. His comments focus on the Tualatin Basin. He indicates that existing minimum flow water rights meet or exceed those flows requested by current instream water rights applications. Specifically identified are 17 certificates of water rights for minimum flows and two pending applications for minimum flows existing in the Tualatin Basin. Mr. Verboort indicates that the Department, as a

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part of the instream water rights application process, should research WRD records to determine the need to apply for instream water rights. He indicates that OAR 690-502-130(1)(g)(b) and 690-502-130(2) both establish minimum flows in the Tualatin as well as all waters in the Willamette basin.

He expresses the opinion that:

"... the summertime flows you are requesting are not available "80%" of the time and therefore cannot be permitted by current OWRD rules. However, if they are approved, they will have priority over later rights issued for domestic, livestock and wetlands enhancement. Frankly I am not sure that this is a good tradeoff..."

Alan and Myra Erwin, Ashland Oregon (received June 10, 1993)
The Erwins write to endorse the Department's applications for instream water rights saying:

"...We strongly support State acquisition of all water rights needed to maintain instream flows for state wide public purposes, ... That concept should be overriding where conflicts exist."

Hans Rilling, Rogue River Oregon (received June 29, 1993)
Mr. Rilling writes in support of the Department's applications for instream water rights indicating:

"...State acquisition of water rights is needed to maintain instream flows for public purposes. The water of the State belong to the citizens of the State. This idea should be an overriding consideration."

Superintendent Wilson, Tualatin Valley Irrigation District
Mr. Wilson attended the June 16th meeting in Beaverton and indicated that he would be submitting written responses but was unable to get them in by the June 17th deadline. No comments have been received from Mr. Wilson as of July 6, 1993. If a letter of comment is received prior to the EQC meeting it will be submitted separately.

Conclusions

- * In general (though the sample of public opinion is small), it appears that protecting the public's use of the State's water for dilution and transport of pollutant streams is controversial.
- * The acceptance of Instream Water Rights as the process that best protects the public's use of the state's waters has little support from the water use community but is clearly supported by the discharge, and environmental communities.
- * Two responses indicate that within these three basin the minimum flows set by WRD in 1975-76 are of adequate size to accomplish the task of pollution dilution and these new instream water rights are not necessary.
- * Nearly all comments seem to support some degree of protection for public use of waters of the state, yet, an issue which has not been clearly addressed is basin wide planning, priorities development and conflict resolution as part of the big picture of water - quantity vs. availability vs. use vs. quality.
- * The Otley letter suggests that a greater effort at public information/education on this issue of instream water rights may be necessary.

Recommendation for Commission Action

It is recommended that the Commission direct the Director to sign and submit the instream water rights applications as presented in Attachment A of the Department Staff Report.

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Attachments

- A. Applications for Instream Water Rights in the Pudding, Tualatin, and Yamhill River Basins.
- B. Sign in sheets for each public meeting
- C. Letter received in response to the Public Meeting Notice

Reference Documents (available upon request)

- 1. ORS 537.332 - 537.360
- 2. OAR Chapter 340 Division 56

Approved:

Section: *Michael Horns*

Division: *Michael Horns*

Report Prepared By: Joseph M. Edney A.I.C.P.

Phone: 229 5030

Date Prepared:

JME:crw
SA\WC11\WC11586.5
22 June 93

ATTACHMENT A

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

- 1. The name of the stream of the proposed instream water right is Pudding River, a tributary of the Molalla River.
- 2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
- 3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
11	11	11	11	11	11	11	11	11	11	11	11

- 4. The reach of the stream identified for an instream water right is from (upstream end) river mile 41, within the south east quarter of section 8, Township 6 south, Range 1 west W.M., in Marion County to (downstream end) river mile 21.5, within the south west quarter of section 11, Township 5 south, Range 1 west W.M., in Clackamas and Marion Counties.
- 5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis was empirically developed using observed relationships between monitoring sites, available flow statistics (U.S.G.S.) and flows estimated using drainage basin area, stream miles, location in the drainage and altitude at the reference site.

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

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2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
36	36	36	36	36	36	36	36	36	36	36	36

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 10, within the south east quarter of section 13, Township 4 south, Range 1 west W.M., in Clackamas and Marion Counties to (downstream end) river mile 0, within the north west quarter of section 29, Township 3 south, Range 1 east W.M., in Clackamas County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis was empirically developed using observed relationships between monitoring sites, available flow statistics (U.S.G.S.) and flows estimated using drainage basin area, stream miles, location in the drainage and altitude at the reference site.

STATE OF OREGON

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PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
16	16	16	16	16	16	16	16	16	16	16	16

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 21.5, within the south west quarter of section 11, Township 5 south, Range 1 west W.M., in Clackamas and Marion Counties to (downstream end) river mile 10, within the south east quarter of section 13, Township 4 south, Range 1 west W.M., in Clackamas and Marion Counties.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis was empirically developed using observed relationships between monitoring sites, available flow statistics (U.S.G.S.) and flows estimated using drainage basin area, stream miles, location in the drainage and altitude at the reference site.

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of
Environmental Quality, 811 S.W. Sixth Avenue,
Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Pudding River, a tributary of the Molalla River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 49, within the south west quarter of section 32, Township 6 south, Range 1 west W.M., in Marion County to (downstream end) river mile 41, within the south east quarter of section 8, Township 6 south, Range 1 west W.M., in Marion County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis was empirically developed using observed relationships between monitoring sites, available flow statistics (U.S.G.S.) and flows estimated using drainage basin area, stream miles, location in the drainage and altitude at the reference site.

IWR Application # _____

Certificate # _____

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Pudding River, a tributary of the Molalla River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
5	5	5	5	5	5	5	5	5	5	5	5

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 51, within the north west quarter of section 8, Township 7 south, Range 1 west W.M., in Marion County to (downstream end) river mile 49, within the south west quarter of section 32, Township 6 south, Range 1 west W.M., in Marion County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis was empirically developed using observed relationships between monitoring sites, available flow statistics (U.S.G.S.) and flows estimated using drainage basin area, stream miles, location in the drainage and altitude at the reference site.

IWR Application # _____

Certificate # _____

- 6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife	Date:
Oregon Department of Parks and Recreation	Date:

- 7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the upstream limit of the identified reach.

- 8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

- 9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

- 10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Date: _____

Signature: _____

Fred Hansen, Director
Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Silver Creek, a tributary of the Pudding River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6

4. The reach of the stream identified for an instream water right is from (upstream end) the headwaters of Silver Creek within Marion County to (downstream end) river mile 0, within the south west quarter of section 32, Township 6 south, Range 1 west W.M., in Marion County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis was empirically developed using observed relationships between monitoring sites, available flow statistics (U.S.G.S.) and flows estimated using drainage basin area, stream miles, location in the drainage and altitude at the reference site.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife	Date:
Oregon Department of Parks and Recreation	Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the downstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Date: _____

Signature: _____
 Fred Hansen, Director
 Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

- 1. The name of the stream of the proposed instream water right is Yamhill River, a tributary of Willamette River.
- 2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
- 3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7

- 4. The reach of the stream identified for an instream water right is from (upstream end) river mile 5, within the south west quarter of section 16, Township 4 south, Range 3 west W.M., in Yamhill County to (downstream end) river mile 0, within the north east quarter of section 13, Township 4 south, Range 3 west W.M., in Yamhill County.
- 5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

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<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 8, within the south west quarter of section 7, Township 4 south, Range 3 west W.M., in Yamhill County to (downstream end) river mile 5, within the south west quarter of section 16, Township 4 south, Range 3 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

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PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
31	31	31	31	31	31	31	31	31	31	31	31

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 9, within the north east quarter of section 12, Township 4 south, Range 4 west W.M., in Yamhill County to (downstream end) river mile 8, within the south west quarter of section 7, Township 4 south, Range 3 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife	Date:
Oregon Department of Parks and Recreation	Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the upstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Signature: _____ Date: _____
Fred Hansen, Director
Oregon Department of Environmental Quality

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WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

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28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 11, within the north east quarter of section 14, Township 4 south, Range 4 west W.M., in Yamhill County to (downstream end) river mile 9, within the north east quarter of section 12, Township 4 south, Range 4 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

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Oregon Department of Parks and Recreation Date:

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Establish a gaging structure at or near the upstream limit of the identified reach.

- 8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

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- 10. Remarks:

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Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is North Yamhill River, a tributary of Yamhill River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
7	7	7	7	7	7	7	7	7	7	7	7

- 4.. The reach of the stream identified for an instream water right is from (upstream end) river mile 3, within the north east quarter of section 9, Township 4 south, Range 4 west W.M., in Yamhill County to (downstream end) river mile 0, within the north east quarter of section 14, Township 4 south, Range 4 west W.M., in Yamhill County.
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5	5	5	5	5	5	5	5	5	5	5	5

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 15, within the south west quarter of section 5, Township 3 south, Range 4 west W.M., in Yamhill County to (downstream end) river mile 3, within the north east quarter of section 9, Township 4 south, Range 4 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

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1. The name of the stream of the proposed instream water right is South Yamhill River, a tributary of Yamhill River.
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PUBLIC USE(S): Pollution Abatement

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 5, within the south west quarter of section 26, Township 4 south, Range 4 west W.M., in Yamhill County to (downstream end) river mile 0, within the north east quarter of section 14, Township 4 south, Range 4 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

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15	15	15	15	15	15	15	15	15	15	15	15

- 4., The reach of the stream identified for an instream water right is from (upstream end) river mile 6, within the south west quarter of section 27, Township 4 south, Range 4 west W.M., in Yamhill County to (downstream end) river mile 5, within the north east quarter of section 26, Township 4 south, Range 4 west W.M., in Yamhill County.
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14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 16, within the south east quarter of section 5, Township 5 south, Range 4 west W.M., in Yamhill County to (downstream end) river mile 6, within the north east quarter of section 27, Township 4 south, Range 4 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

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Oregon Department of Fish and Wildlife	Date:
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14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 24, within the north east quarter of section 14, Township 5 south, Range 5 west W.M., in Yamhill County to (downstream end) river mile 16, within the north east quarter of section 5, Township 5 south, Range 4 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

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12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 30, within the south east quarter of section 35, Township 5 south, Range 5 west W.M., in Yamhill County to (downstream end) river mile 24, within the north east quarter of section 14, Township 5 south, Range 5 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

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STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is South Yamhill River, a tributary of Yamhill River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
12	12	12	12	12	12	12	12	12	12	12	12

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 40, within the north west quarter of section 33, Township 5 south, Range 6 west W.M., in Yamhill County to (downstream end) river mile 30, within the north east quarter of section 35, Township 5 south, Range 5 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is South Yamhill River, a tributary of Yamhill River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 41, within the south east quarter of section 32, Township 5 south, Range 6 west W.M., in Yamhill County to (downstream end) river mile 40, within the north east quarter of section 33, Township 5 south, Range 6 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife	Date:
Oregon Department of Parks and Recreation	Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the upstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Signature: _____ Date: _____
 Fred Hansen, Director
 Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

- 1. The name of the stream of the proposed instream water right is South Yamhill River, a tributary of Yamhill River.
- 2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
- 3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1

- 4. The reach of the stream identified for an instream water right is from (upstream end) river mile 43, within the north west quarter of section 6, Township 6 south, Range 6 west W.M., in Yamhill County to (downstream end) river mile 41, within the south east quarter of section 32, Township 5 south, Range 6 west W.M., in Yamhill County.
- 5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is South Yamhill River, a tributary of Yamhill River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 50, within the south east quarter of section 8, Township 6 south, Range 7 west W.M., in Yamhill County to (downstream end) river mile 43, within the north west quarter of section 6, Township 6 south, Range 6 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife	Date:
Oregon Department of Parks and Recreation	Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the upstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Signature: _____ Date: _____

Fred Hansen, Director
Oregon Department of Environmental Quality

IWR Application # _____

Certificate # _____

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Salt Creek, a tributary of South Yamhill River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

4. The reach of the stream identified for an instream water right is from (upstream end) headwaters of Salt Creek in Yamhill County to (downstream end) river mile 0, within the south east quarter of section 6, Township 5 south, Range 4 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

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STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Deer Creek, a tributary of South Yamhill River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

4. The reach of the stream identified for an instream water right is from (upstream end) headwaters of Deer Creek in Yamhill County to (downstream end) river mile 0, within the south east quarter of section 14, Township 5 south, Range 5 west W.M., in Yamhill County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

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Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife

Date:

Oregon Department of Parks and Recreation

Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the downstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Signature: _____ Date: _____

Fred Hansen, Director

Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

- 1. The name of the stream of the proposed instream water right is Mill Creek, a tributary of South Yamhill River.
- 2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
- 3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

- 4. The reach of the stream identified for an instream water right is from (upstream end) headwaters of Mill Creek in Yamhill County to (downstream end) river mile 0, within the south east quarter of section 32, Township 5 south, Range 6 west W.M., in Yamhill County.
- 5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

- 1. The name of the stream of the proposed instream water right is Willimina Creek, a tributary of South Yamhill River.
- 2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
- 3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
9	9	9	9	9	9	9	9	9	9	9	9

- 4. The reach of the stream identified for an instream water right is from (upstream end) headwaters of Willimina Creek in Yamhill County to (downstream end) river mile 0, within the south west quarter of section 6, Township 6 south, Range 6 west W.M., in Yamhill County.
- 5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model "WQHydro"; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife	Date:
Oregon Department of Parks and Recreation	Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the downstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Signature: _____ Date: _____

Fred Hansen, Director
Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
 by
 Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Tualatin River, a tributary of the Willamette River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
100	100	100	100	100	100	100	100	100	100	100	100

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 38.5, within the north west quarter of section 16, Township 1 south, Range 2 west W.M., in Washington County to (downstream end) river mile 0, within the north west quarter of section 19, Township 2 south, Range 1 west W.M., in Clackamas County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data was analysis using a the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife

Date:

Oregon Department of Parks and Recreation

Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the upstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Date: _____

Signature: _____

Fred Hansen, Director

Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Tualatin River, a tributary of the Willamette River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
75	75	75	75	75	75	75	75	75	75	75	75

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 52.8, within the north east quarter of section 9, Township 1 south, Range 3 west W.M., in Washington County to (downstream end) river mile 38.5, within the north west quarter of section 16, Township 1 south, Range 2 west W.M., in Washington County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

- 1. The name of the stream of the proposed instream water right is Tualatin River, a tributary of the Willamette River.
- 2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
- 3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
25	25	25	25	25	25	25	25	25	25	25	25

- 4. The reach of the stream identified for an instream water right is from (upstream end) river mile 58.8, within the south east quarter of section 7, Township 1 south, Range 3 west W.M., in Washington County to (downstream end) river mile 52.8, within the north east quarter of section 9, Township 1 south, Range 3 west W.M., in Washington County.
- 5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data was analysis using a the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife

Date:

Oregon Department of Parks and Recreation

Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the upstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Date: _____

Signature: _____

Fred Hansen, Director

Oregon Department of Environmental Quality

IWR Application # _____

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STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Tualatin River, a tributary of the Willamette River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
30	30	30	30	30	30	30	30	30	30	30	30

4. The reach of the stream identified for an instream water right is from (upstream end) river mile 68.8, within the south east quarter of section 32, Township 1 south, Range 4 west W.M., in Washington County to (downstream end) river mile 58.8, within the south east quarter of section 7, Township 1 south, Range 3 west W.M., in Washington County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

- 1. The name of the stream of the proposed instream water right is Dairy Creek, a tributary of the Tualatin River.
- 2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
- 3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
10	10	10	10	10	10	10	10	10	10	10	10

- 4. The reach of the stream identified for an instream water right is from (upstream end) the head waters of Dairy Creek, in Washington County to (downstream end) river mile 0, within the north east quarter of section 12, Township 1 south, Range 3 west W.M., in Washington County.
- 5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife

Date:

Oregon Department of Parks and Recreation

Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the downstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Date: _____

Signature: _____

Fred Hansen, Director

Oregon Department of Environmental Quality

IWR Application # _____

Certificate # _____

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Fanno Creek, a tributary of the Tualatin River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

4. The reach of the stream identified for an instream water right is from (upstream end) the head waters of Fanno Creek, in Washington County to (downstream end) river mile 0, within the south east quarter of section 14, Township 2 south, Range 1 west W.M., in Washington County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data was analysis using a the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Gales Creek, a tributary of the Tualatin River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
5	5	5	5	5	5	5	5	5	5	5	5

4. The reach of the stream identified for an instream water right is from (upstream end) the head waters of Gales Creek, in Washington County to (downstream end) river mile 0, within the south east quarter of section 7, Township 1 south, Range 3 west W.M., in Washington County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data analysis used the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____ Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife Date:
Oregon Department of Parks and Recreation Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the downstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Date: _____

Signature: _____
Fred Hansen, Director
Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Rock Creek, a tributary of the Tualatin River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

4. The reach of the stream identified for an instream water right is from (upstream end) the head waters of Rock Creek, in Washington County to (downstream end) river mile 0, within the north west quarter of section 16, Township 1 south, Range 2 west W.M., in Washington County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data was analysis using a the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

IWR Application # _____

Certificate # _____

6. The following state agencies were notified of the intent to file for an instream water right on:

Oregon Department of Fish and Wildlife

Date:

Oregon Department of Parks and Recreation

Date:

7. If possible, include recommendations for measuring locations or methods:

Establish a gaging structure at or near the downstream limit of the identified reach.

8. If possible, include recommendations for assisting the Water Resources Department in measuring and monitoring procedures:

Department of Environmental Quality personnel will assist the Watermaster in establishing a monitoring plan and program. The intent of DEQ assistance is to provide data collection activities where a WRD monitoring site is close to an NPDES permitted outfall or a Department's water quality monitoring site; equipment and training are available to assure data collection activities and reporting meet WRD standards.

9. If possible, include other recommendations for methods or conditions necessary for managing the water right to protect the public uses [see OAR 690-77-020 (5) (c)]:

NONE

10. Remarks:

NONE

An instream water right may be allowed for an instream beneficial use of water subject to existing water rights which have an effective date prior to the filing date of this application.

This type of beneficial use is for the benefit of the public and a certificate issued confirming an instream water right shall be held in trust by the Water Resources Department for the people of the State of Oregon, pursuant to ORS 537.341.

Date: _____

Signature: _____

Fred Hansen, Director

Oregon Department of Environmental Quality

STATE OF OREGON

WATER RESOURCES DEPARTMENT

Application for Instream Water Right
by
Oregon Department of Environmental Quality

Applicant: Fred Hansen for the Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204

1. The name of the stream of the proposed instream water right is Scoggins Creek, a tributary of the Tualatin River.
2. The public use this instream water right is based on is providing required stream flows for pollution abatement.
3. The amount of water (in cubic feet per second) needed by month for the category of public use is as follows:

PUBLIC USE(S): Pollution Abatement

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
25	25	25	25	25	25	25	25	25	25	25	25

4. The reach of the stream identified for an instream water right is from (upstream end) the head waters of Scoggins Creek, in Washington County to (downstream end) river mile 0, within the north west quarter of section 35, Township 1 south, Range 4 west W.M., in Washington County.
5. Technical data relied on in this application are obtained from the United States Geological Survey's "National Water Information System" accessible through the "Automated Data Processing System"; State of Oregon Water Resources Department's stream flow data base; and the State of Oregon Department of Environmental Quality's stream flow data base.

The data was analysis using a the computer model WQHydro; a water quality and hydrological data analysis support software package (E. Aroner) that uses a log Pearson III distribution process.

A T T A C H M E N T B



6.16.93
BEAVERTON
CITY HALL
7PM

PUBLIC MEETING
CITY OF BEAVERTON
SIGN-IN SHEET

PLEASE PRINT

NAME	ADDRESS	CITY, STATE, & ZIP
1. Vergie Ries	City of Beaverton P.O. Box 4755	Beaverton, OR 97076
2. Dan Wilson	TUID 2330 ELM ST	FOREST GROVE, OR 97116
3. Dick Verboort	VERBOORT ENGINEERING WATER RESOURCES DEPT	HILLSBORO, OR 97123
4. Jerry Rodgers	111 NE LINCOLN	HILLSBORO 2 97124
5. JOEL KUNTZ	3910 Lakeview Lake Oswego	97035
6. Eleanor Mason	13915 S.W. Ina Lane Beaverton, Oreg.	97005
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

ATTACHMENT C



Northwest Environmental Defense Center
10015 S.W. Terwilliger Blvd., Portland, Oregon 97219
(503) 244-1181 ext.707

By FAX 229-6124 and Regular Mail

June 16, 1993

Mr. Joseph Edney
Oregon Department of Environmental Quality
Water Quality Division
811 SW 6th Ave.
Portland, OR 97204

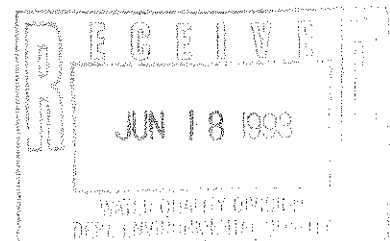
Re: Proposed Instream Water Right Applications

Dear Mr. Edney:

These comments are on behalf of the Northwest Environmental Defense Center (NEDC) and WaterWatch of Oregon (WaterWatch). NEDC is a non-profit environmental group dedicated to the protection of natural resources in the Pacific Northwest. NEDC brought litigation under the Clean Water Act in both Oregon and Washington to require the implementation of the TMDL process required under section 303(d) of the Clean Water Act. WaterWatch of Oregon is a non-profit water policy group dedicated to promoting policies and actions which achieve the quantity and quality necessary to support fish, wildlife, recreation, ecological values, public health and a sound economy. WaterWatch was instrumental in the passage of the Instream Water Rights Act of 1987.

Summary

NEDC and WaterWatch strongly support the establishment of instream flows necessary to protect the quality of water in Oregon's rivers and streams. However, the amount of water requested by DEQ is inadequate. It is based on a low flow assumption, rather than the reality of today's streamflow assimilative needs. The low flows relied on by DEQ are a floor below which water use cannot go, not a ceiling above which DEQ is forbidden to request flows. In order to comply with the requirements of the Instream Water Rights Act and the statutory policies and mandates of the DEQ, these requested flows should reflect actual rather than targeted assimilative capacities.



The Statutes and Rules

The Instream Water Rights Act of 1987 gives the Department of Environmental Quality (DEQ) the authority to request instream water rights for flows necessary "to protect and maintain" state water quality standards. ORS 537.336(2). The statute provides that the "request shall be for the quantity of water necessary for pollution abatement. . ." Id.

The DEQ rules implementing this section of the statute state that it is the policy of the Environmental Quality Commission:

"To apply for instream water rights for pollution abatement where such action provides a public benefit . . .

To maintain streamflow in water quality limited receiving streams to assimilate the identified total maximum daily pollution load. . ."

OAR 340-56-015(1).

The rules further provide that once an instream water right is established DEQ will review the rights on a periodic basis. OAR 340-56-320(1). If review of an instream water right reveals a decline in instream flow needs, DEQ may "assist WRD in proceedings to cancel, transfer or modify the instream right. OAR 340-56-320(2). The rules also allow a request for a new instream water right to be filed if the periodic review reveals that flows are insufficient. OAR 340-56-320(3).

Flow Determination Methodologies

DEQ's rules outline four flow determination methodologies. The rules state that the methodologies are "based on existing users, including facilities with discharge permits and existing land uses that generate nonpoint runoff or otherwise impact the water quality of the stream." OAR 340-56-400(2). The methodologies are as follows:

- The "Streamflow Methodology" which identifies existing water quality sources and develops a streamflow request that will abate existing pollution problems. OAR 340-56-400(4)(a).
- The "Load Assimilation Analysis" which takes into account "permitted effluent discharges" and "estimated nonpoint source loads" to determine flows. The rule allows, but does not require, DEQ to "estimate the instream flow need that will occur" if "permitted discharges do not meet the minimum design criteria" identified in the basin rules. OAR 340-56-400(4)(b).
- The "Water Quality Modeling" analysis is also based upon permitted discharges and estimated nonpoint source loads - however the development of

the streamflow is through modeling rather than through raw data. OAR 340-56-400(4)(c). These modeled flows develop a predicted "low flow" from which is used to calculate assimilative capacity. The load allocations developed under this analysis are target allocations - not current load allocations.

- The "Non-Degradation Flows Method" is only used for Outstanding Resource Waters that are subject to DEQ's non-degradation standard. The suggested method is to use the median monthly streamflow or lake levels.

This list is not an exclusive list of methodologies. DEQ is not required to use one particular methodology as long as the methodology is "most appropriate and reliable." OAR 340-56-400.

Management of Quantity versus Quality

It is important to note that the management of water quantity operates on a totally different system from the management of water quality. Water quantity is allocated based upon the "Prior Appropriation Doctrine". In a nutshell this doctrine is based upon the concept of "first in time, first in right". Thus, the first to receive a right to use water has first claim to the water regardless of the type of use. The Water Resources Commission and Department have been giving rights to take water out of Oregon's streams for over a hundred years based upon this concept. Applications for water rights today are so junior in the prior appropriation line that they are unlikely to be served especially during times of shortage.

In contrast, the Environmental Quality Commission and DEQ's water quality management actions are based upon adopted numeric and narrative standards and policies to protect the beneficial uses of state waters. When determining whether a stream will achieve water quality standards, the EQC considers the amount of pollutants discharged to a receiving stream, the activity occurring adjacent to or within the stream, and the amount of stream flow present. OAR 340-56-005. Thus, if the instream water right is determined based on the targeted waste load and load allocations instead of the current discharge of pollutants into the waters, the balance of the EQC's process will be upset. In other words, unless the streamflows are protected from further diminishment, the third consideration in this list will be constantly decreasing as a result of actions taken by the Water Resources Commission pursuant to the prior appropriation doctrine.

Furthermore, the loading capacity of the water is based upon "the greatest amount of loading that a water can receive without violating water quality standards." OAR 340-56-100(7). So, if a point source or non point source discharger has not met its assigned discharge limit, the waters will be unable to assimilate the overload. Even if a discharger has met its assigned discharge limits, if the streamflow is diminished due to insufficient legal protection of flow, the waters will still be unable to assimilate the loading. Thus, the instream water right request should allow assimilation of the actual loadings regardless of

whether or not the polluters are in compliance with the proposed loading requirements.

The Instream Water Rights Act and DEQ's rules support this approach. ORS 537.336(2) requires DEQ to request flows necessary for pollution abatement. Selection of a flow level based upon projected minimum pollution loadings rather than actual loadings does not result in pollution abatement. DEQ rules describe streamflow methodologies which are intended to be based upon current users and specifically provide a methodology to calculate streamflows when targeted permit limitations and load allocations are not achieved (the Streamflow-Water Quality Correlation Analysis). To fail to do so is bad public policy and does little to abate pollution. If DEQ is only requesting flows necessary to meet targeted load allocations then it should immediately reopen all permits and reduce current load allocations to the targeted allocation for which flows are requested. To do otherwise fails to protect the resource and is contrary to the mandate of the Instream Water Rights Act.

Conclusion

The establishment of instream water rights for pollution abatement is critical to bridging the gap between management of water quality and water quantity. When developing these instream flow requests, DEQ has a responsibility to ensure that the flows requested will abate pollution today. The reality of the prior appropriation doctrine does not give DEQ any time to wait and see if their target loadings will be met. The longer DEQ waits, the less likely the water will be instream to protect.

Thank you for the opportunity to comment on these instream water right applications. Please call if you have any questions.

Sincerely,



Rebecca Rundquist
NEDC Executive Director



Karen Russell
WaterWatch
Legal Affairs Coordinator
295-4039

Oregon Dept. of Environmental Quality
811 S.W. Sixth Ave.
Portland, OR 97204

RECEIVED
JUN 17 1993

AIR QUALITY DIVISION
Dept. Environmental Quality

"We are opposed to DEQ
receiving instream water rights
covering the drainage basins
of the Pudding, Tualatin & Yamhill
rivers.

Converting instream water
rights to DEQ will be very
detrimental to agricultural
people who depend on water
for their livelihood, from
these three rivers. Many farmers
of this area will be deprived
of their existing historic water
rights. This act by DEQ is
unconstitutional. DEQ could
control pollution of these rivers
without depriving water users
of their rights.

If WRO approves DEQ's request
for instream water rights this

could set a precedent for other
rivers in Oregon. We are
opposed to any such actions
by DEQ.

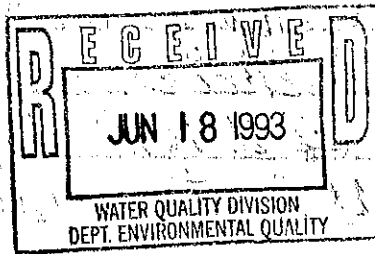
Thank you.

Sincerely,
Jennie Otley
Allan Otley

Allan Otley
Hc 72 Box 55
Princeton OR 97721



AMERICAN LUNG ASSOCIATION



W. RICHARD VERBOORT
666 S.E. 36TH AVENUE
HILLSBORO, OR 97123

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
811 S.W. 6TH AVE
PORTLAND, OR 97204
ATT: Mr. Joseph Edney

June 23, 1993

Dear Mr. Edney:

The following comments are in regards to the information meeting held on June 16, 1993 at the Beaverton City Hall concerning DEQ's proposal for in stream water rights in the Tualatin River system.

The first objection I have is for a State agency to LIMIT written comments to ONE DAY after such an informational meeting. This gives the impression that the agency has already decided its course of action and will go ahead regardless of any written comments received.

The second problem is that apparently your agency had not researched out the existing minimum flow water rights in the Tualatin river system. Had this been done I think you would find that there was no need to file for new instream water rights.

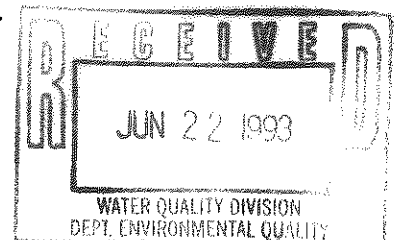
According to the Tualatin Basin watermaster's records there are already a substantial number of existing minimum flow rights in the Tualatin basin. Very briefly there are:

- 16 water right certificates with priority dates of 1966
- 1 water right certificate with a priority date of 1983
- 1 application pending with a priority date of 1970
- 1 application pending with a priority date of 1975

The minimum flow rights require that the river not be drawn down below the specified flows at certain points for certain dates. In other words they specify the amount of water to be left in the river. In that sense they serve the same purpose as an "instream right" such as DEQ is proposing to file.

In addition to the 17 certificates and 2 pending applications noted above, the Willamette Basin Program (OAR 690 DIV 502) further restricts flows in the Tualatin Basin (and most other Willamette river tributaries).

Specifically OAR-690-502-130 (1)(g)(b) limit uses to domestic, commercial not to exceed 4.49 gpm, livestock, wetland enhancement and public instream uses from May 1 to October 31.



OAR 690-502-130 (2) allows no appropriations except for ... domestic and livestock uses ... or waters to be legally stored or used from storage ... in accordance with values specified in Table 1.

In my opinion the summertime flows you are requesting are not available "80%" of the time and therefore cannot be permitted by current ODWR rules. However, if they are approved, they will have priority over later rights issued for domestic, livestock and wetland enhancement. Frankly I am not sure that this is a good tradeoff.

I would recommend that your agency more thoroughly study the existing older minimum flow rights (that have been certified) and the pending permits and then decide if additional minimum flow water is needed (obviously this should have been done in the first place). I think you will find that the flows you plan to file on are already covered by prior minimum flow rights to the extent that water is available and that no additional applications are needed.

I have the feeling that since the legislature established the means for DEQ to file for water rights you agency obviously "has to go out and get some of that water" in order to show the legislature that it is doing its job.

In this particular instance it is my opinion that a little prior research into existing minimum stream flow rights and an analysis of water availability during the summer months would have avoided the need for all the time spent developing rights that (1) are already provided for or (2) cannot be fulfilled by natural flow conditions.

With the current State budget situation I am sure there would have been more effective uses for the money spent either within DEQ or other state agencies.

Sincerely,



W. Richard Verboort

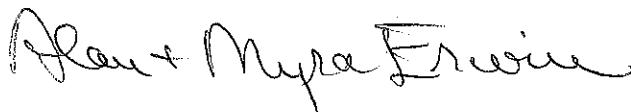
June 10, 1993

Environmental Quality Commission
811 SW 6th Avenue
Portland, OR 97204

Dear Commissioners:

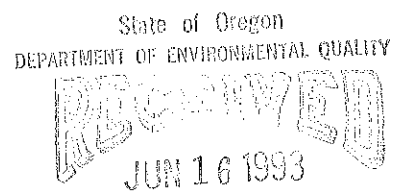
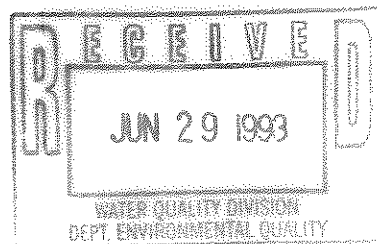
We are glad to endorse the Department's applications for instream water rights in the drainage of the Pudding, Tualatin and Yamhill rivers. We strongly support State acquisition of all water rights needed to maintain instream flows for statewide public purposes, whether they be for dilution of pollution or for the maintenance of fish populations, for recreation or for some other purpose. Never forget the waters of the State belong to all the citizens of the State. That concept should be overriding where conflicts exist.

Sincerely,



Alan and Myra Erwin

300 Grandview Dr. Ashland, OR 97520



OFFICE OF THE DIRECTOR

6/14/93

EQC

811 SW 6th Ave.

Portland OR

Dear Commissioners.

I am pleased to endorse the Department's application for instream drainage rights in the drainage of the Pudding, Tualatin and Yamhill rivers. State acquisition of water rights is needed to maintain instream flows for public purposes. The waters of the State belong to the citizens of the state. This idea should be an overriding consideration.

Sincerely

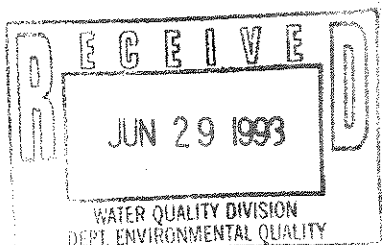
Hans Rilling

Hans Rilling
4395 Pleasant Cr Rd
Rogue River OR 97537

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

JUN 16 1993

OFFICE OF THE DIRECTOR



Revised

A G E N D A

Revised

ENVIRONMENTAL QUALITY COMMISSION MEETING

July 22-23, 1993
DEQ Conference Room 3a
811 S. W. 6th Avenue
Portland, Oregon

Thursday, July 22, 1993: Work Session beginning at 1:00 p.m.

1. Work Session: Accomplishments & Status of Nonpoint Source Control Efforts in the Tualatin Watershed

Staff: Andy Schaedel, Neil Mullane, Mitch Wolgamott

Outside Panel Members:

Bruce Cleland, EPA
Mark Schoening, City of Lake Oswego
Dave Degenhardt, Oregon Dept of Forestry
Chuck Craig, Oregon Dept of Agriculture
Steve Hawkins, City of Portland
Mike Houck, Urban Streams Council
Phil Ward, Oregon Dept of Agriculture
David Noren, Washington County
Bill Gaffi, Unified Sewerage Agency

Other Potential Participants:

Mike Wolf, ODA
John Jackson, USA
John Hession, City of West Linn
Donna Hempstead, Multnomah County
Ela Whelan, Clackamas County

2. Work Session: Discussion of Proposed Federal Operating Permit Program Rules and Hazardous Air Pollutant Control Rules

Staff: ^② Gregg Lande, ^① Sarah Laumann, ^② Jill Inahara, ^① Wendy Sims, ^⑤ Kevin Downing

Outside Panel Members: None

Friday, July 23, 1993: Regular Meeting beginning at 8:30 a.m.

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.

A. Approval of Minutes

B. Approval of Tax Credits

Staff: Mike Downs, Charles Bianchi

C. Rule Adoption: Amendments to the Rules for Hazardous Waste Disposal Facilities

Staff: Dave St. Louis, Stephanie Hallock, (Gary Calaba available)

Possible Others:

Harry Demaray could show up. No others anticipated.

D. Anodizing Inc. New Source Review Variance Request

Staff: Steve Greenwood, Wendy Sims

Company Representatives (Potential):

✓ Lou Rink, President

✓ Mike Davis, Plant Manager??

✓ Lynne Perry, Legal Counsel

(Tom Lindley -- possible, but not expected)

E. Request for Commission Review of the Water Pollution Control Facilities (WPCF) Permit Issued to Guide Dogs for the Blind on June 9, 1993. 10:30 a.m.

This item is scheduled for 10:30 a.m. and will be considered as close to that time as possible. Items listed later on the agenda may be taken ahead of this item if time permits.

Staff: Anne Cox (Northwest Region) (*avail for Tech. Questions*)
(Kent Ashbaker is on Vacation)

Public: Derald Bleu (by phone connection if it can be arranged. We do not know yet what his phone number is.)

F. Tualatin River Watershed Nonpoint Source Management Implementation and Compliance Schedule and Order

Staff: Andy Schaedel, Mitch Wolgamott

David Noren - Wash. Co. Counsel

G. Information Item: Instream Water Rights

Staff: Neil Mullane, Joe Edney

Jeff Bachman, NEDC

H. Commission Members Reports (Oral)

I. Director's Report (Oral)

J. Report on Legislation (Oral)

Staff: Olivia Clark

3177

2214

67

86

July 20, 1993

2070

912

42

1012

Budget

Oregon Department of Agriculture
Information on SB 1010
for the
Environmental Quality Commission
July 22, 1993

What the Bill Provides:

- The department is authorized to develop and carry out a water quality management plan for any agricultural and rural lands where a water quality management plan is required by state or federal law. (eg., TMDL basins, groundwater management areas, coastal zone management area)
- The plans may require actions on the land necessary for the prevention or control of water pollution resulting from agricultural activities and soil erosion including but not limited to construction, maintenance and clearance and agricultural and cropping practices.
- If persons refuse to comply with the requirements of the plan, the department may assess civil penalties for violations.
- The department may collect fees that do not exceed the total cost of carrying out the plan and do not exceed \$200 per landowner per year.
- There is a mechanism for addressing concerns of the Environmental Quality Commission and the Department of Environmental Quality identical to the mechanism in the Forest Practices Act.
- The department is expressly permitted to enter into agreements with other agencies including Soil and Water Conservation Districts to develop and carry out plans.

What is necessary to implement SB 1010 in the Tualatin:

- Describe the lands that are subject to the water quality management plan
 - a.) delineate geographic areas.
 - b.) determine which rural issues other than agricultural NPS will be contained in our plan. (eg. steambank erosion, riparian restoration)
- Develop and carry out the plan:
 - a.) adopt existing Tualatin ag plan with amendments to include mandatory components.
 - b.) Adopt administrative rules to carry out the plan in consultation with the Board of Agriculture.
- Develop and adopt by rule a process and criteria for appeal of specific actions required of a particular landowner.
- Develop and establish enforcement procedures by rule.
- Define the role of the SWCDs and other cooperating agencies through interagency agreements.

B-Engrossed
Senate Bill 1010

Ordered by the House June 15
Including Senate Amendments dated May 5 and House Amendments dated
June 15

Sponsored by COMMITTEE ON AGRICULTURE AND NATURAL RESOURCES (at the request of Oregon Dairy Farmers Association, Oregon Seed Council, Oregon Wheat Growers League, Oregon Association of Conservation Districts)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Allows State Department of Agriculture to develop water quality management plans and to require landowners to take actions necessary to carry out plan. Allows department to impose civil penalty for failure to take necessary actions or comply with rules implementing plan. Imposes maximum ~~[\$5,000]~~ **\$2,500** civil penalty for first violation and maximum \$10,000 for subsequent violation.

Limits fees for developing and implementing plan.

Subjects plan and rules to coordination requirements of Strategic Water Management Group. **Declares intent that soil and water conservation districts be involved with plan development as local management agencies.**

Requires scientific basis for prohibiting specific practice. Allows landowner to appeal specific actions required by department.

A BILL FOR AN ACT

1
2 Relating to agricultural water quality management plans; creating new provisions; repealing sections
3 2, 3, 4, 5 and 6, chapter 908, Oregon Laws 1991; and appropriating money.

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

5 **SECTION 1. Sections 2 to 13 of this Act are added to and made part of ORS 568.210 to**
6 **568.805.**

7 **SECTION 2. As used in sections 2 to 13 of this 1993 Act:**

8 (1) **"Board"** means the State Board of Agriculture.

9 (2) **"Operator"** means any person, including a landowner or land occupier engaged in any
10 commercial activity relating to the growing or harvesting of agricultural crops or the pro-
11 duction of agricultural commodities.

12 (3) **"Water"** or **"the waters of the state"** has the meaning given in ORS 468B.005.

13 (4) **"Water pollution"** has the meaning given in ORS 468B.005.

14 (5) **"Plan"** or **"water quality management plan"** means a plan developed under section 3
15 of this 1993 Act. The plan shall be based upon scientific information.

16 **SECTION 3. (1) The State Department of Agriculture may describe the boundaries of**
17 **agricultural and rural lands that are subject to a water quality management plan:**

18 (a) **Due to a determination by the Environmental Quality Commission to establish a Total**
19 **Maximum Daily Load for a body of water under the federal Water Pollution Control Act (33**
20 **U.S.C. §1313);**

21 (b) **Due to a declaration of a ground water management area under ORS 468B.180; or**

22 (c) **When an agricultural water quality management plan is otherwise specifically re-**

NOTE: Matter in boldfaced type in an amended section is new; matter *[italic and bracketed]* is existing law to be omitted. New sections are in boldfaced type.

1 required by state or federal law.

2 (2) For an area whose boundaries have been designated under this section, the depart-
3 ment shall develop and carry out a plan for the prevention and control of water pollution
4 from agricultural activities and soil erosion. The plan shall be based upon scientific infor-
5 mation.

6 SECTION 4. Notwithstanding the definition given in ORS 568.210, as used in sections 3
7 to 13 of this 1993 Act "landowner" includes any landowner, land occupier or operator.

8 SECTION 5. (1) The State Department of Agriculture in consultation with the State
9 Board of Agriculture may adopt rules necessary to effectuate a water quality management
10 plan initiated under section 3 of this 1993 Act.

11 (2) The department may require any landowner whose land is located within an area
12 subject to a water quality management plan to perform those actions on the landowner's
13 land necessary to carry out a water quality management plan. Such actions may include:

14 (a) Routine construction, maintenance and clearance of any works and facility;

15 (b) Agricultural and cropping practices; or

16 (c) Any other measure or avoidance necessary for the prevention or control of water
17 pollution of the waters of the state.

18 (3) No specific practice may be prohibited under this section unless the department has
19 a scientific basis for concluding that the practice is a factor in causing water quality stan-
20 dards to be exceeded.

21 (4) A landowner subject to the requirements of a plan may appeal specific actions re-
22 quired of that landowner by the department to carry out a plan. The department shall es-
23 tablish by rule a procedure and criteria for the appeal process.

24 SECTION 6. After making a reasonable attempt to notify the landowner, the State De-
25 partment of Agriculture or a designee of the department may go upon any lands within the
26 area subject to a water quality management plan for the purpose of determining:

27 (1) Those actions that may be required of landowners under sections 2 to 13 of this 1993
28 Act; and

29 (2) Whether the landowner is carrying out the required actions.

30 SECTION 7. Upon finding that a landowner in an area subject to a water quality man-
31 agement plan has failed to perform actions required by the plan, the State Department of
32 Agriculture shall notify the landowner and direct the landowner to perform the work or take
33 any other actions necessary to bring the condition of the subject lands into compliance with
34 the plan within a reasonable period of time. In all cases, the legal owner of the property shall
35 also be notified, prior to the assessment of any civil penalty.

36 SECTION 8. (1) In addition to any other liability or penalty provided by law, the State
37 Department of Agriculture may impose a civil penalty on a landowner in an agricultural or
38 rural area subject to a water quality management plan for failure to comply with the re-
39 quirements of the plan including rules to implement the plan.

40 (a) The civil penalty for the first violation shall not exceed \$2,500. Upon a second vio-
41 lation, the department may impose a civil penalty of not more than \$10,000.

42 (b) For the purposes of this section, each day of violation continuing after the period of
43 time for correction set by the department shall be considered a separate violation unless the
44 department finds that a different period of time is more appropriate to describe a specific
45 violation event.

1 (2) A civil penalty may not be imposed for the first violation under this section unless
2 the department has notified the person of the violation and prescribed a reasonable time for
3 the elimination of the violation:

4 (a) Not to exceed 30 days after the first notice of a violation; or

5 (b) If the violation requires more than 30 days to correct, the period of time specified in
6 a plan of correction found acceptable to the department.

7 (3) The person to whom the notice is addressed shall have 10 days from the date of re-
8 ceipt of the notice in which to make written application for a hearing before the department.

9 (4) In imposing a penalty under this section, the department shall consider the following
10 factors:

11 (a) The past history of the person incurring a penalty in taking all feasible steps or pro-
12 cedures necessary or appropriate to correct a violation.

13 (b) Any prior violations of rules, regulations or statutes pertaining to a water quality
14 management plan.

15 (c) The gravity and magnitude of the violation.

16 (d) Whether the violation was repeated or continuous.

17 (e) Whether the cause of the violation was an unavoidable accident, negligence or an in-
18 tentional act.

19 (f) The violator's efforts to correct the violation.

20 (g) The immediacy and extent to which the violation threatens the public health or
21 safety.

22 (5) No notice of violation or period to comply shall be required under subsection (2) of
23 this section if:

24 (a) The violation is intentional; or

25 (b) The landowner has received a previous notice of the same or similar violation.

26 (6) Any civil penalty recovered under this section shall be deposited into a special sub-
27 account in the Department of Agriculture Service Fund. Moneys in the subaccount are con-
28 tinuously appropriated to the department to be used for educational programs on water
29 quality management and to provide funding for water quality management demonstration
30 projects.

31 SECTION 9. The State Department of Agriculture, in consultation with the State Board
32 of Agriculture, may establish and collect fees from landowners subject to the requirements
33 of a water quality management plan adopted under section 3 of this 1993 Act. The fees shall
34 not exceed the total cost of developing and carrying out the plan and shall not exceed \$200
35 annually per landowner. Any fees received by the department pursuant to this section shall
36 be deposited in the State Treasury to the credit of the Department of Agriculture Service
37 Fund. Such moneys are continuously appropriated to the department for the purpose of im-
38 plementing sections 2 to 13 of this 1993 Act.

39 SECTION 10. It is the intention of the Legislative Assembly that plans developed under
40 sections 2 to 13 of this 1993 Act involve soil and water conservation districts as local man-
41 agement agencies to the fullest extent practical, consistent with the timely and effective
42 implementation of these plans.

43 SECTION 11. The State Department of Agriculture may enter into agreements with any
44 agency of this state, including but not limited to a soil and water conservation district, or
45 with any agency of the Federal Government, for the purposes of carrying out the provisions

1 of sections 2 to 13 of this 1993 Act including the development of a plan.

2 **SECTION 12.** The provisions of sections 2 to 13 of this 1993 Act shall not apply to any
3 forest practice conducted on forestland as defined in ORS 527.620.

4 **SECTION 13.** (1) All agricultural activities conducted on agricultural lands within the
5 boundaries of an area subject to a water quality management plan shall be conducted in full
6 compliance with the plan and rules implementing the plan and with all the rules and stan-
7 dards of the Environmental Quality Commission relating to water pollution control. In addi-
8 tion to any other remedy provided by law, any violation of those rules or standards shall be
9 subject to all remedies and sanctions available to the Department of Environmental Quality
10 or the Environmental Quality Commission.

11 (2) Any civil penalty imposed under section 8 of this 1993 Act shall be reduced by the
12 amount of any civil penalty imposed by the Environmental Quality Commission or the De-
13 partment of Environmental Quality for violations of water quality rules or standards, if the
14 latter penalties are imposed on the same person and are based on the same violation.

15 (3) The State Department of Agriculture and the State Board of Agriculture shall consult
16 with the Department of Environmental Quality or the Environmental Quality Commission in
17 the adoption and review of water quality management plans.

18 (4)(a) The Environmental Quality Commission may petition the department for a review
19 of part or all of any water quality management plan and rules implementing the plan. The
20 petition must allege with reasonable specificity that the plan or its content is not adequate
21 to achieve compliance with applicable state and federal water quality standards.

22 (b) The department, in consultation with the board, shall complete its review of a petition
23 submitted under paragraph (a) of this subsection within 90 days of the date of the filing of
24 the petition for review. The department shall not terminate the review without the concu-
25 rrence of the Environmental Quality Commission unless the department initiates revisions to
26 the water quality management plan that address the issues raised by the Environmental
27 Quality Commission. Any revisions adopted in response to a petition by the Environmental
28 Quality Commission shall be adopted not later than two years from the date the Environ-
29 mental Quality Commission submits the petition, unless the department, with the concu-
30 rrence of the Environmental Quality Commission, finds special circumstances require
31 additional time.

32 (5) A water quality management plan and rules implementing the plan that pertain to a
33 ground water management area shall be subject to the coordination requirements of ORS
34 536.108.

35 **SECTION 14.** Sections 2, 3, 4, 5 and 6, chapter 908, Oregon Laws 1991, are repealed.
36

**MILLER, NASH, WIENER,
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LYNNE A. PERRY

July 19, 1993

VIA MESSENGER

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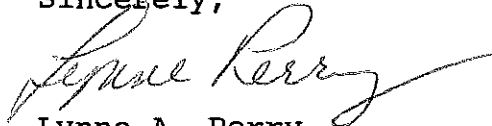
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Dear Commissioners:

I have enclosed Anodizing Inc.'s rebuttal to DEQ's report on Anodizing's variance request. Wendy Sims of DEQ's Air Quality Division suggested that it be delivered to you directly. The variance request is scheduled to be heard as agenda item D at the July 23, 1993, EQC meeting.

Sincerely,


Lynne A. Perry

ANODIZING INC.
Rebuttal to DEQ Report on Variance Request

I. INTRODUCTION.

Anodizing Inc.'s ("AI") variance request was initially addressed at the December 11, 1992, EQC meeting. At that time, the Commissioners identified two key issues of concern:

1. Did the Commission have the authority to grant the variance requested?

2. If so, should the Commission grant the variance requested?

At the close of the December meeting, AI elected to withdraw its application pending a determination as to whether the Commission had the authority to grant the variance. The parties now agree that the Commission does have such authority. The issue now before the Commission is whether AI's variance request should be granted.

II. THE VARIANCE SHOULD BE GRANTED.

ORS 468A.075 provides that the EQC shall grant a variance if it finds that strict compliance with a rule or standard is inappropriate. Grant of a variance is called for if the EQC determines "that strict compliance with [a] rule or standard is inappropriate because * * * special circumstances render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause." ORS 468A.075(1)(b). In this instance, special circumstances exist that render strict compliance with certain New Source Review ("NSR") requirements unreasonable and impractical.

The NSR rules require sources that emit or have the potential to emit more than 40 tons of VOCs per year to install LAER (Lowest Achievable Emission Rate) technology. As DEQ recognizes, "the NSR question only arises because the company is not using RACT complying coatings." (DEQ Attachment A, p. A2). High performance architectural coatings that meet the RACT limits are not currently available, however. (DEQ Attachment A, p. A1). The option to high performance coatings would be control technologies.

AI estimates that the cost of installing LAER technology at its facility will be between \$750,000 and \$930,000. AI is confident, however, that technological improvements in the coatings available to AI over the next five years will dramatically improve the emissions performance of those coatings.

AI anticipates that these technological improvements will make installation of LAER control technology unnecessary by the end of the short variance period.

Moreover, AI estimates that demand for its products will fall by approximately 20 percent per year over the next four years (or 80 percent) as its market-base shifts to vinyl coated windows. The consequent decrease in production would reduce AI's VOC emissions below the 40 ton NSR threshold.

AI is not seeking a temporary variance simply because the costs of the control technology called for under the NSR rules are high. AI is seeking a temporary variance because the cost of the control technology called for under the NSR rules is unreasonable and installation impractical given the short period of time during which the control technology would be needed. The short time frame in which LAER technology would be needed constitutes a special circumstance such that granting a temporary variance is appropriate.

Approval of this variance request is also consistent with the theory behind the Innovative Response Policy approved by the EQC just last month. By this variance procedure, the Commission has been given the regulatory discretion or flexibility to achieve an environmentally beneficial outcome, while at the same time taking into account the equities of the situation, where as here, a standard rule is burdensome to the point of unreasonableness when applied to a particular facility or industry.

III. REBUTTAL TO DEQ REPORT.

A. RACT Revision.

DEQ's argument regarding the relationship between the RACT revision and the NSR variance request clouds the issue. DEQ specifically states in its report that:

1. High performance architectural coatings that satisfy the RACT rule are not currently available.
2. Control equipment, which is the alternative to high performance coatings, is so expensive as to be "excessive" for purposes of RACT. (DEQ Attachment A, p. A1).

As a result, DEQ supports the request for a SIP revision to relax the RACT limit and notes that "unless otherwise directed, the Department would proceed with a SIP revision on the RACT rule." (DEQ Report, p. 4 and Attachment A, p. A1). The confusion begins, however, when DEQ offers three scenarios that use this same RACT rule to oppose AI's NSR variance request. (See DEQ Attachment A, pp. A1-A2.)

Scenario 1: DEQ asserts that a RACT revision would be unnecessary if the NSR variance request is denied. DEQ notes that the LAER control equipment required under the new source review rules would satisfy RACT. This begs the question; if the control equipment could be practically installed, no variance request would be necessary. The cost of LAER, particularly in light of the short time frame in which it will be necessary, is as impractical as requiring installation of control technology to achieve RACT.

DEQ's next two scenarios ignore DEQ's stated position with respect to the RACT revision:

Scenario 2: Even if EQC denies the NSR variance, it would not impact production levels because AI's coatings would not satisfy RACT. AI must (a) obtain a RACT rule relaxation or (b) install control equipment.

Scenario 3: Even if EQC grants the NSR variance, AI's coatings would not satisfy RACT. AI must (a) obtain a RACT rule relaxation or (b) install control equipment.

Given DEQ's stated position in support of the RACT rule relaxation, the scenarios that treat the RACT rule as a variable merely confuse the issue.

There are two more realistic scenarios that DEQ did not include in its report:

Scenario 4: The RACT rule relaxation already supported by DEQ is granted because (1) high performance coatings are not currently available and (2) the cost of control technologies is excessive. The NSR variance request is granted, allowing AI to increase emissions by only ten tons per year for a short interim period during which technological improvements in coatings and a shift in AI's market-base will make LAER unnecessary.

Scenario 5: The RACT rule relaxation already supported by DEQ is granted because (1) high performance coatings are currently unavailable and (2) the cost of control technologies is excessive. The NSR variance request is denied, AI is forced to constrain its production to levels emitting less than 40 tons per year at the AI facility. AI has the option of using the older, less efficient PCI facility or another new facility to the extent that expansion is needed.

B. Status of the Pacific Coatings, Inc. ("PCI") Permit.

AI has been pursuing this request for almost two and a half years. AI first met with representatives of DEQ to discuss this variance request on February 5, 1991, a full six months before PCI was shut down. Due to delays outside of AI's control, time has passed during which AI could have banked emission reduction credits for use off-site. Had AI banked emission

reduction credits from PCI in February 1991 (at the time it first met with DEQ), AI could have banked 18 tons per year for use at its AI facility.

It should be noted that of the two facilities, PCI is the older facility and is located in a heavily residential area. PCI has been the subject of a number of complaints. AI is the newer, more efficient facility. It is not located in a heavy residential area and has not had any air complaints since it began operating. AI made the environmentally sound decision to shift work from the PCI facility to use the full capacity at the newer, cleaner AI facility.

DEQ has acknowledged that because it delayed action on the PCI permit, a full one-year period for purposes of banking emission reduction credits for on-site use is still available to AI. (DEQ Attachment A, p. A2.) Equitable considerations compel the same conclusion with respect to emission reduction credits for use off-site.

Finally, DEQ notes in its report that the variance reaches the NSR requirements for installation of LAER technology, net air quality benefit, offsets, and an alternatives analysis. (DEQ Report p. 2.) In granting a variance that reaches offsets, the Commission would essentially moot the controversy over whether AI would be allowed to utilize emission reduction credits off-site.

C. Environmental Benefit.

DEQ has already acknowledged that AI could retain credit to emit up to 66.4 tons of VOCs per year at the PCI site. AI seeks to emit only ten additional tons per year from its newer, more efficient facility on a temporary basis. As an alternative to emitting up to 66.4 tons from the older, less efficient facility, the requested variance clearly achieves a net environmental benefit.

Without belaboring the point, DEQ's argument that the benefit to be achieved if the variance is granted is only 26.5 tons is unreasonable. Whether or not the PCI facility utilizes the full 66.4 tons per year in its PSEL, other sources (or AI itself) can begin new operations emitting up to 39.9 tons per year. Regardless of the method used, the benefit is still greater than the 10 tons requested.

D. Procedural Issues.

AI requests the EQC make a decision on the variance request now rather than after public hearing on the SIP revision. Given the length of time this variance has been pending, and the fact that both DEQ and AI have already presented their positions, the EQC's position should be clarified now.



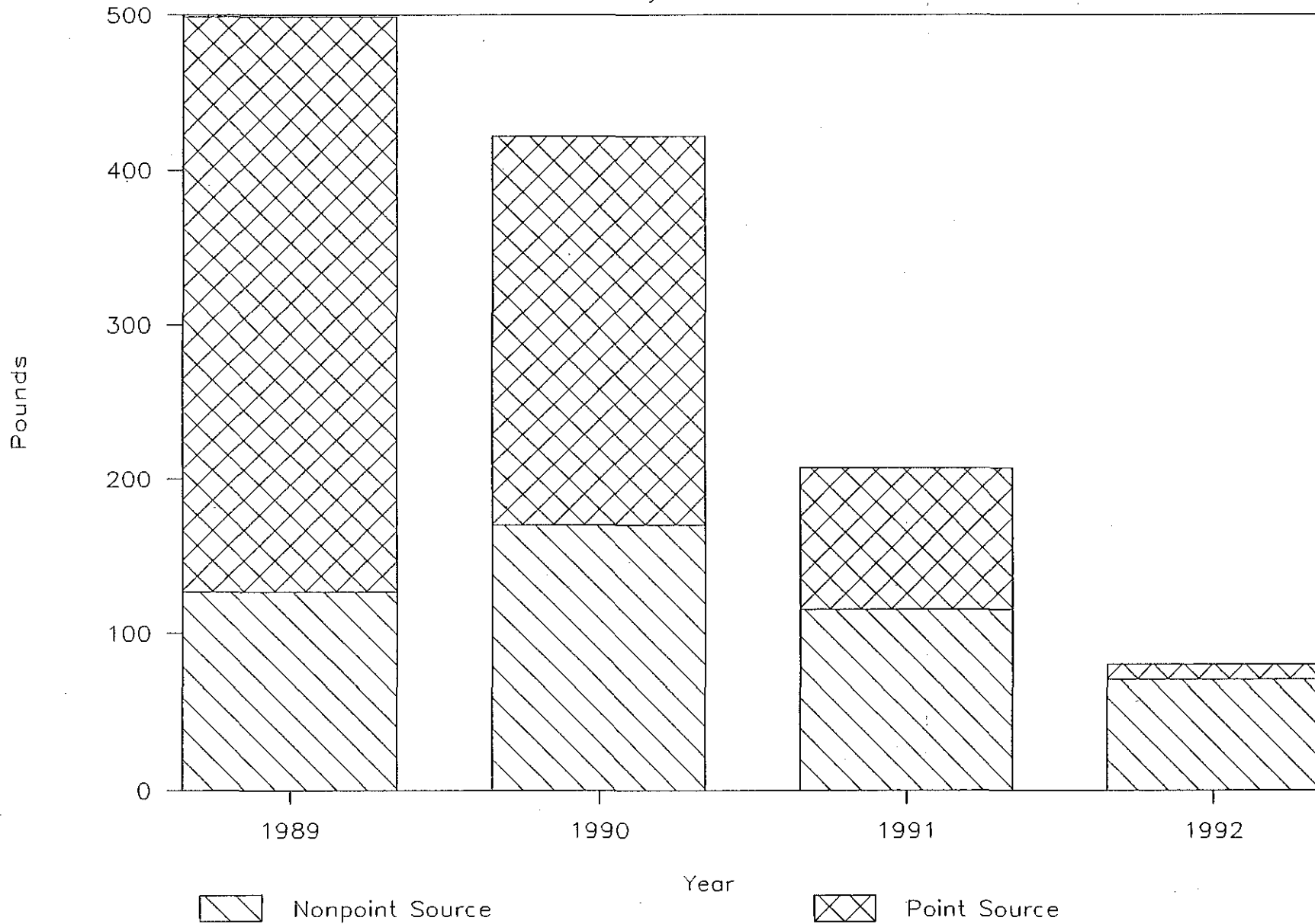
MONTHLY PHOSPHORUS CONCENTRATION

0.000 Compliance Point

.022-.035-.061 Measured Concentration
Monthly Medians
(minimum - mean - maximum)

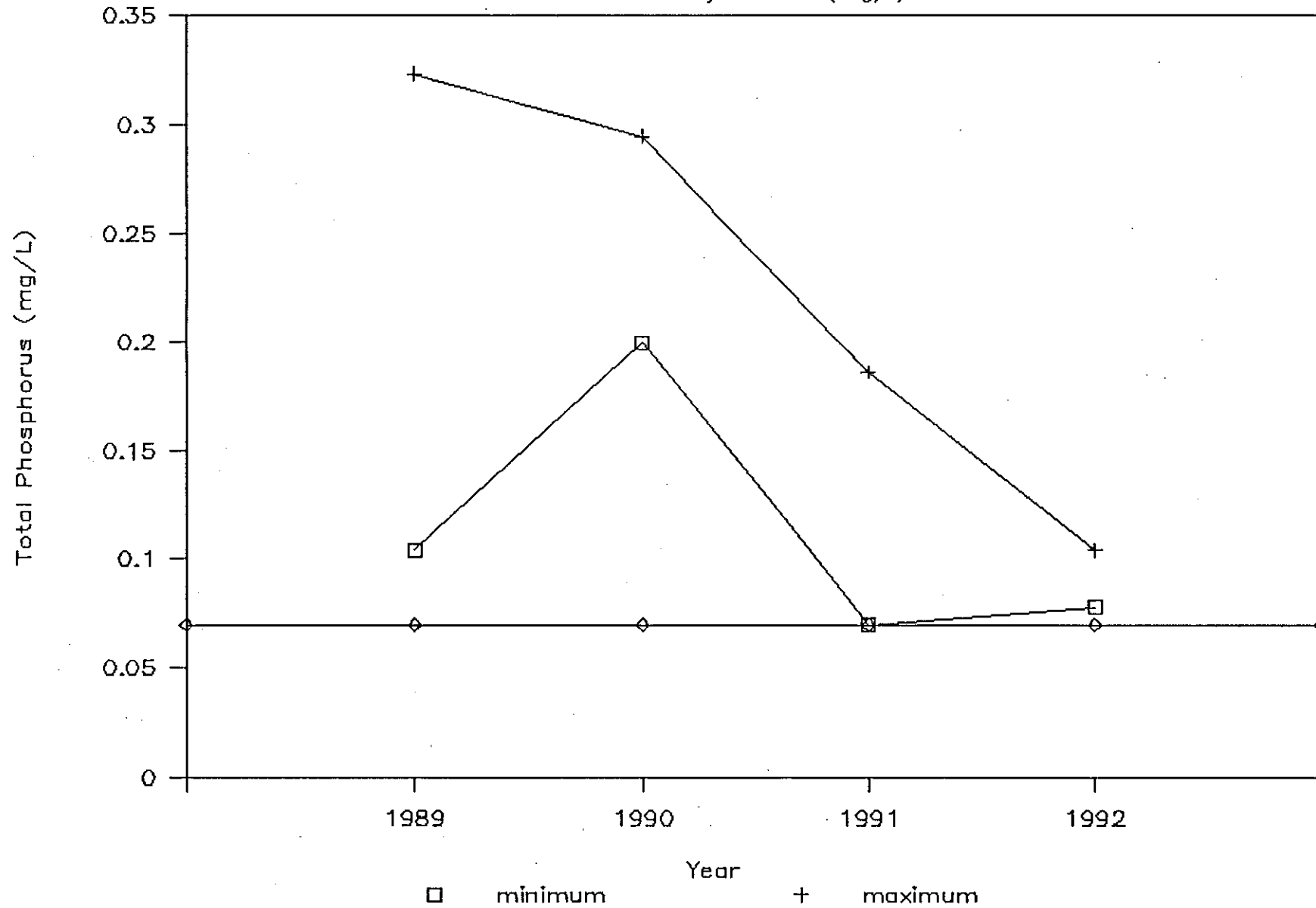
Total Phosphorus Load (median lb/day)

May to October

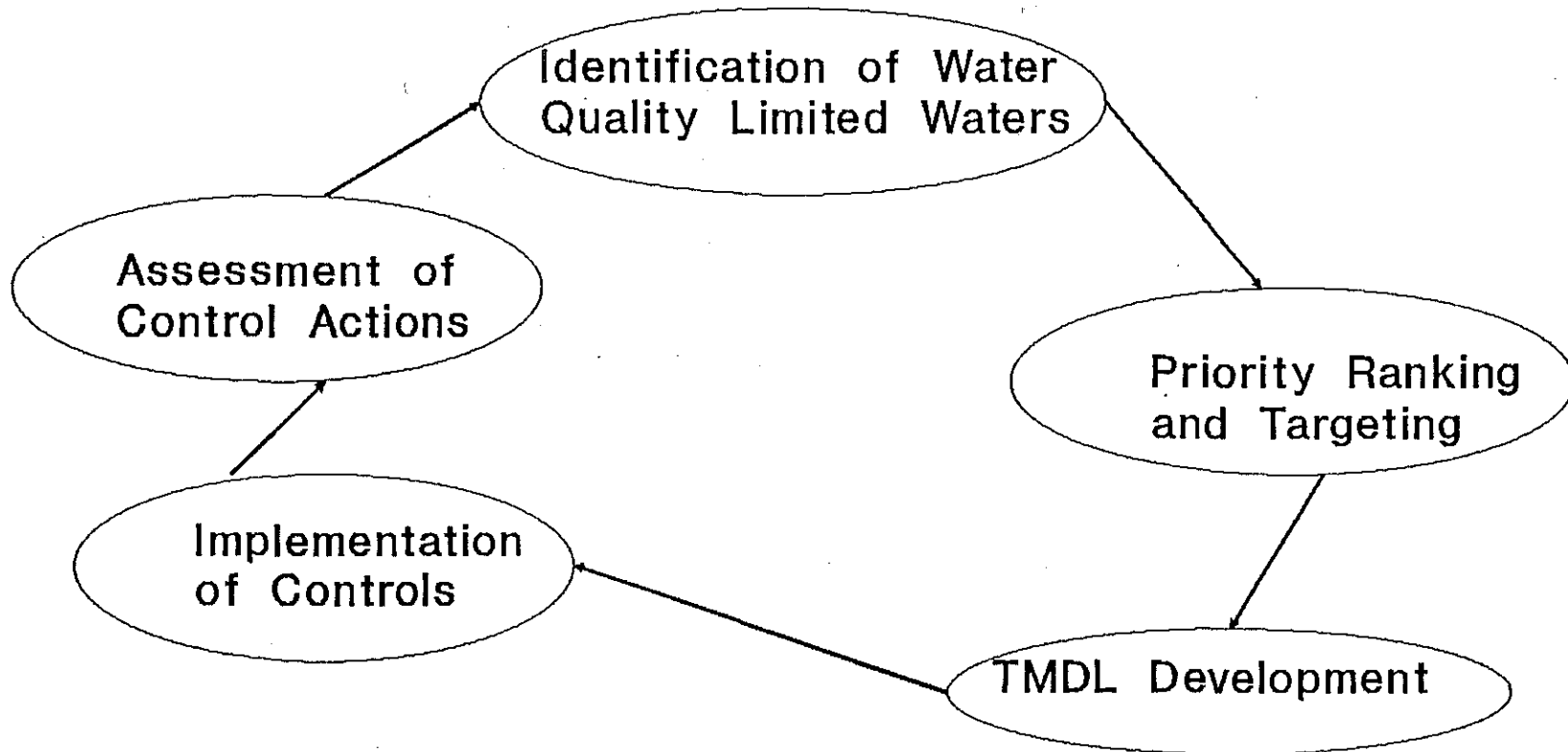


Stafford Road Total Phosphorus

Min-Max Monthly Median (mg/l)



Five Steps to the Water Quality Based Approach



OREGON DEPARTMENT OF FORESTRY
TUALATIN RIVER TMDL COMPLIANCE PROGRAM
Presentation to the Environmental Quality Commission
JULY 22, 1993

I. A Dynamic Forest Practices Program: Water Quality Management on Oregon's Private and State Forest Land.

1971 Oregon Forest Practices Act
1972 Initial Forest Practice Rules
1979 "208" Certification of rules as BMPs
1982 Landslide Prevention rules
1987 Forest Practices Act Amendments: HB 3396
1987 Riparian Management Area rules
1990 Board of Forestry Forum on Forest Practices
1991 Forest Practices Act Amendments: SB 1125
1993 Water Classification and Protection rules project
1993+ Forest Practices Strategic Plan Projects: Water Quality and Watershed Management Project; Monitoring Project; Studies - Forestry Effects on Anadromous Fisheries and Cumulative Effects; Stream Restoration Project; Landslide Prevention Project; Soil and Site Productivity Project; Application of Chemicals Project; Comprehensive Review of Remaining Rules Project

II. Response to Tualatin River Phosphorus TMDL: OSU Literature Study - "Phosphorus and Forest Streams: The Effects of Environmental Conditions and Management Activities".

Research has focused on sediment control. Few watershed-scale research programs have been undertaken to evaluate the relative success of sedimentation control forest practices in terms of in-stream phosphorus concentrations.

Forest harvesting case studies (BMP application unknown) generally show increased phosphorus concentrations to be relatively uncommon.

No systematic trend in downstream phosphorus concentrations has been noted in studies.

Phosphorus concentrations are highly variable. Standard deviations over several years in a given watershed may range to 50 ug/l or higher.

Background levels of total phosphorus found in studies of Pacific Northwest streams range from 5 to 90 ug/l.

III. Forestry's Water Sampling Program.

ODF began water sampling at three sites across the basin to determine phosphorus levels on forest land in 1989 and 1990.

With refined laboratory methods, monitoring was expanded in 1991 and 1992 to clarify the pattern of phosphorus concentrations in forest stream reaches across the basin.

ODF has collected 339 samples from forest streams since 1989. Testing expenditures by ODF for 1992 were approximately \$8,500. Laboratory work in 1989-91 was contributed by Unified Sewerage Agency.

IV. Forestry's Water Sampling Program Results.

P concentrations vary with time and among streams, but are fairly consistent longitudinally along forested reaches of each stream. P concentrations in headwater springs consistently show that groundwater is the major influence on P concentrations in forest streams.

Mean total P concentrations occur in three categories among the forested watersheds monitored (refer to attached map):

- a) 15-30 ug/l Upper Tualatin River, Lee Creek, West Fork Dairy Creek, Murtaugh Creek, upper East Fork Dairy, and McKay Creek;
- b) 40-55 ug/l Clear Creek and Gales Creek; and
- c) 55-65 ug/l Bateman Creek, Coffee Creek, Beaver Creek, Burgholzer Creek, Sadd Creek, and lower East Fork Dairy Creek.

P concentrations do not appear to correlate with recent clearcutting or the extent of forest harvesting in a stream's watershed.

Here are some examples. Harvesting within the last ten years occurs in all the 15-30 ug/l watersheds. Harvesting has not occurred recently in Gales Creek subbasin, which is in the 40-55 ug/l range. Very recent harvesting in the Coffee, Burgholzer, and McKay Creeks has not elevated P concentrations. All these streams have the same or higher P concentrations above recent harvesting and in spring water compared to P concentrations downstream of the clearcutting. Harvesting has not occurred recently in Sadd Creek and lower East Fork Dairy Creek, which are in the 55-65 ug/l category.

P concentrations show noticeable consistency with the underlying geologic rock units in the watersheds monitored. (Refer to attached graph of 1991's data compared to rock types.

Winter 1992 sampling following heavy precipitation shows turbidities ranging around 2 NTU's. Any substantial sediment loads from forest lands would register much higher.

P concentrations on forest land in the Tualatin River basin appear to be background levels determined largely by the underlying geology. Current forest management BMPs are effective in controlling sedimentation and associated P loadings.

IV. The Forest Practices Program: A system of BMPs complete with educational, prevention, and enforcement capabilities will continue functioning to protect water quality in the Tualatin River basin.

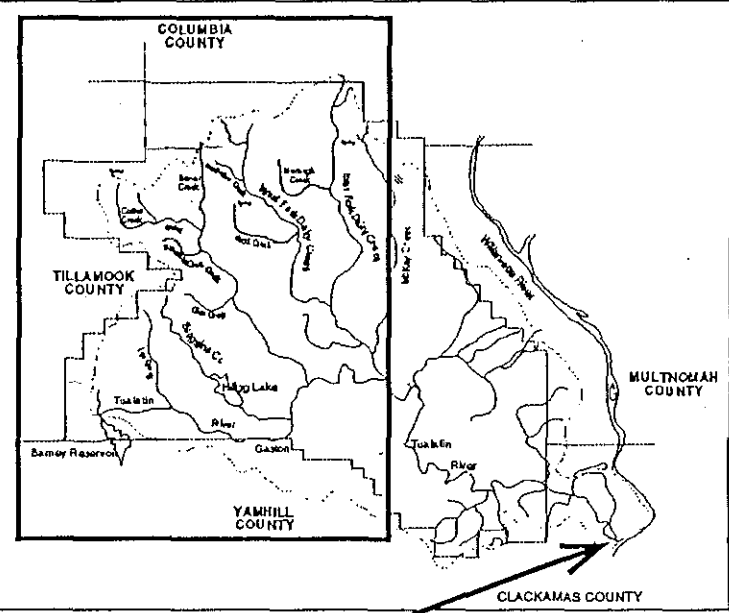
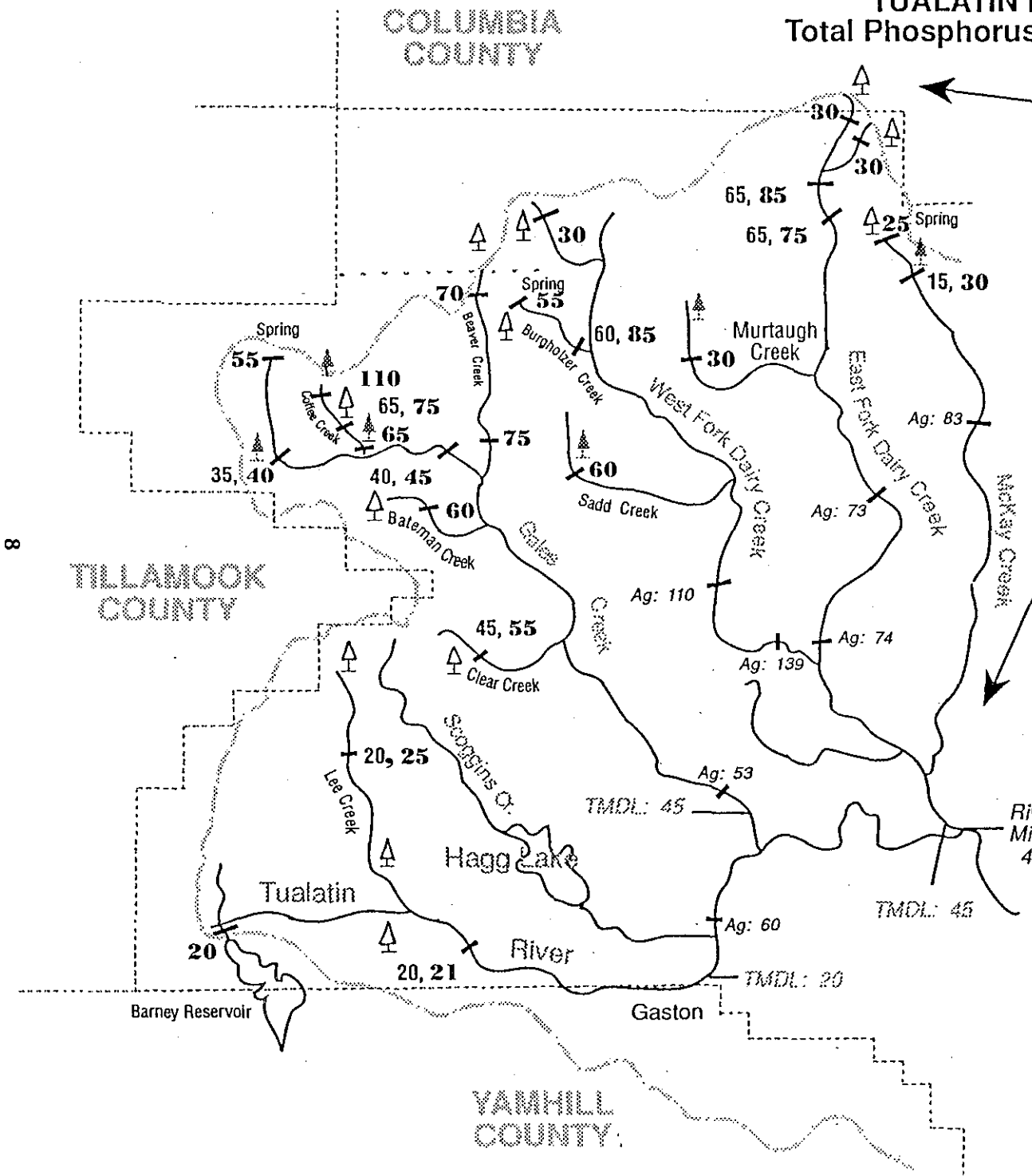
The Forest Grove District devotes approximately one FTE, a Forest Practices Forester, to administering the Forest Practices rules in the Tualatin River basin. Ongoing investments to maintain this program in the basin are about \$80,000 per year.

In greatly summarized form, the rules specify the following practices to protect water quality:

- * Keeping chemicals out of waters;
- * Keeping soil in stable locations, and out of streams;
- * Retaining near-natural water drainage paths around roads, landings, skid trails, and fire trails to maintain slope stability;
- * Retaining ground cover to filter overland water flows;
- * Protecting riparian management area vegetation around stream channels;
- * Protecting stream banks and beds from disturbance;
- * Limiting soil disturbance;
- * Stabilizing exposed soil surfaces by seeding, mulching, or riprapping;
- * Falling trees away from streams;
- * Maintaining a stable road surface;
- * Keeping activities above high water marks of streams; and
- * Keeping organic debris out of road and landing fills.

TUALATIN RIVER BASIN FOREST SITES

Total Phosphorus Monitoring Results 1991 and 1992



Basin-Wide
Total Maximum Daily Load (TMDL):
70 micrograms/liter

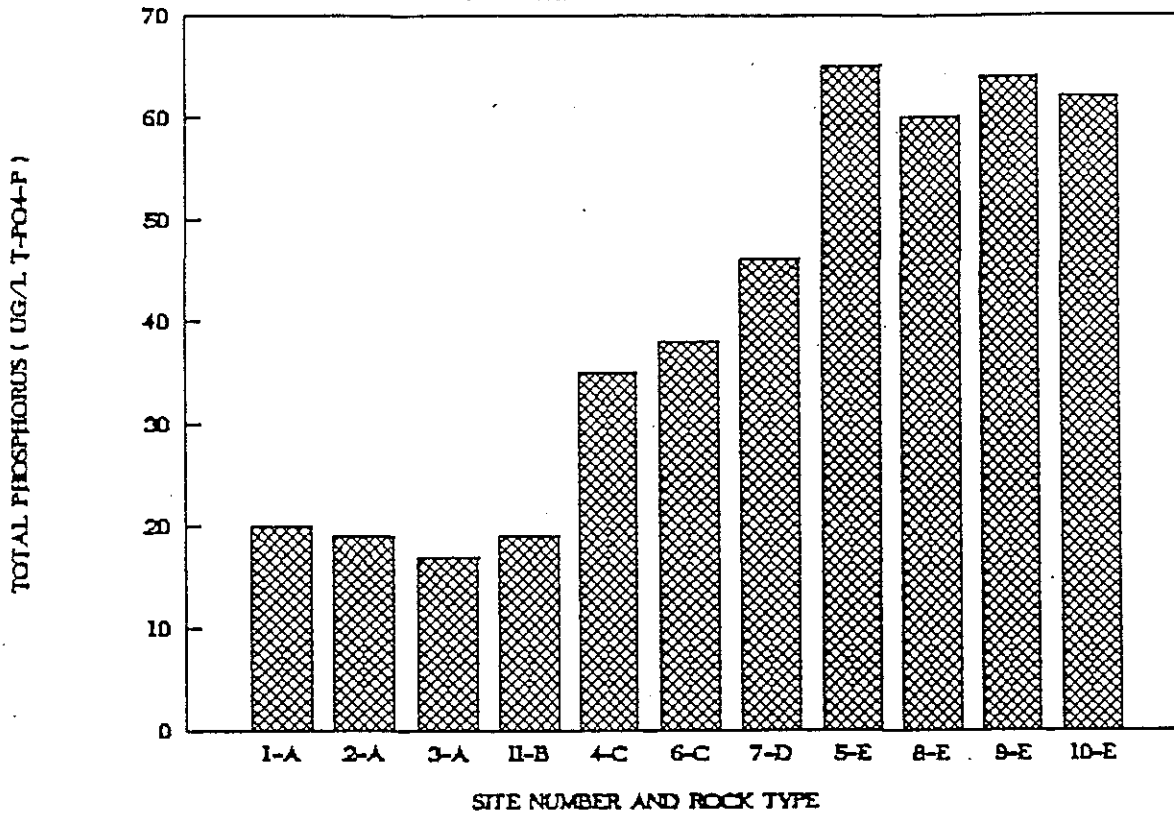
LEGEND

- 1991 Total Phosphorus (Forest)
- 1992 Total Phosphorus (Forest)
- Ag: - Total Phosphorus sampled by Department of Agriculture
- TMDL: - Total Maximum Daily Load Compliance Location
- △ - Some stands less than 10 years above site
- ▲ - Stands more than 10 years old above site

All Results In micrograms/liter (ug/l)

PRELIMINARY FINDINGS: GEOLOGY vs. T-PO4

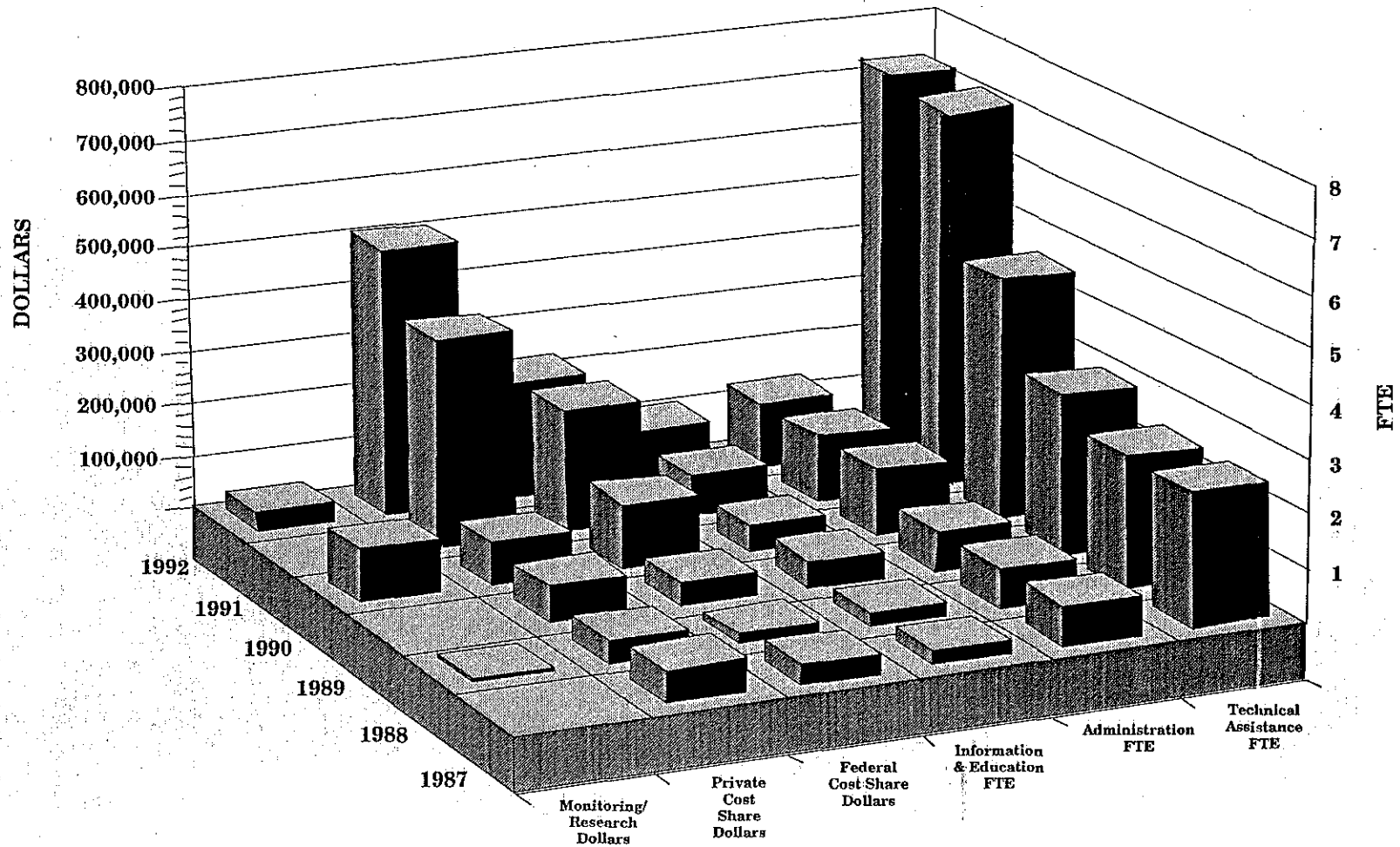
TUALATIN FORESTRY SITES 1991



PRELIMINARY FINDINGS FROM RECONNAISSANCE FIELD WORK

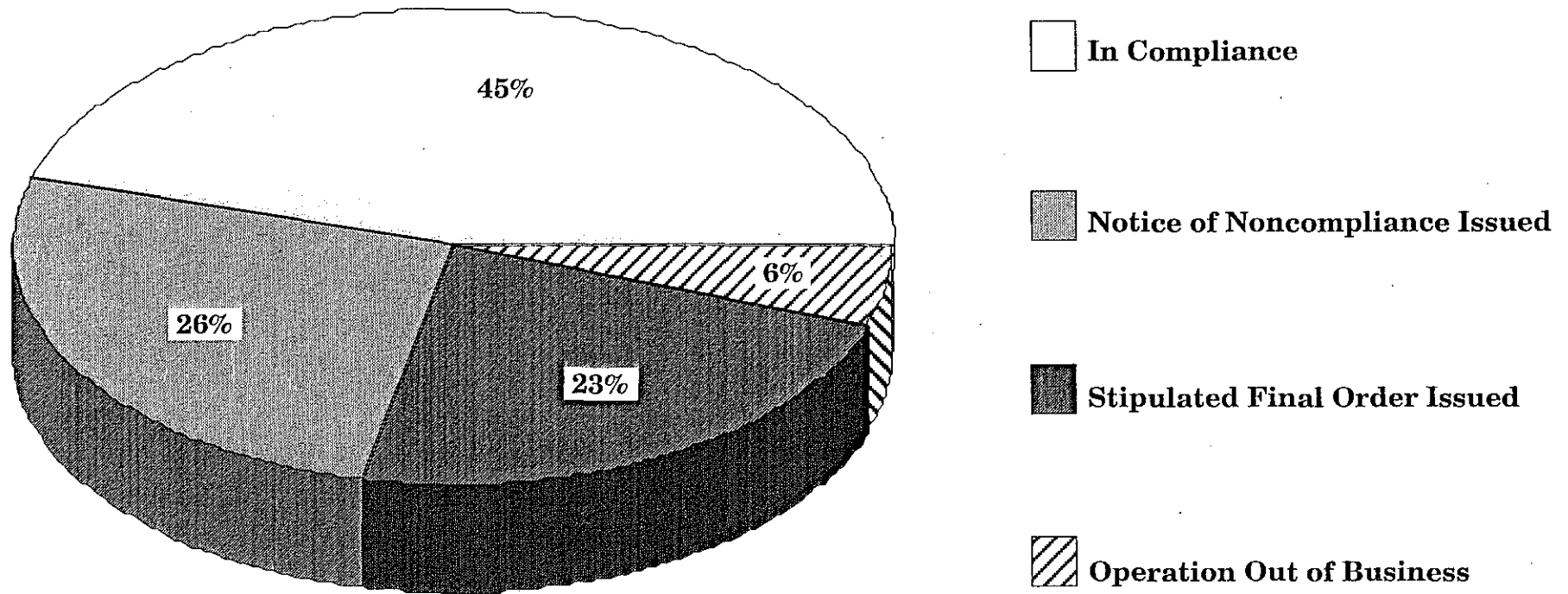
CODE	ROCK TYPE	TOTAL-P RANGE
A	BASALT: TERTIARY INTRUSIVE, MARINE (?)	17 - 19
B	BASALT: COLUMBIA RIVER	19
C	BASALT: TERRESTRIAL, TILLAMOOK VOLCANIC	35 - 38
D	BASALTIC SANDSTONE - SANDSTONE MIX: (Mapped as marine sediment. Field = basalt)	46
E	SEDIMENTARY: EOCENE SEQUENCE	60 - 65

Resources Allocated to Agricultural Water Quality Planning and Implementation in the Tualatin Basin



Tualatin Permitted CAFO Status, July 1993

53 Operations

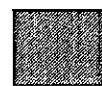
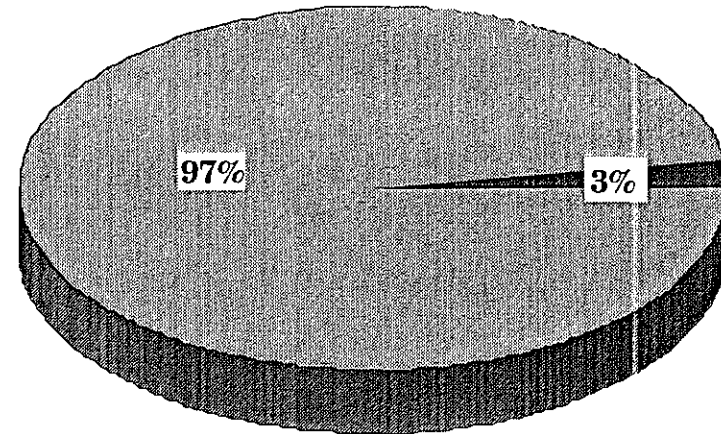
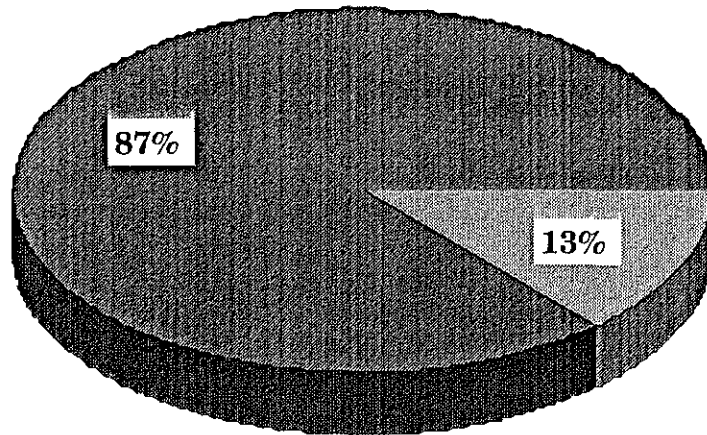


Tualatin Container Nursery Discharge Status

880 Acres

1991

1993



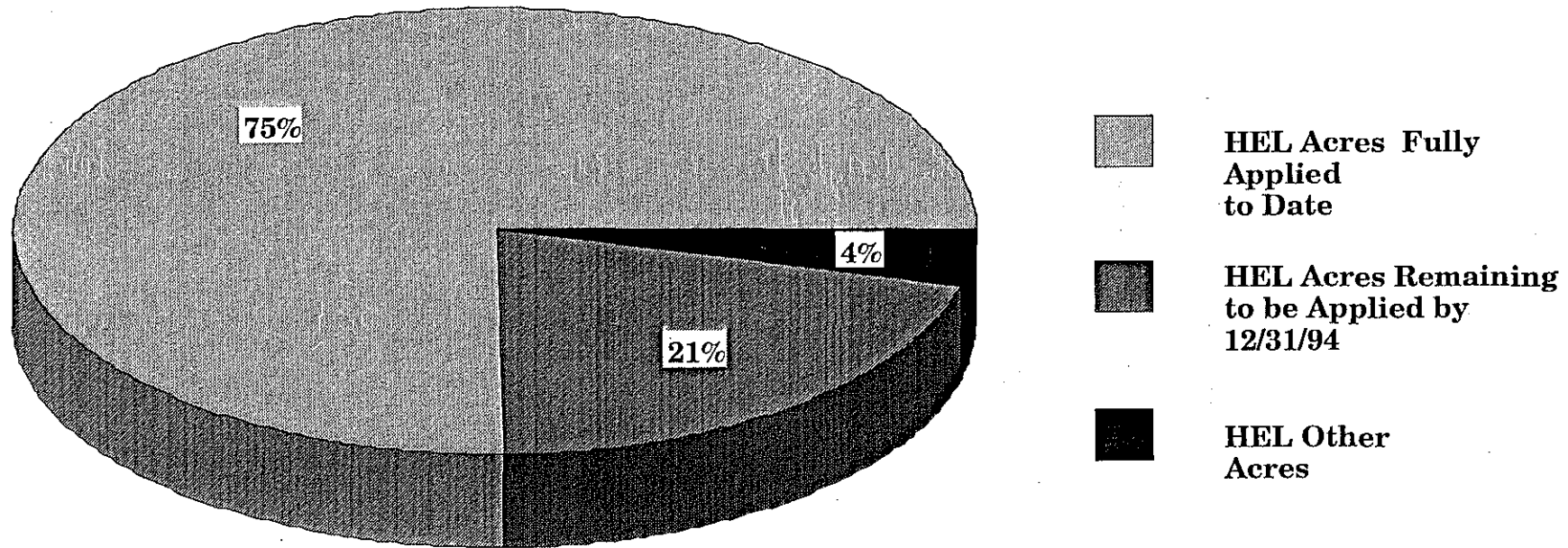
Discharge Acres



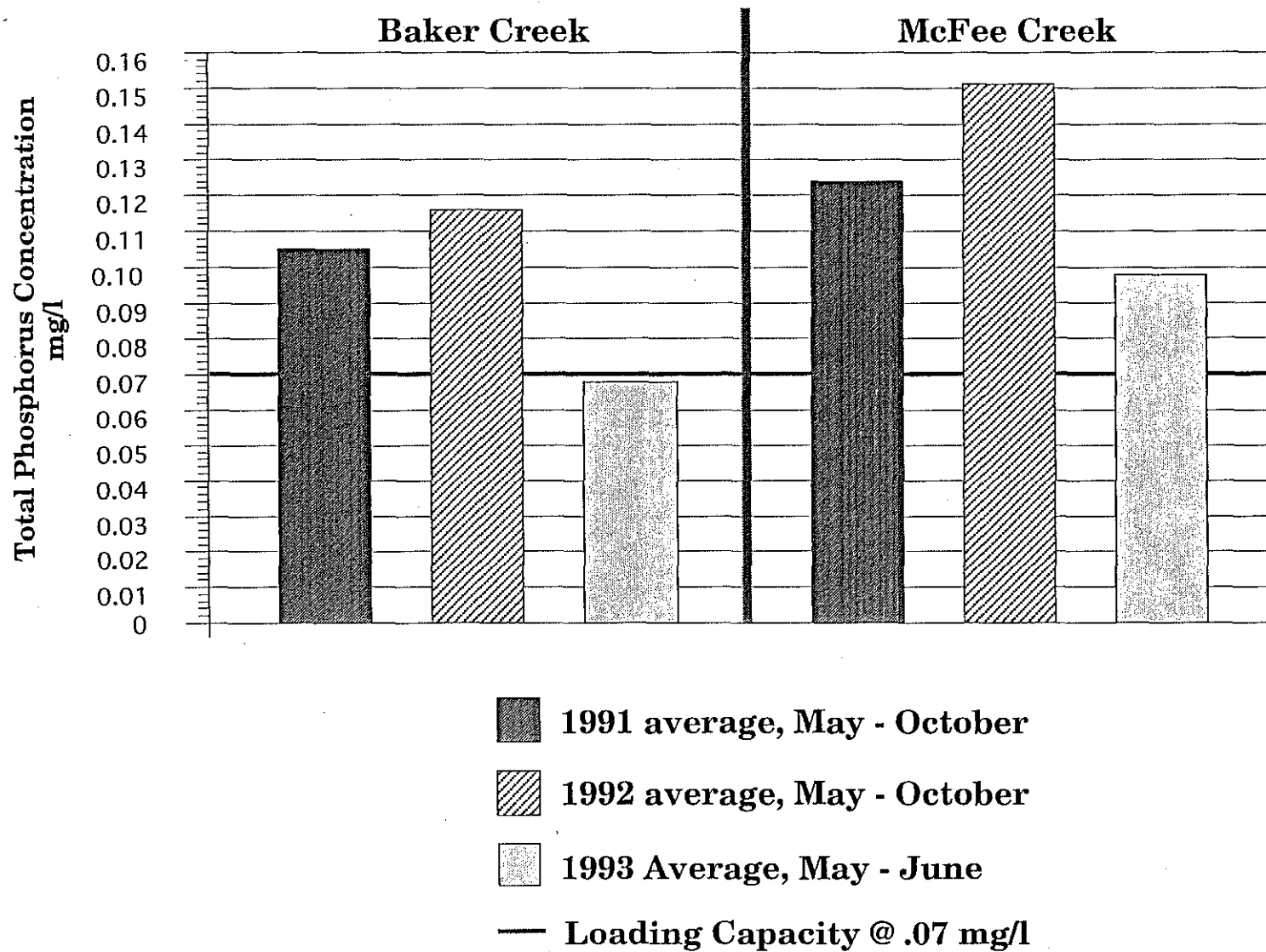
No Discharge Acres

Status of Required Erosion Control Practices on Highly Erodible Lands, Tualatin Basin

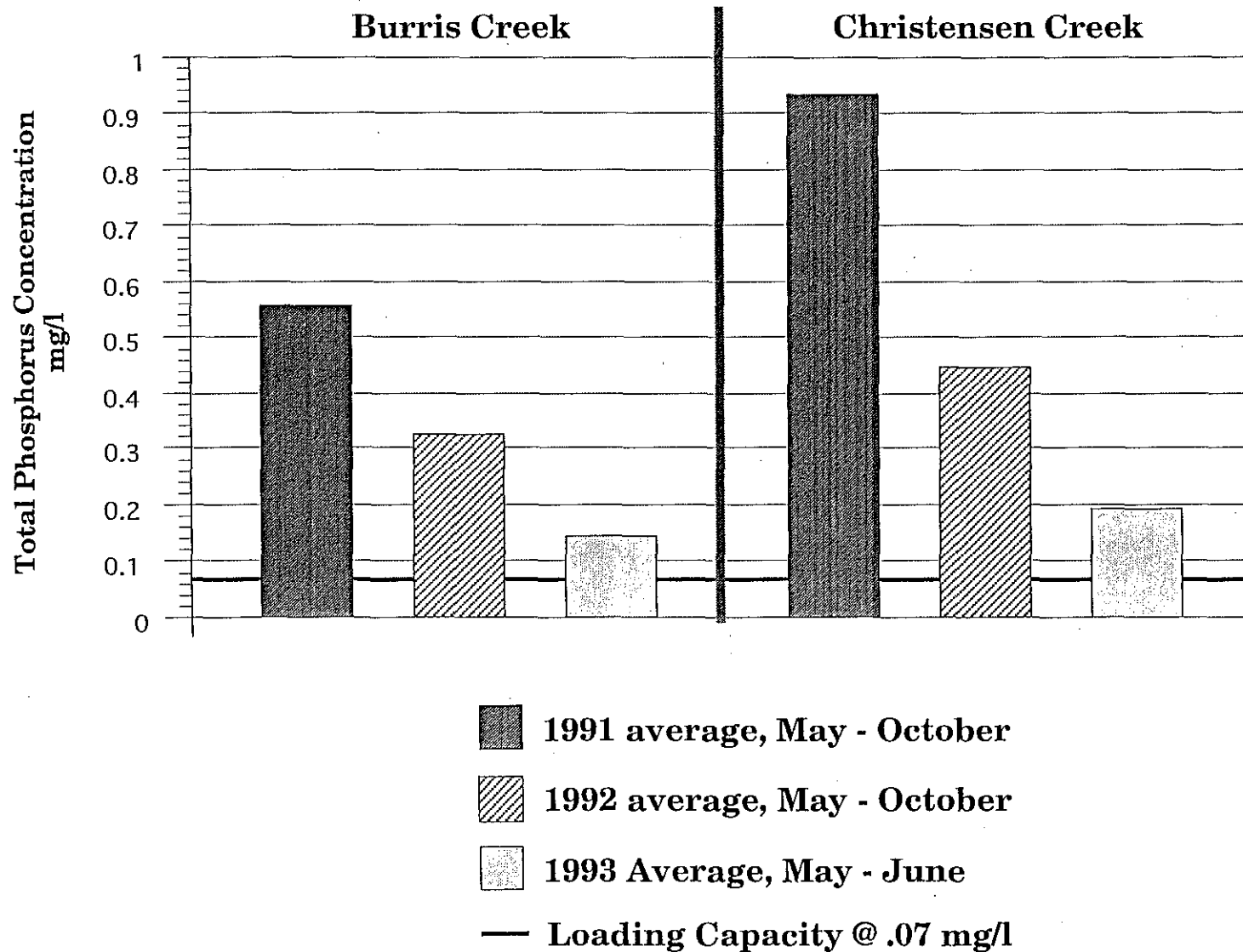
13,646 Acres



1991 - 1993 Total P Concentrations in Two Tualatin Tributaries



1991 - 1993 Total P Concentrations in Two Tributaries Undergoing Treatment



June workshop is for horse owners

**HORSE
AND
LAND USE
WORKSHOP**



JUNE 19, 1993

**Twilight tour explores
cover crop study at farms**

Small Grants Money
Awarded

*Cover Cropping Trial: Control of
Erosion and Potential Leaching of
Nitrates and Phosphates Following
Harvest of Vegetables.*

THE NEWS-TIMES, Wednesday, September 2, 1992

**Farmers invited to straw
mulching machine demo**

SEPTEMBER 18, 1992 CAPITAL PRESS

**Mechanical mulching system
debuts in Tualatin Basin**

PHOSPHORUS WORKSHOP
Monday, December 7, 1992

DECEMBER 11, 1992 CAPITAL PRESS

**Farmers go to school on
phosphorous impact**

DERALD J. BLEU
43900 SE MUSIC CAMP RD
SANDY, OREGON 97055
503-668-9211

Mr. William W. Weeseinger, Chair
Environmental Quality Commission
811 SW Sixth Ave.
Portland, Oregon

July 23, 1988

Re: Item E, July 23rd meeting
Permit for Guide Dogs for the Blind, Inc.

Dear Mr. Chairman and members of the Commission:

Thank you for allowing me to address this Commission and request a review of the permit issued to Guide Dogs for the Blind, Inc.

Your review should address two issues:

- A) The DEQ's procedures (including Hearings process) and interpretation of the Guide lines and Rules for issuing WPCF AND NPDES permits.
- B) The issuance of permits for kennel waste in systems designed for domestic waste without proof they can meet effluent quality.

A) The procedural process calls for a public informational meeting and/or a public HEARING. The term HEARING in and of itself imply a legal procedurc. The DEQ's interpretation of this Hearing process appears to be "a public information meeting" a process inconsistent with other State or County services, where the Hearings process has strict procedures under the Oregon Administrative Procedures Act.

The DEQ's procedures for issuing these permits appear inconsistent with the written rules for systems installed under domestic and general permits. Therefore, we must conclude that the rules are incomplete or the DEQ's interpretation of the rules is not consistent with the original intent of these rules.

For example: Div. 71 provide rules for administration of permits and Div 45 provide regulations for industrial permits. Under the rules for general permits (340-45-033) the requirement is made for issuance of a permit provided it can be shown that successful operation of a system exists which involve the same or similar types of operations for disposal of the same or similar types of waste. In other words, the intent is that the system has been proven for the types of waste being treated. Domestic waste from septic/absorption fields have strict guide lines and effluent standards: BOD₅ 200 mg/l and TSS 150 mg/l. Sand filters were designed for areas where soil conditions are less than adequate for the septic systems disposal. The output of a good working sand

filter is normally less than 20 mg/l BOD. Gravel filters are required to operate at the same levels as do sand filters.

These rules are designed to "adequately protect the environment". For the DEQ to allow mixing systems (septic/gravel filter/absorption fields) and not meet the output limits for each is unacceptable under the intent of the DEQ's guide lines.

B) Disposal of Dog waste

Mr. Hansens letter to Representative Ken Baker dated June 26, stated dog waste was acceptable in Municipalities sewer systems. This is one of the acceptable methods of disposing of dog waste. A sewer system is daily tested and treatment added.

While DOG is "mans best friend" and a gift of God to the Blind for mobility, it appears that dogs may be mans worst polluter. There is nothing in the literature about the disposal of dog waste because up until now we have not attempted its disposal except through sewer systems or through systems normally designed for animal waste management. It is the consensus of most people I have talked with in R & D and in State Health and Water Quality Departments that dog waste is very difficult to dispose of and it does not act like domestic waste.

Of specific interest are the States of Missouri and Ohio where Iams Research and Purina Research dispose of their waste. In Missouri, no dog waste is allowed in septic systems. They require kennels to be on public or private sewer systems or on a livestock lagoon treatment facility.

Iams house up to 100 dogs in their Ohio facility and they have their own sewer system to handle up to forty thousand gal. per day. Presently, their capacity is 20,000 gal per day. Like any sewer system, daily monitoring is required and chemical balancing is needed.

Purina's research facility in Missouri house between 800 and 1,000 dogs and cats. They have a two-lagoon treatment plant. Again, neither state allows dog waste in septic systems because "dog waste does not act like human waste and cannot be treated adequately in septic systems/absorption fields".

Doggie Doolie sells a dry composting treatment system for the home. Their experience shows dry composting works well with their chemicals. However, when wet the process is reduced or terminated. Other studies show that the anaerobic action, which takes place in gravel filters and in the soil is reduced in the presence of water. Therefore, quick draining soils should be more suitable to the anaerobic action than the slow draining soils.

There is insufficient time in this five minutes to go into much detail about what is and is not known about disposal of dog waste. Research is definitely needed for developing a system for disposing

dog waste before we add more untried septic systems in this State. Especially on the Guide Dog Site in Borling situated on a knoll at the origin of streams flowing into the Clackamas River, the water supply for many cities.

In Oregon, we are increasing the use of septic systems for disposing of dog waste. Mr. Hansen lists several kennels using septic systems for the purpose and indicates there are "no problems". However, none have been tested for the waste stream output insuring they meet DEQ standards.

To our knowledge, the Coos Bay Animal Shelter is the only such system found in the United States that has been tested. The system works, however, it does not meet DEQ minimum limits. The output for the septic tank and the gravel filter are both substantially over DEQ limits. Therefore, I would call this system a failure. We must also conclude from the Coos Bay system that all of the septic systems are suspect and may not meet State DEQ limits.

Dr. Jantrania from the National Small Flows Clearing house recommends a research project to develop a suitable system for kennel waste. The states of Missouri and Ohio would also like to know of a workable system for their use. They do not allow untried system, yet Oregon appears to encourage this development on a project level.

Mr. Chairman, I encourage you and the Commission to review the policies and recommend discontinuance of approving kennel waste in septic systems until a proven system is developed under acceptable research practices.

Respectfully



Derald J. Bleu

Derald J. Bleu

Urban Streams Council

a program of
The **Wetlands** Conservancy

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
JUL 20 1993

OFFICE OF THE DIRECTOR
July 18, 1993

600 NORTHEAST GRAND AVENUE
PORTLAND, OREGON 97232 2736

Commissioner Gretchen Kafoury
City Hall
1220 SW Fifth Avenue
Portland, OR 97204

IONAL SERVICES



Dear Commissioner Kafoury,

I received a copy of your letter to Bill Montgomery and I assume you received mine as well. I wanted to take issue with your position that "we have been unable to clearly link the proposed improvements in water quality with scientifically verifiable health measures. We are being forced to spend money to clean up the river without being able to document its beneficial impact." You then go on to state that the only reason we are engaging in the clean up is due to state and federal regulations and that the clean up may not be a high priority for our citizens or even a high environmental priority.

Although we are in agreement with a large portion of what has come out of the CSO project to date, I disagree strongly with your apparent assumption that cleaning up the CSO's to the 85% level will necessarily be adequate. In fact, from your letter one might assume that you question the value of cleaning up any of the CSO problem since you state that we "know intuitively that we should not be dumping our sewage in the river, but...science does not permit us to demonstrate the health risks to humans or wildlife in a way that makes the improvements...meaningful to the general public." You state nowhere in your letter to Mr. Montgomery that you agree with any level of clean up of CSO's. Is that accurate? Furthermore, you make no mention whatsoever of the need to clean up all CSO's from the Columbia Slough. Nowhere in your letter do you acknowledge that the Slough is so filthy that an aggressive program equal to the SFO will be undertaken on the Slough. What is your position on the Slough? From your letter I would conclude that you do not agree with the SFO approach on the Slough, yet that is what BES staff and the CRC recommended.

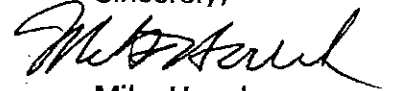
I would like to remind you that there are issues beside potential bacterial impacts on humans. As you know, all kinds of toxic compounds enter the Columbia Slough and Willamette River in the CSO mix. There is ample scientific evidence to link these compounds with deleterious impacts on humans and wildlife, not to mention fish in these waterbodies, especially the Columbia Slough.

In my opinion, your letter to Mr. Montgomery is too simplistic with respect to the CSO issue and simply urges him to continue his opposition since no benefits can be demonstrated. That is simply not true. My position is it may well be the case that achieving an 85% reduction of CSO's will protect the beneficial uses of the **Willamette River**, but that we should decide that as part of the negotiation process with EQC and as we collect more data. There is no question that we need to remove all CSO's from the Slough and I cannot imagine that the EQC would allow the City to avoid that action. I think it is important for the City of Portland to enter into



discussions with EQC in good faith that the City will do whatever is necessary to clean up the Willamette River. As I have stated on numerous occasions, and in memos to the EQC as well, I don't want to see the City of Portland spend inordinate amounts of money cleaning up the CSO's in the Willamette, thereby eliminating spending in the Willamette's tributaries. I will support the City's efforts to negotiate a level of CSO cleanup that is both environmentally and fiscally responsible. I am not in a position to pre-judge that an 85% level, or lower, is acceptable and I don't know on what basis you have taken that position.

Sincerely,



Mike Houck

TUALATIN RIVER WATCH



Unified Sewerage Agency
155 N. First Avenue, Suite 270
Hillsboro, OR 97124
(503) 648-8621

JULY 1993

USA Freezes Sewer Rate

Healthier river pays off for ratepayers

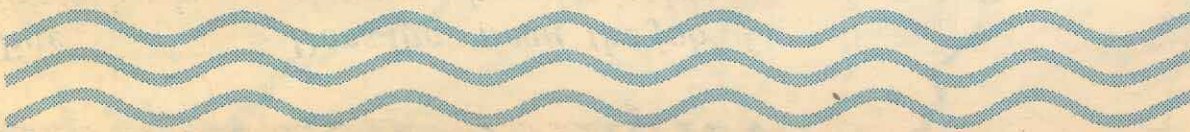
The public's investment in sewage treatment is paying off—not only for the health of the Tualatin River, but for USA Ratepayers as well.

For the first time in six years, USA will not raise sewer rates or stormwater fees for 1993-94. In fact, the Agency's 1993-94 budget is \$115 million less than the current year.

The Agency is able to avoid rate increases because research from the U.S. Geological Survey (USGS) shows that water released from USA's newly improved sewage treatment plants is meeting or exceeding strict new federal and state standards.

These findings have allowed USA to reduce its capital improvement requirements, saving ratepayers millions of dollars. In essence, the treatment facility construction projects of the Tualatin River Cleanup Program have been completed.

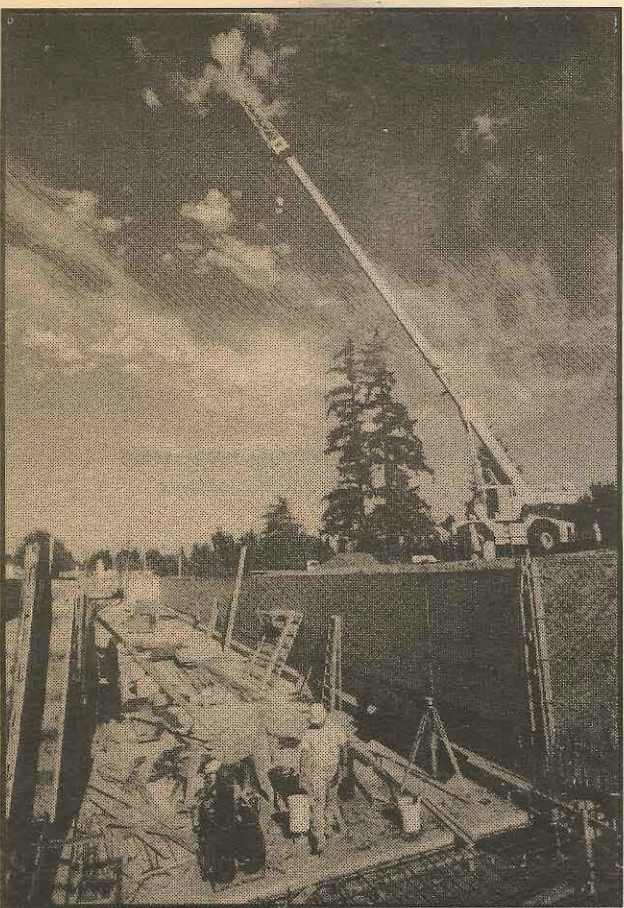
In addition, USA recently refinanced virtually all of its outstanding debt, significantly reducing debt payments during the next three fiscal years. This contributed to the Agency's strong financial position, and the decision to freeze rates for 1993-94.



Major Construction Complete

Sanitary systems on-line Sewage cleaned to highest levels

Washington County is ahead of most communities in river cleanup efforts. The wastewater released into the Tualatin River from USA's treatment plants is cleaned to the highest standards in the nation. The substantial progress that has been made thus far will greatly reduce the potential for large future cleanup efforts and associated rate increases.



Does that mean the job of cleaning the river is done?

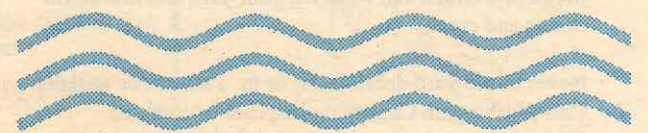
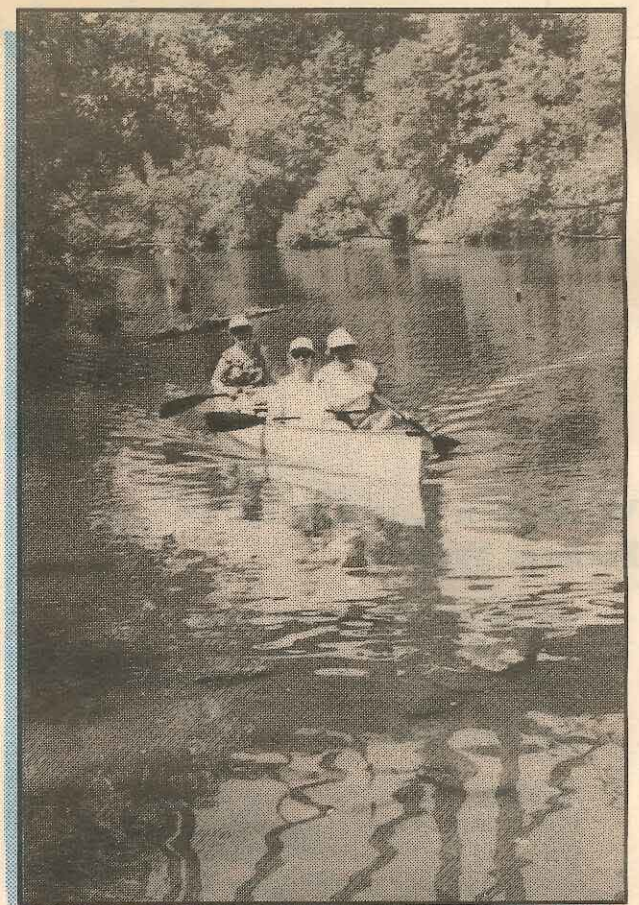
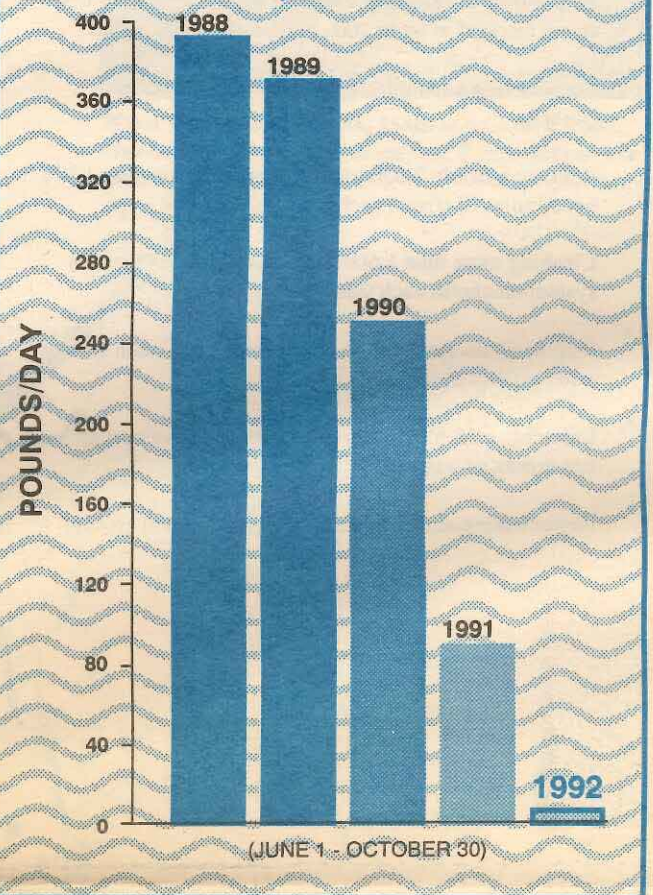
Not at all. Although wastewater generated by homes and business is cleaned to the highest standards before being released to the Tualatin River, the job of protecting the river is only partially done. "USA's treatment plants have done their part; the effluent can't get any cleaner," says Dennis Lynch of the U.S. Geological Survey (USGS). "Now it's up to the rest of the sources to do their part."

The "rest of the sources" are the diffuse, "nonpoint" sources of pollution which includes urban runoff from streets, driveways, parking lots and lawns. This contaminated runoff enters storm drains, creeks and groundwater, eventually flowing to the Tualatin River. Other nonpoint sources include leaking septic tanks, and agricultural and forestry runoff.

Many people don't realize that storm drains in the urban portions of the Tualatin Basin drain directly to creeks and streams without the benefit of treatment. Whatever goes into storm drains goes into the Tualatin River.

It's now time to focus our efforts on reducing pollution from storm drains and other "nonpoint" sources. The groups listed in this issue are working to meet the important water quality goals. We could all use your help!

Phosphorus Dramatically Reduced in USA's Cleaned Wastewater Community's Investment Cuts Nutrient by 98%!



Where Does Your S

Surface Water Management: It's a Year-Round Job

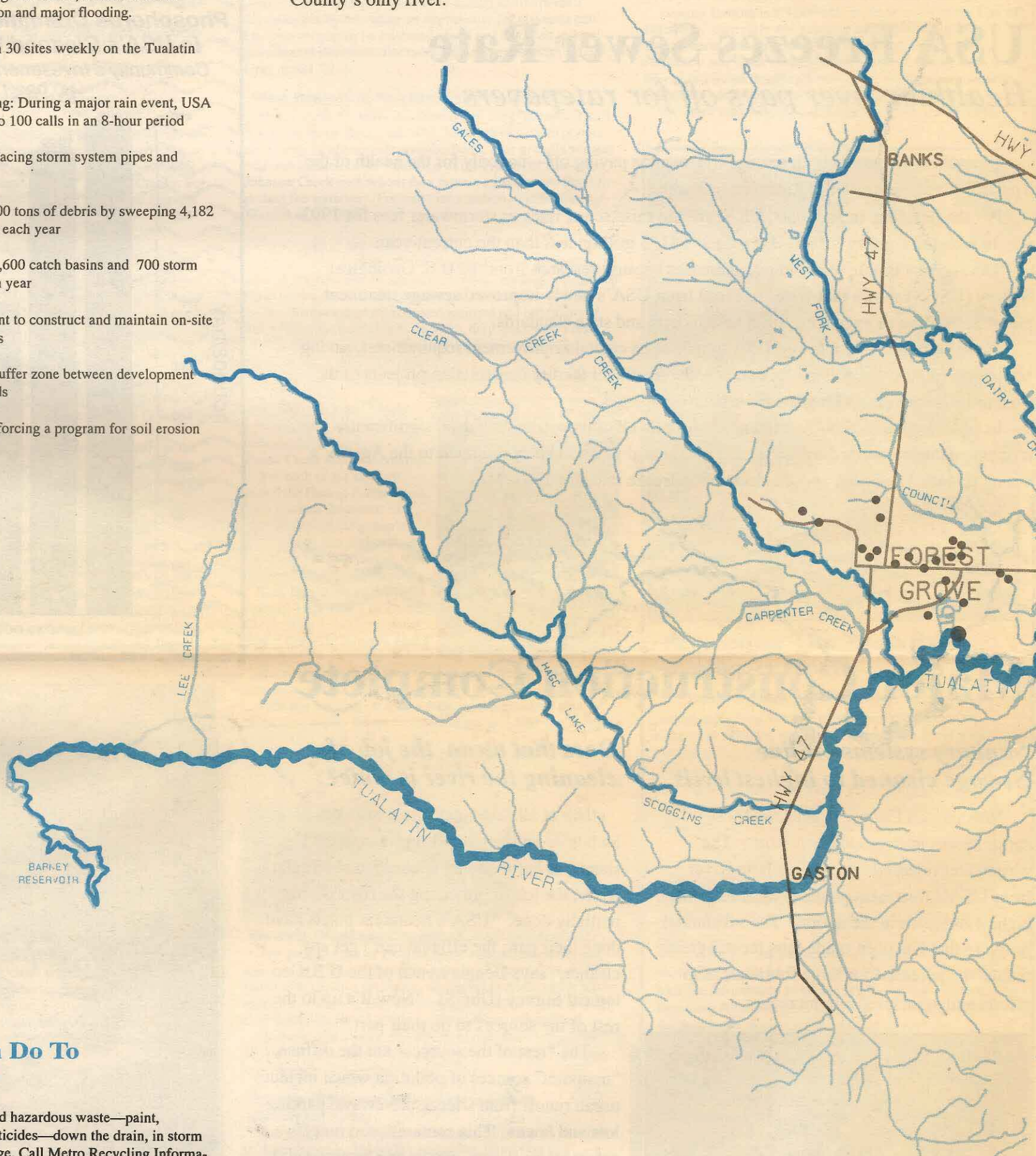
It makes sense that USA would focus on controlling storm water during the wet months. Less obvious—but no less critical—are the year-round activities that are part of the Agency's Surface Water Management (SWM) Program.

Rain or shine — 365 days a year, 24 hours a day — USA's SWM program is protecting our creeks, streams and the Tualatin River from pollution and major flooding.

- Monitoring more than 30 sites weekly on the Tualatin and its tributaries
- Responding to flooding: During a major rain event, USA crews respond to up to 100 calls in an 8-hour period
- Constructing and replacing storm system pipes and facilities
- Removing nearly 2,500 tons of debris by sweeping 4,182 linear miles of streets each year
- Cleaning more than 1,600 catch basins and 700 storm system manholes each year
- Requiring development to construct and maintain on-site water quality facilities
- Enforcing a 25-foot buffer zone between development and creeks or wetlands
- Implementing and enforcing a program for soil erosion

- Does it go into a storm drain on your block?
- Does it pick up the car exhaust and oil from your driveway and street?
- Does it carry off your fertilizer and bug spray?

Whether you have a storm drain or a ditch or some other means of drainage, the water still goes down hill and it carries lots of pollutants with it to its destination — the Tualatin River — Washington County's only river.



What You Can Do To Protect Water

- Never dump household hazardous waste—paint, cleaning solvents, pesticides—down the drain, in storm drains, or in the garbage. Call Metro Recycling Information (234-3000) to find out when and where you can dispose of household hazardous waste.
- 74,000 dogs in Washington County drop more than 37,000 pounds of waste everyday. When rain washes over pet waste it becomes contaminated, carrying bacteria to groundwater and streams. Dispose of pet waste by flushing it down your toilet.
- Use less-toxic alternatives for household cleaners. Call Metro (234-3000) for information on the safe use, proper disposal and alternatives.
- Minimize the use of fertilizers, pesticides and herbicides which can wash off your yard and into storm drains and creeks.
- Never dump yard debris near, or in, a stream or wetland. Call Washington County for disposal or compost information, 648-8609.

Paint Poses Problems

USA receives about six calls a month from citizens reporting paint being dumped into a catch basin or drainage area. In urban Washington County, anything dumped down a storm drain goes to the nearest stream.

If the paint is oil based, USA and Tualatin Valley Fire and Rescue crews must respond with specialized equipment to stop it before it kills aquatic life.

It can take up to 36 staff hours and hundreds of dollars to clean up a single gallon of paint.

Water based paints can be washed down your household sewer drain. Call Metro (234-3000) for free disposal of oil-based paint.

Please report dumping of any pollutant into a storm drain or drainage system to USA at 693-4541 or 648-8621.

Community Water Quality Partners

The more we learn about the Tualatin River, the more we know that it will take a community-wide commitment to clean and protect Washington County's only river.

The commitment begins with individual, family and neighborhood action. Today, an increasing number of people are meeting the water quality challenge and getting their feet wet protecting and restoring neighborhood creeks and wetlands.

The biggest challenge is from "nonpoint" source pollution. Nonpoint pollution comes from diffuse sources. When rain washes over lawns, gardens, driveways and parking lots, it picks up fertilizers, pesticides, oil, lead and other pollutants and carries them into storm drains, creeks and groundwater, eventually flowing to the Tualatin River.

This list highlights some of the individual and community efforts underway to control nonpoint pollution and assure a cleaner river and safer environment for all of us.

Beaverton Creek Watershed Group (Beaverton Area)

Informal group of local environmental organizations that has just formed focusing on water quality-related issues in the Beaverton Creek Watershed, which includes Willow, Cedar Mill, Hall, Golf, Beaverton and a pair of Johnson Creeks. For more information contact Mike Houck at the Urban Streams Council 225-9916.

The Wetlands Conservancy

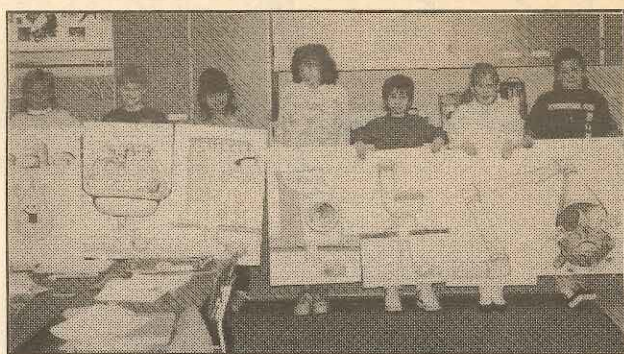
The Wetlands Conservancy is a nonprofit land trust that assists in the acquisition, restoration and management of Oregon wetlands. Besides protecting and preserving the land, the organization educates the public about the value of wetlands and involves communities in hands-on restoration and education projects. For more information, contact Tony Laska at 691-1394.

Friends of Cedar Springs (Cedar Mills Area)

This group works to preserve a 150 acre area in Cedar Mill north of Highway 26. The area contains springs, wetlands, ponds and the last large stand of Western Red Cedars in the metropolitan area. Three tributaries to Johnson Creek North join in the area before flowing south to Beaverton. It is home to more than 125 species of wildlife. For more information, contact Troy Horton at 297-1173.

Friends of Cook Park (Tigard Area)

The Friends are dedicated to preserving Cook Park's natural setting, as well as improving the activities available to area residents. These activities include soccer, basketball, baseball and picnicking. The Park also provides playgrounds, open space and one of only two improved boat access points to the Tualatin River. For more information, Contact Mary Meininger at 624-9857.



USA's Tualatin River Rangers (Tualatin River Watershed)

The Rangers is an environmental education program that involves students in learning clean water fundamentals such as wastewater treatment, storm water pollution prevention and water conservation. The program is self-contained, requires no teacher preparation, and is available free of charge to elementary schools (generally 4th grade) throughout the Tualatin Basin.

Since its development four years ago, the Rangers have visited over 20,000 students. The program includes a 45-minute interactive presentation, an 8-page color workbook, a take-home activity for students to share with adults and a River Ranger Badge upon completion. For more information, contact Linda Kelly or Mark Jockers, Unified Sewerage Agency at 648-8621.

Tualatin Riverkeepers (Tualatin River Watershed)

The Riverkeepers promote the educational, scientific, historical and recreational aspects of the Tualatin River and coordinate the annual Tualatin River Discovery Day canoe trip. One goal is to provide a "river trail" within Washington County and provide greater accessibility to the River, primarily through canoe and kayak put-ins along its banks. For more information, contact Kathy Clair at 786-7099.

Beaverton Neighborhood Association Committees

Beaverton's 12 Neighborhood Association Committees are dedicated to enhancing the livability of their community. As the citizen involvement arm of the city, they work on a variety of issues including environmental concerns, land use, transportation and community development. For more information, contact Deborah Middleton at 526-2243.

Urban Streams Council

The Urban Streams Council seeks to promote the protection, restoration and stewardship of urban streams. The group runs a stream information and referral telephone line, directs stream restoration projects and supports "friends" groups. The organization also serves as a clearing-house for information and resources related to the protection of urban streams. For more information, contact Mike Houck at 225-9916.

Washington County CPOs

Washington County's 12 Citizen Participation Organizations (CPOs) work to preserve the quality of life in their communities by providing an opportunity for residents and business owners to be informed about and involved in local government decisions. For more information, contact Linda Gray at 681-7073.

West Beaverton Neighborhood Association

Home to the St. Mary's wetlands and lower Johnson Creek South, the West Beaverton NAC has worked hard to protect the quality of life in their neighborhood. This group's support was instrumental in the formation of the Friends of Beaverton's Johnson Creek with whom they remain a partner in efforts to protect the waterway. For more information, contact George Weirick at 641-8687.

Wildwood Pollution Patrol

The students involved in this volunteer effort go door-to-door in Washington County with a simple message: Help stop water pollution by keeping pollutants out of storm drains.

The Wildwood group received national and international recognition for their efforts. In 1991, they received a Presidential Citation and also captured the Department of Interior's "Take Pride in America" award.

For more information, contact Marcha Hunt at 244-9385.

Fans of Fanno Creek

Volunteers dedicated to the restoration and protection of Fanno Creek and its tributaries.

For each of the last two years, the Fans of Fanno Creek have planted thousands of trees as part of the group's efforts to protect and enhance the creek and its riparian, wetland and wildlife resources.

This March, more than 300 citizens helped Fans of Fanno Creek plant 7,500 trees along Fanno Creek in Beaverton and Tigard.

Recent activities have focused on habitat restoration, public education and government regulatory and planning processes.

Fans are working on a long-range comprehensive plan to protect the creek. For more information, call John LeCavalier at 246-7771.



Fernhill Wetlands Council (Forest Grove Area)

The group began in 1990 to create and enhance a natural and upland wetland area located south of Forest Grove. The intent is to create a multipurpose wetland system which serves to improve water quality for the Tualatin River while offering combined benefits of wildlife enhancement, recreational enjoyment, educational interpretation and improved quality of life for the present and future generations. For more information, contact Greg Johnson at 357-5221.

Friends of Beaverton's Johnson Creek (Beaverton Area)

The group works to preserve the quality of life in Beaverton by focusing on water quality education, protection and restoration.

Beaverton's Johnson Creek is one of the last significant natural wetlands remaining in Beaverton providing an oasis in a heavily urbanized area for a wide variety of wildlife and waterfowl.

Most of the creek's pollutants come from neighborhood storm drains, and runoff from development activities, erosion, illegal dumping, and dumping of hazardous wastes.

The group is working for improved land use procedures in Beaverton and Washington County to better protect urban wetlands.

For more information, call Mark Hereim at 626-2826.

Friends of Tualatin Valley National Wildlife Refuge (Sherwood Area)

Besides providing communication and education about the refuge, this group works to raise funds toward acquiring property for adaptation to wildlife areas. For more information, contact Jim Rapp at 625-5522.

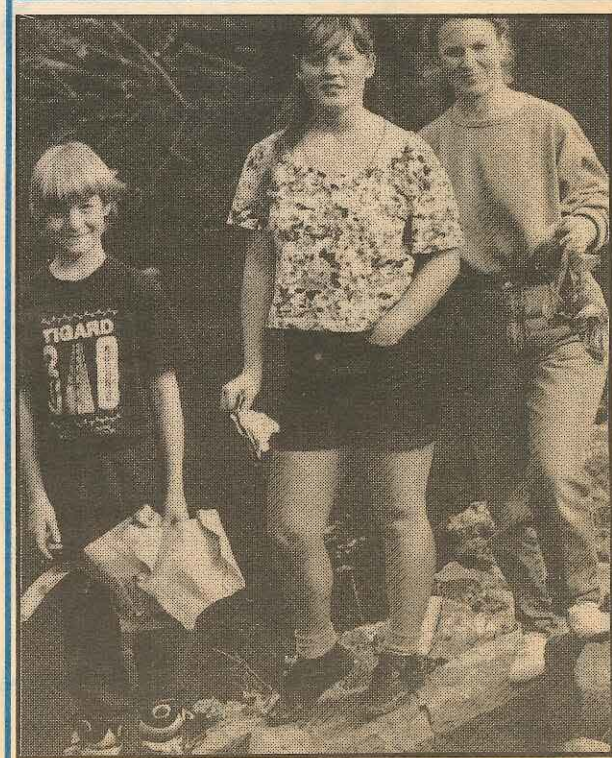
Ti-Tu-Me-Wood

Over the last five years, the Tigard, Tualatin, Metzger and Sherwood Girl Scouts have removed 14 tons of debris, planted thousands of trees, repaired riparian areas and stenciled storm drains during their annual Fanno Creek Cleanup. For more information, contact Pat Knox at 620-1395.



Friends of Jackson Bottom (Hillsboro Area)

Jackson Bottom is a 3,000 acre wetland south of the City of Hillsboro. Currently 450 acres of the bottom are under a management plan to rehabilitate the wetland for wildlife, recreation and water management. It is a non-profit association of interested people promoting the Wetland as a wildlife sanctuary, educational resource and a community focus. For more information, contact Sue Orlaske at 985-7048.



Protecting The Tualatin Begins At Home

For the Knowles family of Metzger, water used to just be something you got when you turned on the tap. Like most families, they didn't think much about water pollution, conservation or what happened after water went down the drain.

That was before Michelle Knowles and her mother, Trudy, got involved with the Girl Scouts' efforts to protect streams and the Tualatin River six years ago.

The Girl Scouts began their water protection efforts by picking up trash along Fanno and Ash Creeks in 1988. When the Unified Sewerage Agency (USA) assumed responsibility for surface water management in 1990, former Scout Leader Pat Knox asked USA to join the effort.

"USA gave us Tualatin River Rangers booklets and stickers to our Cadet Scouts," Pat recalls. "The Cadets took the information to all the troops and talked about becoming River Rangers. On cleanup day, we passed out the booklets to people in the neighborhood."

River Rangers is an interactive education program that teaches water conservation, care and protection basics to more than 5,000 students a year.

As charter members of the program, the Ti-Tu-Me-Wood Scouts helped teach their families and neighbors about pollution prevention, water conservation, and the proper disposal of household hazardous wastes.

Michelle, her younger brother Matthew and Trudy then set off to complete the River Rangers' assignment—to carefully inventory and label their household hazardous wastes with "Don't Dump Down Drain" stickers.

Today, the Knowles continue to practice and expand upon the lessons they learned from Girl Scouts and the Tualatin River Rangers.

Trudy, a kindergarten teacher in Portland, maintains that her family is not doing anything special.

"We just do what any family with three kids and a busy life can do," she says. By adopting a few "new habits," the Knowles are helping to protect and conserve water.

How to Start a Stream Group

Protecting creeks, streams or wetlands begins with neighborhood efforts. Work through your neighborhood association, homeowners association or local scouting groups to build interest in the project.

Your city's planning office, USA and the Urban Streams Council can offer organizational assistance, guidance and resources. For information, contact USA, 648-8621, or the Urban Streams Council, 225-9916.