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OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 07/23/1992

State of Oregon
Department of Environmental Quality

State of Oregon

ENVIRONMENTAL QUALITY COMMISSION

A G E N D A

REGULAR MEETING - July 23, 1992

DEQ Conference Room 3a
811 S. W. 6th Avenue
Portland, Oregon
10:00 a.m.

Note: 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. Times noted on the agenda are approximate. An effort will be made to consider items with a designated time 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.

10:00 a.m.

A. Petitions of James River II, Inc., Boise Cascade Corporation, and the City of St. Helens for Reconsideration or Rehearing of the Commission's April 16, 1992, Order in the Appeals of NPDES Permit No. 100716 (James River) and Permit No. 100715 (City of St. Helens).

Rule Adoptions

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.

B. Proposed Adoption of New Rule to Clarify Procedure for Calculating Mass Load Discharge Limits for BOD and Suspended Solids for Domestic Waste NPDES Permits

C. Proposed Adoption of Rule Amendments to Delay Implementation of the Enterococci Bacteria Standard and Reinstate and Substitute the Fecal Coliform Standard in the Interim

D. Proposed Adoption of Rule Regarding use of Permit as a Shield Language in NPDES Permits

Information Items

E. Status Report on Voluntary Implementation of Agricultural Activities in the Tualatin Basin

F. Work Session -- Discussion on Water Quality Status Report [305(b) Report]

REGULAR MEETING - July 24, 1992

DEQ Conference Room 3a
811 S. W. 6th Avenue
Portland, Oregon
8:30 a.m.

8:30 a.m.

G. Approval of Minutes

H. Approval of Tax Credit Applications

Rule Adoptions

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.

I. Proposed Adoption of Amendments to Crematory Incineration Rules

J. Proposed Adoption of Revision to the Clean Air Act State Implementation Plan: Lane Regional Air Pollution Authority Rule Amendments for Kraft Pulp Mills and Excess Emissions

K-1 Proposed Adoption of Rules to Update the Visibility Protection Plan

K-2 Proposed Adoption of Rules to Update the Slash Burning Smoke Management Plan

L. Proposed Adoption of Amendments to Rules for Enforcement Procedures and Civil Penalties

✳ M. Proposed Adoption of Rules for Oil Spill Prevention and Emergency Response Contingency Planning (SB 242)

Action Items

N. Request by City of Prineville for an Exception to the Receiving Stream Dilution Requirement

O. Request By Unified Sewerage Agency for an Exception to the Receiving Stream Dilution Requirement for the Durham and Rock Creek Wastewater Treatment Facilities

11:30 a.m.

✳ **P. Public Forum**

This 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.

Information Items

Q. Commission Member Reports (Oral)

R. Director's Report (Oral)

1:00 p.m.

S. Status Report by City of Portland on Progress in Implementation of Combined Sewer Overflow Order

T. Status Report on Bi-State Study on the Columbia River and the Tillamook NEP Designation

The Commission will meet on August 7, 1992, in Portland to consider adoption of the proposed rules on chemical process mining. The next regular business meeting will be on September 11, 1992, in Eugene.

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

July 6, 1992

State of Oregon
Department of Environmental Quality Memorandum

Date: July 9, 1992

To: Environmental Quality Commission

From: for Fred Hansen Stephanie Hallock

Subject: Overview of Agenda Items I, J, K-1, K-2

Modern air pollution control programs began to take their current form with the passage of the first amendments to the Federal Clean Air Act in 1970. Many of the requirements and strategies that we use today are based on programs established by this early legislation. As a matter of historic interest, Oregon was the first state, in 1951, to establish a statewide air pollution control agency.

The 1970 amendments established nationwide, health-based ambient air quality standards that set maximum concentrations for selected pollutants. This regulatory framework accepts the presence of concentration levels of pollution below the standards, though the Act contains requirements to prevent deterioration of air quality which is already clean. Wherever air pollution exceeds the standards the Act mandates efforts to reduce air emissions so that it will comply with the standards - a state responsibility. The central mechanism for doing this continues to be the state implementation plan (SIP). Each of the items regarding air quality (Items I, J, K-1, K-2) on today's agenda are proposed modifications to Oregon's state implementation plan.

The plan consists of many parts, including specifications for the air quality monitoring network, emissions inventory, permitting and enforcement procedures, plans for attainment and maintenance of acceptable air quality and adequate state resources and authority to carry out the statute. One component of the state implementation plan is the body of regulations specifying emission limitations for specific sources of air pollution. Agenda Item I modifies control requirements for the operation of crematories, a subset of the rules regarding operation of incinerators. These rule modifications are being developed in response to industrial concerns regarding the economic and technical feasibility of current requirements and public concerns over emissions from these types of sources.

Besides specifying requirements for point sources such as crematories the state implementation plan also details standards for emission of pollutants from widespread or area sources of pollution like slash burning (Agenda Items K-1 and K-2). Agenda Item K-2 describes modifications to the Oregon State Department of Forestry smoke management plan for prescribed burning. These rules will provide greater protection from smoke impacts to those areas already in violation of the federal air quality standards for small particulate matter, PM_{10}. In addition to those regulations designed primarily to protect public health

from adverse air quality, certain regulations also address the aesthetic impacts of air pollution. Agenda Item K-1 proposes modifications to the Oregon Visibility Plan adopted by the Commission in 1986. Federal statutes, beginning in 1977 and reaffirmed in the 1990 amendments to the Clean Air Act, require the states to demonstrate reasonable further progress in improving visibility in Class I areas, which in Oregon includes 11 wilderness areas and Crater Lake National Park. This proposal is intended to ensure continued visibility improvements for those areas.

The Department of Environmental Quality is the primary regulatory agency in Oregon for enforcement of federal and state environmental statutes. In Lane County, however, the Lane Regional Air Pollution Authority (LRAPA) is the delegated authority to implement and enforce federal and local air pollution laws. LRAPA is the only local air pollution agency in Oregon. In order to maintain delegation and local control LRAPA must adopt and enforce rules that are at least as stringent as the comparable state rules.

Air Contaminant Discharge Permits serve as the primary tool for controlling emissions from industrial sources. The permit specifies limits for pollutants emitted by the source and establishes conditions which minimize their impact on air quality. Recently, the Department adopted permit rules that also recognize that emissions outside the permit conditions occur during periods of startup, shutdown and maintenance and need to be accounted for and controlled to the best extent possible. Agenda Item J represents modifications to LRAPA's excess emissions rule that make it consistent with the most recent Environmental Protection Agency guidance and state rules.

Environmental Quality Commission

☒ Rule Adoption Item
☐ Action Item
☐ Information Item

Agenda Item I
July 23, 1992 Meeting

Title:

Amendments to Crematory Incineration Rules OAR 340-25-890 to -905

Summary:

In 1990 the Department of Environmental Quality proposed, and the Commission adopted, more stringent rules on the combustion of municipal and hospital wastes in incinerators and crematories following growing concerns about emissions from these sources. Since that time crematory operators have commented that compliance with certain sections of the rules, i.e., required combustion residence times of 1 second, would necessitate costly and unnecessary modifications to existing crematory units with no appreciable gains in air quality.

After considerable review of technical information, and consultation with the Environmental Protection Agency and other state air quality agencies, Department staff found no differences in air quality impacts from the 1 second residence time required by the rule versus the operational design value of 0.5 seconds. Staff agreed to the modification and, to ensure continued environmental protection, proposed tightening the opacity limit from 10% to a "no visible emissions" limit.

Department Recommendation:

Adopt the proposed amendments to the Crematory Rule

Report Author	Division Administrator	Director Acting
Brian Finneran	Greenwood	Stephanie Hallock

July 7, 1992

Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

REQUEST FOR EQC ACTION

Meeting Date: July 23, 1992
Agenda Item: I
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption: Amendments to Crematory Incineration Rules OAR 340-25-890 to -905.

PURPOSE:

To address concerns by crematory operators that DEQ rules were unnecessarily restrictive for afterburner residence times.

ACTION REQUESTED:

X Adopt Rules

Proposed Rules	Attachment A
Rulemaking Statements	Attachment B
Fiscal and Economic Impact Statement	Attachment C
Public Notice	Attachment D
Land Use Compatibility Statement	Attachment E
Hearing Officer's Report	Attachment F

DESCRIPTION OF REQUESTED ACTION:

In 1990 the Department of Environmental Quality (Department) adopted new rules for municipal and hospital waste incinerators and crematories which included more stringent combustion requirements, to better protect the public from harmful air emissions. Existing crematories had to demonstrate compliance with these rules by March 1993.

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

During the public comment period for these rules representatives of the crematory industry commented that they could meet requirements of these rules, with the exception of the proposed combustion temperature requirement, which the Department agreed to modify following the hearings. In the summer of 1991 the Department started to receive additional comments from the industry that the 1 second residence time requirement (the optimum time for complete combustion) for existing units was unnecessary and would require expensive combustion chamber modifications at a cost of $15,000 - $30,000. They argued that a properly operated crematory produces no visible smoke or odor emissions at a 0.5 second residence time. At the request of the industry the Department agreed to review this requirement, and to coordinate this analysis with an engineering consultant hired by the industry. In January 1992, after lengthy review of national studies on incinerator combustion efficiency and discussions with the Environmental Protection Agency and other states which had recently adopted new incinerator rules, the Department concluded that there was no definitive data which would support a 1 second residence time over a .5 second time for crematory incineration, in terms of any additional air quality impact from the lower residence time.

Therefore, the proposed amendments to the Department's crematory rules involves only two changes: the first changing the residence time requirement from 1 second to 0.5 second, and the second changing the opacity requirement from the current 10% limit to a "no visible emissions" limit.

AUTHORITY/NEED FOR ACTION:

_X_ Statutory Authority: ORS 468.020/468A.025 Attachment E

_X_ Pursuant to Rule: OAR 340-25-890 to -905 Attachment ___

___ Other: Attachment ___

_X_ Time Constraints: Existing crematory rule requires compliance with residence time provision by March 1993. Crematories need to begin incinerator modifications as soon as possible if a rule change is not approved.

DEVELOPMENTAL BACKGROUND:

These amendments were authorized for public hearing by the Director on April 10, 1992. Two hearings were held on May 19 and 22, 1992 (see Hearing Officer's Report, Attachment G). A total of only six persons attended these hearings.

One industry representative testified in favor of the amendments, but also commented that the existing requirement for source testing of each unit (in order to determine compliance with the 1990 crematory rules) should be amended to allow emissions data from similar models to be substituted instead. This would save crematory owners the cost of source testing, which the commentor stated is approximately $2500. The Department received two other comments on this matter from crematory owners. No other testimony was received.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Based on discussions and input from crematory representatives, the Department understands industry is in support of these amendments.

In response to the above comments on source testing of crematory units, the Department agrees that while it is likely that many crematory units of the same model operate and emit at very similar levels, substituting source test data from a representative model does not guarantee that the unit in question was installed and is operating in complete accordance with the rules. The Department therefore still supports the requirement for individual source testing in order to demonstrate compliance by March 1993.

PROGRAM CONSIDERATIONS:

Approval of the proposed rule change would negate the need for most crematories to make expensive modifications to their secondary combustion chambers. Department staff will still need to verify by March 1993 that existing crematories meet the new requirements; however, this rule change would simplify this process and likely lessen Department staff workload in this area.

In the Department's review of the optimum residence time requirement for crematories, it was found that emissions of dioxin, particulate, and carbon monoxide, and hydrochloric acid were approximately 10 times higher for medical waste (which includes plastics) than pathological waste (similar to crematory remains), leading many states to adopt rules requiring a 1 or 2 second residence time for medical waste. Since the primary emissions of concern from crematory incineration are limited to particulates and odor, most evidence supports a 0.5 second residence time and 1600 F temperature, along with a stringent grain loading requirement, to satisfactorily control these emissions.

The lowering of the 10% opacity requirement to "no visible emissions" was based on comments from the crematory industry that they typically must operate at this level as part of their business. Representatives of the crematory industry were contacted prior to the hearings and indicated that this change was acceptable. This requirement will help to ensure that all crematories are operated at maximum combustion efficiency.

Minor housekeeping changes were also made to the rules, so that references to "waste" were clarified to better differentiate between cremation and waste incineration. Two rule provisions were switched in order to be placed in the more appropriate rule section.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

None.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

Adopt the proposed amendments to the Crematory Rule.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed revisions are consistent with Goals 2, 3, 4, and 5 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy. The proposed strategy and supporting rules are consistent with the Oregon Benchmarks goal of increasing the percentage of Oregonians living in area which meet ambient air quality standards.

ISSUES FOR COMMISSION TO RESOLVE:

Does the relaxing of the residence time requirement and the tightening of the opacity represent an acceptable balance in terms of controlling air pollution from crematories ?

INTENDED FOLLOWUP ACTIONS:

1. File the adopted rules with the Secretary of State.

Approved:

Section: John Kawalczyk

Division: Sue Greenwood

Director: Stephanie Kaelocke, acting

Report Prepared By: Brian Finneran

Date Prepared: June 22, 1992

BRF:a
RPT\AH60022
6/22/92

Crematory Incinerators

Emission Limitations

340-25-890 (1) No person shall cause to be emitted particulate matter from any crematory incinerator in excess of 0.080 grains per dry standard cubic foot of exhaust gases corrected to 7 percent O_2 at standard conditions.

(2) Opacity. ~~[The opacity as measured visually shall not exceed 10 percent]~~ **No visible emissions shall be present except** for a period aggregating **no** more than six minutes in any 60 minute period.

(3) **Renumbered from 340-25-895 (3)** Odors. In cases where incinerator operation may cause odors which unreasonably interfere with the use and enjoyment of property, the Department may require by permit the use of good practices and procedures to prevent or eliminate those odors.

Design and Operation

340-25-895 (1) Temperature and Residence Time. The temperature at the final combustion chamber of shall be 1800°F for new incinerators, and 1600°F for existing, with a residence time of at least ~~[one]~~ **0.5** second. At no time while firing waste shall the temperature in the final chamber fall below 1400°F.

(2) Operator Training and Certification. Each crematory incinerator shall be operated at all times under the direction of individuals who have received training necessary for proper operation. A description of the training program shall be submitted to the Department for approval.

(3) **Renumbered from 340-25-890 (3)** ~~[Other Wastes.]~~ As defined in section 340-25-855 (4) of these rules, crematory incinerators may only be used for incineration of human and animal bodies. No ~~[other]~~ waste, including infectious waste as defined in section 340-25-855(10) of these rules, may be incinerated unless specifically authorized in the Department's Air Contaminant Discharge Permit.

Monitoring and Reporting

340-25-900 (1) All crematory incinerators shall operate and maintain continuous monitoring for final combustion chamber exit temperature.

(2) All records associated with continuous monitoring data including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least one year and shall be furnished to the Department upon request.

(3) All crematory incinerators must conduct testing to

demonstrate compliance with these rules in accordance with a schedule specified by the Department.

Compliance

340-25-905 (1) All existing crematory incinerators must demonstrate compliance with the applicable provisions of these rules ~~[within three (3) years of the effective date of these rules]~~ **by March 15, 1993**. Existing data such as that collected in accordance with the requirements of an Air Contaminant Discharge Permit may be used to demonstrate compliance.

(2) All existing crematory incinerators shall be subject to these rules upon demonstration of compliance pursuant to paragraph (1) of this section. Until compliance is demonstrated, existing sources shall continue to be subject to the provisions of OAR 340-21-025 and all applicable permit conditions.

(3) New crematory incinerators must demonstrate compliance with the emission limits and operating requirements of these rules in accordance with a schedule established by the Department before commencing regular operation.

brf 3/92
AH

ATTACHMENT B

RULEMAKING STATEMENTS FOR AMENDMENTS TO CREMATORY INCINERATION RULES

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335 (7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-25-890 to 340-25-905, Crematory Incinerators. The amendments are proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

New rules were adopted in March 1990 as a result of growing concern over harmful emissions from waste incinerators and crematories. Recent comments from crematory operators have indicated that the 1 second combustion residence time for existing crematory units is unnecessary, and would require major modifications to the secondary combustion chamber of existing units, as these were only designed to meet a 0.6 residence time. Based on cost factors and technical information that a 0.5 residence time would not produce any appreciable difference in air quality impact than the 1 second time, crematory operators have requested this provision be changed to 0.5 second.

After considerable review the Department found no evidence to support a 1 second residence time over 0.5 second, in terms of any additional air quality impact, and therefore agrees the rule change is justified. However, to continue to ensure best emission control, and with the agreement of crematory operators, the Department is also proposing to tighten the opacity requirement from 10% to a "no visible emissions" limit.

(3) Principal Documents Relied Upon

Status of EPA Regulatory Program for Medical Waste Incinerators - Test Program and Characterization of Emissions, Kenneth R. Durkee and James A. Eddinger, EPA Emission Standards Division, Research Triangle Park, North Carolina, 1990.

Research Areas for Improved Incineration System Performance, Kun-chieh Lee, Central Research & Engineering Technology, Union Carbide Corporation, South Charleston, West Virginia, 1988.

Combustion Evaluation, EPA Environmental Research Center, Research Triangle Park, North Carolina, 1980.

Proceedings from the National Workshop on Hospital Waste Incineration and Hospital Sterilization, EPA Office of Research and Development, Research Triangle Park, North Carolina, 1989.

Agenda Item L, March 2, 1990, EQC Meeting, Adoption of Incinerator Rules: Amendments to Better Address Municipal, Hospital, and Crematory Units.

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 SW 6th Avenue, Portland, Oregon, during normal business hours.

BRF:brf
RPT\AHxxx
3/31/92

FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED AMENDMENTS TO CREMATORY INCINERATION RULES

PROPOSAL SUMMARY

The proposed amendments to the crematory rules involves only two changes: 1) lowering the residence time requirement for the final combustion chamber from 1 second to 0.5 second; and 2) lowering the opacity requirement from 10% to a "no visible emissions" limit.

COST TO CREMATORY OPERATORS

Most existing crematories in Oregon currently operate a small retort incinerator capable of achieving a maximum residence time of 0.6 seconds in the secondary chamber. There are approximately 30 such crematories in Oregon. In order to meet the current residence time requirement of 1 second, these crematories would have to make expensive modifications to their secondary chambers. The proposed lowering of the residence time rule to 0.5 second represents a significant cost savings to these sources, as the costs associated with this modification would be in the range of $15,000 to $30,000.

The proposed change to the opacity requirement is expected to have little or no impact, as these crematories typically operate with no visible emissions.

COST TO SMALL BUSINESSES

Most crematories are small businesses (less than 50 employees), and as such are subject to the discussion above. No other small businesses are affected by this proposal.

COST TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY

The proposed revision to the residence time requirement will negate the need for existing crematories to make major modifications to their secondary combustion chamber, and therefore will greatly reduce Department staff workload in determining industry compliance with current crematory rule requirements. From an enforcement standpoint, new requirement for no visible emissions from crematories should be somewhat easier for staff to determine than current 10% opacity requirement.

COST TO LOCAL GOVERNMENT AND OTHER STATE AGENCIES

There is no impact expected from this proposal.

BRF:brf
4/02/92

ATTACHMENT D

NOTICE OF PUBLIC HEARING

Hearing Dates: May 19 and 22, 1992
Comments Due: May 22, 1992

WHO IS AFFECTED:

Any crematory facility subject to the requirements of OAR 340-25-890 thru -905, and provisions of an Air Contaminant Discharge Permit in Oregon.

WHAT IS PROPOSED:

Amendments to Crematory Incinerator rules, Emission Limitations OAR 340-25-890, and Design and Operation OAR 340-25-895.

WHAT ARE THE HIGHLIGHTS:

The proposed amendments to the crematory rules involves only two changes: 1) lowering the residence time requirement for the final combustion chamber from 1 second to .5 second; and 2) lowering the opacity requirement from 10% limit to a "no visible emissions" limit. These amendments should not result in any increase in air quality impacts from crematories, and will allow crematory operators to avoid expensive modifications to their incinerators imposed by the 1 second residence time requirement.

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division at 811 SW Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon) or contact Brian Finneran at (503) 229-6278.

A public hearing will be held before a hearings officer at:

6:00 pm	1 pm
May 19, 1992	May 22, 1992
Smullin Center Auditorium	Conference Room 10A
Rogue Valley Medical Ctr.	DEQ Headquarters
Medford, Oregon	811 SW Sixth
	Portland, Oregon

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than **5 pm, May 22, 1992.**

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U.S. Environmental Protection Agency as a revision to the State Clean Air Act Implementation Plan. The Commission's deliberation should come on July 23, 1992, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

BRF:brf
3/31/92

ATTACHMENT E

DEQ LAND USE EVALUATION STATEMENT FOR RULEMAKING
AMENDMENTS TO CREMATORY INCINERATION RULES

(1) Explain the purpose of the proposed rules.

To address concerns by crematory operators that DEQ rules were unnecessarily restrictive for afterburner residence times.

(2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes X No ___

(a) If yes, explain: The proposed rule revisions will affect the Department's Air Contaminant Discharge Permits, which affect land use.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes X No ___

If no, explain:

(c) If no, apply criteria 1. and 2. from the instructions for this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

(3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility. Not applicable.

Sha Greenwood — Division

Intergovernmental Coor. — Date 4-8-92

BRF:brf
RPT\AHxxx

ATTACHMENT F

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY **INTEROFFICE MEMORANDUM**

DATE: June 26, 1992

TO: Environmental Quality Commission

FROM: Brian Finneran, Hearings Officer

SUBJECT: Hearings Report for Crematory Incinerator Rules Amendments

Two hearings were held to accept testimony on amendments to the Department's Crematory Incinerator Rules, OAR 340-25-890 to -905. These amendments were authorized for public hearing by the Director on April 10, 1992.

On May 19, 1992, a public hearing was at the Smullen Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Three persons were in attendance; one gave verbal testimony and two written comments were received.

On May 22, 1992, a public hearing was held in Conference Room 10A, DEQ Headquarters, 811 SW Sixth Avenue, Portland, Oregon. 3 persons attended the hearing, however no verbal or written testimony was received.

No additional written comments were received prior to the May 22, 1992 deadline.

One industry representative testified in favor of the amendments, but also commented that the existing requirement for source testing of each unit (in order to determine compliance with the 1990 crematory rules) should be amended to allow emissions data from similar models be substituted instead. This would save crematory owners the cost of source testing, which the commentor stated is approximately $2500. The Department received two other comments on this matter from a crematory owners. (This issue is addressed in the staff report on page 3). No other issues were raised.

brf
6/26/92

Environmental Quality Commission

☑ Rule Adoption Item
☐ Action Item
☐ Information Item

Agenda Item J
July 23, 24, 1992 Meeting

Title:

Proposed Adoption of Revision to the Clean Air Act Implementation Plan: Lane Regional Air Pollution Authority Rule Amendments for Kraft Pulp Mills and Excess Emissions.

Summary:

The requested action is to adopt Lane Regional Air Pollution Authority (LRAPA) regulations as a revision to the State of Oregon Clean Air Act Implementation Plan, OAR 340-20-047, or SIP. The subject regulations involve Kraft Pulp mills and excess emissions from industrial sources. Commission adoption is the procedure through which LRAPA regulations are officially incorporated into the SIP. Prior to requesting this action, these regulations have been reviewed by Department staff to determine whether they are at least as stringent as equivalent Department regulations. Having determined this, the Department authorized LRAPA to act as a hearings officer on behalf of the Commission for purposes of meeting SIP requirements. Upon adoption, Department staff will officially submit these regulations to the U.S. Environmental Protection Agency as a revision to Oregon's SIP.

Department Recommendation:

Adopt regulations as contained in Attachment A as a revision to State of Oregon Clean Air Act Implementation Plan, OAR 340-20-047.

Report Author	Division Administrator	Director acting
		Stephanie Hallock,

July 7, 1992

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

REQUEST FOR EQC ACTION

Meeting Date: July 24, 1992
Agenda Item: J
Division: Air Quality
Section: Planning & Development

SUBJECT:

Air Quality State Implementation Plan: Amendments to the Lane Regional Air Pollution Authority (LRAPA) Title 33, Prohibited Practices and Control of Special Classes, Title 36, Excess Emissions, and the repeal of Regulation 34-035, Upset Conditions, of Title 34, Air Contaminant Discharge Permits, as part of the State Implementation Plan.

PURPOSE:

Adoption of the amended titles as part of the State of Oregon Clean Air Act Implementation Plan, Oregon Administrative Rule (OAR) 340-20-047.

ACTION REQUESTED:

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

___ Authorize Rulemaking Hearing
_x_ Adopt Rules

Proposed Rules	Attachment A
Rulemaking Statements	Attachment B
Fiscal and Economic Impact Statement	Attachment C
Public Notice	Attachment D

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

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

___ Approve Department Recommendation

___ Variance Request	Attachment ___
___ Exception to Rule	Attachment ___
___ Informational Report	Attachment ___
___ Other: (specify)	Attachment ___

DESCRIPTION OF REQUESTED ACTION:

The Lane Regional Air Pollution Control Authority (LRAPA) has repealed Regulation 34-035, Upset Conditions, of Title 34, Air Contaminant Discharge Permits, adopted Title 36, Excess Emissions, and amended Title 33, Prohibited Practices and Control of Special Classes. These changes bring LRAPA's regulations in line with Department's equivalent regulations.

Title 36, Excess Emissions, replaces regulation 34-035, Upset Conditions. The regulations establish reporting requirements for industrial sources during periods of temporary permit exceedances. The amendments to Title 33, Prohibited Practices and Control of Special Classes, primarily cover the Kraft Pulp Mill industry, as well as some housekeeping amendments.

The LRAPA has acted as Hearings Officer for the Environmental Quality Commission (EQC, Commission) upon authorization by the Department of Environmental Quality (DEQ, Department). Prior to hearing authorization, DEQ found the proposed rules to be consistent with Department rules.

The Commission is requested to adopt these amendments as a revision to the State of Oregon Clean Air Act, Implementation Plan (OAR 340-20-047) (SIP), and to direct the Department to submit the SIP revision to the U.S. Environmental Protection Agency (EPA) for approval.

AUTHORITY/NEED FOR ACTION:

___	Required by Statute: _____ Enactment Date: _____	Attachment ___
_x_	Statutory Authority: ORS 468A.035	Attachment ___
_x_	Pursuant to Rule: OAR 340-20-047	Attachment ___
___	Pursuant to Federal Law/Rule: _____	Attachment ___
___	Other:	Attachment ___

___ Time Constraints: (explain)

DEVELOPMENTAL BACKGROUND:

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

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The Commission's adoption of these rules has no direct affect on the regulated community. These rules are currently in effect in Lane County. LRAPA staff and its Board of Directors have considered the affect within Lane County. The only affect the Department's action has on the regulated community is that if EPA approves these regulations as a SIP revision, they will be federally enforceable in Lane County by EPA.

PROGRAM CONSIDERATIONS:

The LRAPA regulations have been reviewed by the Department staff and determined to be consistent and at least as stringent as the Department's regulations. The review and adoption process for LRAPA regulations are part of the current agency workloads. Therefore, this action has no direct affect on the agency.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Not to adopt the amended rules as a SIP revision. This would make LRAPA rules inconsistent with the current SIP.

2. Adopt as a SIP revision all of the amended titles.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

Adopt the amended LRAPA titles in their entirety as a revision to the SIP.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The amendments are consistent with the strategic plan, and agency and legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

1. None at this time.

INTENDED FOLLOWUP ACTIONS:

1. File as an amendment to OAR 340-20-047, the State of Oregon Clean Air Implementation Plan, with the Secretary of State.

2. Submit the LRAPA amended titles to the U.S. Environmental Protection Agency for approval as a revision to the State of Oregon Clean Air Act State Implementation Plan.

Approved:

Section: John Kowalczyk

Division: Fred Greenwood

Director: Stephanie Hallock, acting

Report Prepared By: Yone C. McNally

Phone: 229-5143

Date Prepared: July 6, 1992

YCM:a
RPT\AH60012
July 7, 1992

AMENDMENTS ADOPTED BY LRAPA BOARD
JUNE 11, 1991

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 33

PROHIBITED PRACTICES AND CONTROL OF SPECIAL CLASSES

Section 33-005 Definitions

A. "Authority" means the Lane Regional Air Pollution Authority.

B. "BLS" means Black Liquor Solids, dry weight.

C. "Continual Monitoring" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect actual emission levels or concentrations on an ongoing basis.

D. "Continuous Monitoring" means instrumental sampling of a gas stream on a continuous basis, excluding periods of calibration.

E. "Daily Arithmetic Average" means the average concentration over the twenty-four hour period in a calendar day, or Authority-approved equivalent period, as determined by continuous monitoring equipment or reference method testing. Determinations based on EPA reference methods or equivalent methods in accordance with the Department Source Test Manual consist of three (3) separate consecutive runs having a minimum sampling time of sixty (60) minutes each and a maximum sampling time of eight (8) hours each. The three values for concentration (ppm or grains/dscf) are averaged and expressed as the daily arithmetic average which is used to determine compliance with process weight limitations, grain loading or volumetric concentration limitations and to determine daily emission rate.

F. "Department" means the Department of Environmental Quality.

G. "Emission" means a release into the atmosphere of air contaminants.

H. "Kraft Mill" or "Mill" means any industrial operation which uses for a cooking liquor an alkaline sulfide solution containing sodium hydroxide and sodium sulfide in its pulping process.

I. "Lime Kiln" means any production device in which calcium carbonate is thermally converted to calcium oxide.

J. "Non-Condensibles" means gases and vapors, contaminated with TRS compounds, from the digestion and multiple-effect evaporation processes of a mill.

K. "Other Sources" means sources of TRS emissions in a kraft mill other than recovery furnaces and lime kilns, including but not limited to:

1. Vents from knotters, brown stock washing systems, evaporators, blow tanks, blow heat accumulators, black liquor storage tanks, black liquor oxidation system, pre-steaming vessels, tall oil recovery operation; and

2. Any vent which is shown to contribute to an identified nuisance condition.

L. "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air, as measured by EPA Method 5 or an equivalent test method in accordance with the Department Source Test Manual. Particulate matter emission determinations by EPA Method 5 shall use water as the cleanup solvent instead of acetone, and consist of the average of three (3) separate consecutive runs having a minimum sampling time of 60 minutes each, a maximum sampling time of eight (8) hours each, and a minimum sampling volume of 31.8 dscf each.

M. "Parts Per Million (ppm)" means parts of a contaminant per million parts of gas by volume on a dry-gas basis (1 ppm equals 0.0001% by volume).

N. "Production" means the daily amount of air-dried unbleached pulp, or equivalent, produced during the 24-hour period each calendar day, or Authority-approved equivalent period, and expressed in air-dried metric tons (admt) per day. The corresponding English unit is air-dried tons (adt) per day.

O. "Recovery Furnace" means the combustion device in which dissolved wood solids are incinerated and pulping chemicals recovered from the molten smelt. For these regulations, and where present, this term shall include the direct contact evaporator.

P. "Significant Upgrading of Pollution Control Equipment" means a modification or a rebuild of an existing pollution control device for which a capital expenditure of 50 percent or more of the replacement cost of the existing device is required, other than ongoing routine maintenance.

Q. "Smelt dissolving tank vent" means the vent serving the vessel used to dissolve the molten smelt produced by the recovery furnace.

R. "Standard Dry Cubic Meter" means the amount of gas that would occupy a volume of one cubic meter, if the gas were free of uncombined water, at a temperature of 20° C. (68° F.) and a pressure of 760 mm of Mercury (29.92 inches of Mercury). The corresponding English unit is standard dry cubic foot. When applied to recovery furnace gases, "standard dry cubic meter" requires adjustment of the gas volume to that which would result in a concentration of 8% oxygen if the oxygen concentration exceeds 8%. When applied to lime kiln gases, "standard dry cubic meter" requires adjustment of the gas volume to that which would result in a concentration of 10% oxygen if the oxygen concentration exceeds 10%. The mill shall demonstrate that oxygen concentrations are below noted values or furnish oxygen levels and corrected pollutant data.

S. "Total Reduced Sulfur (TRS) means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, and any other organic sulfides present, expressed as hydrogen sulfide (H_2S).

Section 33-020 Incinerator and Refuse Burning Equipment

A. No person shall cause, permit or maintain any emission from any refuse burning equipment which does not comply with the emission limitations of these Rules.

B. Every person operating refuse burning equipment shall be able at all times during the operation to know the appearance of the emissions.

C. Refuse Burning Hours

1. No person shall permit or maintain the operation of refuse burning equipment at any time other than 1/2 hour after sunrise to 1/2 hour before sunset, except with prior approval of the Authority.

2. Approval of the Authority for the operation of such equipment may be granted upon the submission of a written request giving:

a. Name and address of the applicant.

b. Location of the refuse burning equipment.

c. Description of refuse burning equipment and its control apparatus.

d. Type and quantity of refuse.

e. Good cause for issuance of such approval.

f. Hours, other than daylight hours, during which the applicant seeks to operate the equipment.

g. Length of time for which the approval is sought.

D. Design and Construction Standards

1. Notwithstanding any other section of these Rules, construction of any article, machine, equipment or contrivance for commercial, industrial or residential incineration operations shall maintain 1500°F for 0.3 seconds in secondary chamber gas path. One and two family residential disposal in Area "B" are exempt from this paragraph.

2. Notwithstanding any other section of the Rules, construction of any article, machine, equipment or contrivance for disposal of Type 4 waste shall maintain 1700° F for 0.4 seconds in secondary chamber gas path.

3. After January 1, 1974, the operation of any source described in this section that fails to meet the design standards of this section shall be deemed prima facie evidence of violation of section 32-055 of the Rules.

E. Incinerator operating instructions shall be furnished by the supplier to the Program Director for approval coincident with submission of construction plans. The supplier shall furnish adequate training in the

operation of the incinerator to the purchaser prior to the required test operation.

F. When a commercial or industrial incinerator is constructed or assembled on site, the Program Director shall be notified so that the internal dimensions may be determined while the incinerator is still open.

G. Fuel burning equipment, incinerators and equipment used in manufacturing processes shall be provided with sufficient control apparatus to meet the emission standards of these regulations to include means whereby the operator of the equipment shall be able at all times during the operation to know the appearance of the emission.

[~~Section 33-025 Wigwam Waste Burners~~

~~A. Construction of wigwam waste burners requires approval of the plan by the Authority prior to construction, as specified in Title 21.~~

~~B. After January 1, 1971, any person operating a wigwam waste burner or similar device in Area "A" shall provide proper sampling and testing facilities thereon to determine the nature, extent, quality and degree of air contaminants emitted thereby and provide to the Authority evidence of his compliance with the emission standards prescribed by these rules.~~

~~C. It is declared to be the policy of this Authority to recognize the alternate utilization of wood waste is unreasonable and impractical in that part of the territory of the Authority lying west of the Coast range of mountains, and that atmospheric conditions in such area would allow the protection of the public health and welfare if the particulate emissions from the modified wood waste burner were not greater than 20% opacity. Until technological and economic development further enhances the degree to which wood wastes may be better utilized or otherwise disposed of in ways not damaging to the environment, the Authority intends to retain the following provisions in effect.~~

~~D. Operations of modified wigwam waste burners in that part of the territory of the Authority lying west of Range 8 West shall be permitted under the following conditions:~~

~~1. Operation of wigwam waste burners other than modified wigwam waste burners is prohibited. The term "modified wigwam waste burner" shall mean a device having the general features of a wigwam waste burner, but with improved combustion air controls and other improvements involved in accordance with design criteria approved by the Authority.~~

~~2. Persons seeking authorization to modify a wigwam waste burner or establish a new wigwam waste burner shall request authorization by submitting a notice of construction and submitting plans in accordance with Title 21 of these Rules and Regulations.~~

~~3. Authorization to establish a modified waste burner installation shall not be approved unless it is demonstrated to the Authority that:~~
~~(a) no feasible alternative to incineration of wood wastes then does~~

~~exist. In demonstrating this, the applicant must provide a statement of the relative technical and economic feasibility alternatives, including but not limited to utilization, off site disposal and incineration in a boiler or incinerator other than a wigwam waste burner; (b) the modified wigwam waste burner facility is to be constructed and operated in accordance with the design criteria approved by the Authority and the emission standard set forth in subsection (3) of this Rule.~~

~~E. No person shall cause, suffer, allow or permit the emission of air contaminants into the atmosphere from any wigwam burner for a period or periods aggregating more than three (3) minutes in any one hour which is equal to or greater than 20% opacity. No person shall use a wigwam burner for the incineration of other than production process wood waste. Such wood wastes shall be transported to the burner by methods which transport materials at a uniform rate of flow, or at rates generated by the production process.~~

~~F. A thermocouple and recording pyrometer, or other approved temperature measurement and recording devices shall be installed and maintained on every modified wigwam waste burner. Gas temperatures shall be recorded continuously using the installed pyrometer at all times when the burner is in operation. Records of temperature and burning operations, or summaries thereof, shall be submitted at such frequency as the Authority may prescribe. In addition to the aforementioned devices, the Authority may require installation of visible emission monitoring devices and subsequent reporting of data therefrom.~~

~~G. Notwithstanding any provision of this section to the contrary, the herein contained modification of the particulate matter weight standards of Section 320-040 of these Rules shall apply only in the territory described in subsection D above.~~]

Section 33-030 Concealment and Masking of Emissions

A. No person shall willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission of air contaminant which would otherwise violate these rules.

B. No person shall cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes or tends to cause detriment to health, safety or welfare of any person.

Section 33-045 Gasoline Tanks

[~~A.~~] Gasoline tanks with a capacity of 1500 gallons or more may not be installed without a permanent submerged fill pipe or other adequate vapor loss control device in any control area.

[~~B. All existing installations in Area "A" must comply with Section 33-045-A by January 1.~~]

Section 33-055 Sulfur Content of Fuels

A. Residual Fuel Oils

1. After July 1, 1972, no person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 2.5 percent sulfur by weight.

2. After July 1, 1974, no person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight.

B. Distillate Fuel Oils

After July 1, 1972, no person shall sell, distribute, use or make available for use, any distillate fuel oil containing more than the following percentages of sulfur:

1. ASTM Grade 1 fuel oil - 0.3 percent by weight

2. ASTM Grade 2 fuel oil - 0.5 percent by weight

C. Coal

After July 1, 1972, no person shall sell, distribute, use or make available for use, any coal containing greater than 1.0 percent sulfur by weight.

D. Exemptions

Exempted from the requirements of A, B and C above are:

1. Fuels used exclusively for the propulsion and auxiliary power requirements of vessels, railroad locomotives and diesel motor vehicles.

2. With prior approval of the Authority, fuels used in such a manner or control provided such that sulfur dioxide emissions can be demonstrated to be equal to or less than those resulting from the combustion of fuels complying with the limitations of Sections A, B and C.

Section 33-060 Board Products Industries

A. General Provisions

1. These regulations establish minimum performance and emission standards for veneer, plywood, particleboard and hardboard manufacturing operations.

2. Emissions limitations established herein are in addition to, and not in lieu of, general emission standards for visible emissions, fuel burning equipment, and refuse burning equipment.

3. Emission limitations established herein and stated in terms of pounds per 1000 square feet of production shall be computed on an hourly basis using the maximum 8 hour production capacity of the plant.

[~~4. Upon adoption of these regulations, each affected veneer, plywood, particleboard, and hardboard plant shall proceed with a progressive and timely program of air pollution control, applying the highest and best practical treatment and control currently available. Each plant shall, at the request of the Authority, submit periodic reports in such form and frequency as directed to demonstrate the progress being made toward full compliance with these regulations.~~]

B. Veneer and Plywood Manufacturing Operations

1. No person shall cause to be emitted particulate matter from veneer and plywood mill sources, including but not limited to, sanding machines, saws, presses, barkers, hogs, chippers and other material size reduction equipment process or space ventilation systems, and trust loading and unloading facilities in excess of a total from all sources within the plant site of one (1.0) pound per 1000 square feet of plywood or veneer production on a 3/8 inch basis of finished produce equivalent.

2. Excepted from subsection 33-060 B.1 are veneer dryers, fuel burning equipment and refuse burning equipment.

[~~3. Compliance Schedule~~

~~No later than July 1, 1972, every person operating a plywood or veneer manufacturing plan shall submit to the Authority a proposed schedule for compliance with this section. The schedule shall provide for compliance with the applicable provisions at the earliest practicable date, but in no case shall final compliance be achieved by later than December 31, 1973.~~]

[4] 3. Open Burning

Upon the effective date of these regulations, no person shall cause or permit the open burning of wood residues or other refuse in conjunction with the operation of any veneer or plywood manufacturing mill and such acts are hereby prohibited.

C. Particleboard Manufacturing Operations

1. Every person operating or intending to operate a particleboard manufacturing plant shall cause all truck dump and storage areas holding or intended to hold raw materials to be enclosed to prevent windblown particle emissions from these areas to be deposited upon property not under the ownership of said person.

2. The temporary storage of raw materials outside the regularly used areas of the plant site is prohibited unless the person who desires to temporarily store such raw materials notifies the Authority and receives written approval for said storage.

a. When authorized by the Authority, temporary storage areas shall be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials.

b. Any temporary storage areas authorized by the Authority shall not be operated in excess of six (6) months from the date they are first authorized.

3. Any person who proposes to control windblown particulate emissions from truck dump and storage areas other than by enclosure shall apply to the Authority for authorization to utilize alternative controls. The application shall describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.

4. No person shall cause to be emitted particulate matter from particleboard plant sources including, but not limited to, hogs, chippers and other material size reduction equipment, process or space ventilation systems, particle dryers, classifiers, presses, sanding machines and materials handling systems, in excess of total from all sources within the plant site of three (3.0) pounds per 100 square feet of particleboard produced on a 3/4 inch basis of finished product equivalent.

5. Excepted from subsection 33-060 C.4 are truck dump and storage areas, fuel burning equipment and refuse burning equipment.

[~~6. Compliance Schedule~~

~~Not later than July 1, 1972, every person operating a particleboard manufacturing plant shall submit to the Authority a proposed schedule for complying with these regulations. The schedule shall provide for compliance with the applicable provisions at the earliest practicable date, but in no case shall final compliance be achieved by later than December 31, 1973.~~]

[~~7.~~] 6. Open Burning

Upon the effective date of these regulations, no person shall cause or permit the open burning of wood residues or other refuse in conjunction with the operation of any particleboard manufacturing plant and such acts are hereby prohibited.

D. Hardboard Manufacturing Operations

1. Every person operating or intending to operate a hardboard manufacturing plant shall cause all truck dump and storage areas holding or intended to hold raw materials to be enclosed to prevent windblown particle emissions from these areas to be deposited upon property not under the ownership of said person.

2. The temporary storage of raw materials outside the regularly used areas of the plant site is prohibited unless the person who desires to temporarily store such raw materials first notifies the Authority and receives written approval.

   a. When authorized by the Authority, temporary storage areas shall be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials.

   b. Any temporary storage areas authorized by the Authority shall not be operated in excess of six (6) months from the date they are first authorized.

3. Alternative Means of Control

   Any person who desires to control windblown particulate emissions from truck dump and storage areas other than by enclosure shall first apply to the Authority for authorization to utilize alternative controls. The application shall describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.

4. No person shall cause to be emitted particulate matter from hardboard plant sources including, but not limited to hogs, chippers and other material size reduction equipment, process or space ventilation systems, particle dryers, classifiers, presses, sanding machines, and materials handling systems, in excess of a total from all sources within the plant site of one (1.0) pound per 1000 square feet of hardboard produced on a 1/8 inch basis of finished product equivalent.

5. Excepted from subsections 33-060 D.4 are truck dump and storage areas, fuel burning equipment and refuse burning equipment.

6. No person shall operate any hardboard tempering oven unless all gases and vapors emitted from said oven are treated in a fume incinerator capable of raising the temperature of said gases and vapors to at least 1500°F for 0.3 seconds or longer. Specific operating temperatures lower than 1500°F may be approved by the Authority upon application, provided that information is supplied to show that operation of said temperatures provides sufficient treatment to prevent odors from being perceived on property not under the ownership of the person operating the hardboard plant. In no case shall fume incinerators installed pursuant to this section be operated at temperatures less than 1000°F.

7. Any person who proposes to control emissions from hardboard tempering ovens by means other than fume incineration shall apply to the Authority for authorization to utilize alternative controls. The application shall describe in detail the plan proposed to control odorous emissions and indicate on a plot plan the location of the nearest property not under ownership of the applicant.

[~~8. Compliance Schedule~~

~~No later than July 1, 1972, every person operating a hardboard manufacturing plant shall submit to the Authority a proposed schedule for complying with these regulations. The schedule shall provide for compliance with the applicable provisions at the earliest practicable date, but in no case shall final compliance be achieved by later than December 31, 1973.~~]

[~~9.~~] 8. Open Burning

Upon the effective date of these regulations, no person shall cause or permit the open burning of wood residues or other refuse in conjunction with the operating of any hardboard manufacturing plant and such acts are hereby prohibited.

Section 33-065 Charcoal Producing Plants

A. No person shall cause or permit the emission of particulate matter from charcoal producing plant sources including, but not limited to, charcoal furnaces (retorts), heat recovery boilers, after combustion chambers, and wood dryers using any portion of the charcoal furnace off-gases as a heat source, in excess of a total from all sources within the plant site of 10.0 pounds per ton of charcoal produced (as determined from the retort process) as an annual average.

B. Emissions from char storage, briquette making (excluding dryers using furnace off-gases), boilers not using charcoal furnace off-gases, and fugitive sources are excluded in determining compliance with subsection (A).

C. Charcoal producing plants as described in (A) above shall be exempt from the limitations of Sections 32-030, 32-035, 32-040 and 32-045 which concern particulate emission concentrations and process weight.

[~~D. The person responsible for an existing emission source subject to this rule shall proceed promptly with a program to comply as soon as practicable with this rule. A proposed program and implementation plan for each emission source shall be submitted no later than June 30, 1979 to the Authority for review and written approval. The Agency shall within 45 days of receipt of a complete proposed program and implementation plan, notify the person concerned as to whether or not it is acceptable.~~

~~E. Charcoal Producing Plants shall comply with this section as soon as practicable, in accordance with approved compliance schedules, but by no later than December 31, 1982.~~

~~F. The compliance schedule for Charcoal Producing Plants shall contain reasonably expeditious interim dates and pilot testing programs for control to meet the emission limits. If pilot testing and cost analysis indicates that meeting the emission limits of these rules may be impractical, a public hearing shall be held no later than July 1, 1981, to consider amendments to this limit.~~]

[~~G.~~] D. The Agency may require the installation and operation of instruments and recorders for measuring emissions and/or parameters which affect the emission of air contaminants from sources covered by this rule to ensure that the sources and the air pollution control equipment are operated at all times at their full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable level. The instruments and recorders shall be periodically calibrated. The method and frequency of calibration shall be approved in writing by the Agency. The recorded information shall be kept for a period of at least one year and shall be made available to the Agency upon request.

[~~H.~~] E. The person responsible for the sources of particulate emissions shall make or have made tests once every year to determine the type, quantity, quality and duration of emissions, and process parameters affecting emissions, in conformance with test methods of file with the Agency. If this test exceeds the annual emission limitation then three (3) additional tests shall be required at three (3) month intervals with all four (4) tests being averaged to determine compliance with the annual standard. No single test shall be greater than twice the annual average emission limitation for that source.

Source testing shall begin within 90 days of the date by which compliance is to be achieved for each individual emission source.

These source testing requirements shall remain in effect unless waived in writing by the Agency upon adequate demonstration that the source is consistently operating at lowest practicable levels.

Section 33-070 Kraft Pulp Mills

A. General Provisions

Recent technological developments have enhanced the degree of malodorous emissions control possible for the kraft pulping process. While recognizing that complete malodorous and particulate emission control is not presently possible, consistent with the meteorological and geographical conditions in Oregon, it is hereby declared to be the policy of the Authority to:

1. Require, in accordance with a specific program and time table for all sources at each operating mill, the highest and best practicable treatment and control of atmospheric emissions from kraft mills through the utilization of technically feasible equipment, devices, and procedures. Consideration will be given to the economic life of equipment which, when installed, complies with the highest and best practicable treatment requirements.

2. Require degrees and methods of treatment for major and minor emissions points that will minimize emissions of odorous gases and eliminate ambient odor nuisances.

3. Require effective monitoring and reporting of emissions and reporting of other data pertinent to air quality or emissions. The Authority

will use these data in conjunction with ambient air data and observation of conditions in the surrounding area to develop and revise emission and ambient air standards, and to determine compliance therewith.

4. Encourage and assist the kraft pulping industry to conduct a research and technological development program designed to progressively reduce kraft mill emissions, in accordance with a definite program, including specified objectives and time schedules.

B. Highest and Best Practicable Treatment and Control Required

1. Notwithstanding the specific emission limits set forth in rule 33-070, C, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided, with consideration being given to the economic life of the existing equipment.

2. All installed process and control equipment shall be operated at full effectiveness and efficiency at all times, such that emissions of contaminants are kept at lowest practicable levels.

C. Emission Limitations

1. Emission of Total Reduced Sulfur (TRS):

a. Recovery Furnaces:

(1) The emissions of TRS from each recovery furnace placed in operation before January 1, 1969, shall not exceed 10 ppm [~~as a daily arithmetic average~~] and 0.15 Kg [~~S~~]/metric ton (0.30 lb [~~S~~]/ton) of production as [~~a monthly~~] daily arithmetic average~~s~~.

(2) TRS emissions from each [~~new~~] recovery furnace placed in operation after January 1, 1969, and before September 25, 1976, or any recovery furnace modified significantly after January 1, 1969, and before September 25, 1976, to expand production, shall be controlled such that the emissions of TRS shall not exceed 5 ppm [~~as a daily arithmetic average~~] and [~~0.08~~] 0.075 Kg [~~S~~]/metric ton (0.150 lb [~~S~~]/ton) production as [~~a monthly~~] daily arithmetic average~~s~~.

b. Lime Kilns. Lime kilns shall be operated and controlled such that emission of TRS shall not exceed[~~:~~]

[~~(1) 40 ppm and 0.1 Kg S/metric ton (0.2 lb S/ton) of production as monthly arithmetic averages.~~

~~(2) As soon as practicable, but not later than July 1, 1978, 20 ppm and 0.05 Kg S/metric ton (0.1 lb S/ton) or production as monthly arithmetic averages.~~

~~(3) As soon as practicable, but not later than July 1, 1983,~~] 20 ppm as a daily arithmetic average and 0.5 Kg [~~S~~]/metric ton (0.10 lb [~~S~~]/ton) of production as a [~~monthly~~] daily arithmetic average. This paragraph applies to those sources where construction was initiated prior to September 25, 1976.

[~~(4) 20 ppm as a daily arithmetic average and 0.05 Kg S/metric ton (0.1 lb S/ton) of production as a monthly arithmetic average from each new lime kiln placed in operation or any lime kiln modified significantly to expand production.~~]

c. Smelt Dissolving Tanks.

(1) As soon as practicable, but not later than July 1, 1990, TRS emissions from each smelt dissolving tank shall not exceed 0.0165 gram/Kg BLS (0.033 lb/ton BLS) as a daily arithmetic average, except as provided in paragraph (2) below.

(2) Where an explosion hazard, which was in existence on March 26, 1989, exists and control is not practical or economically not feasible and adequate documentation of these conditions is provided to the Authority, the affected smelt dissolving tank shall not exceed 0.033 gram/Kg BLS (0.066 lb/ton BLS) as a daily average.

[~~c~~] d. Non-Condensibles[~~:~~]

[~~(1)~~] Non-condensibles from digesters [~~and~~], multiple-effect evaporators and contaminated condensate stripping shall be continuously treated to destroy TRS gases by thermal incineration in a lime kiln or incineration device capable of subjecting the non-condensibles to a temperature of not less than 650°C. (1200°F.) for not less than 0.3 second[~~s~~]. An alternate device meeting the above requirements shall be available in the event adequate incineration in the primary device cannot be accomplished. Venting of TRS gases during changeover shall be minimized but in no case shall the time exceed one hour.

[~~(2) When steam or air stripping of condensates or other contaminated streams is practiced, the stripped gases shall be subjected to treatment in the non-condensible system or otherwise given equivalent treatment.~~]

[~~d~~] e. Other Sources:

(1) [~~As soon as practicable, but not later than July 1, 1978, t~~]The total emissions of TRS from other sources including, but not limited to, knotters and brown stock washer vents, brown stock washer filtrate tank vents, and black liquor oxidation vents[~~, and contaminated condensate stripping~~] shall not exceed [~~0.1~~ 0.078 Kg [~~S~~]/metric ton ([~~0.2~~] 0.156 lb[~~s~~]/ton) of production as a daily arithmetic average.

(2) Miscellaneous Sources and Practices. [~~When~~] If it is determined that sewers, drains, and anaerobic lagoons significantly contribute to an odor problem, a program for control shall be required.

[~~e. Compliance Program. As soon as practicable, but not later than January 1, 1983, each mill with lime kiln(s) not in compliance with the 1983 limits shall submit a program and schedule for achieving compliance.~~]

2. Particulate Matter:

a. Recovery Furnaces. The emissions of particulate matter from each recovery furnace stack shall not exceed [~~a monthly arithmetic average of~~]:

(1) 2.0 kilograms per metric ton (four (4) pounds per ton) of production as a daily arithmetic average; [~~and~~]

(2) 0.30 gram[~~s~~] per dry standard cubic meter (0.13 grain[~~s~~] per dry standard cubic foot)[~~.~~] as a daily arithmetic average in accordance with LRAPA Section 33-060 and the Department Source Test Manual; and

(3) 35 percent opacity for a period or periods aggregating more than thirty (30) minutes in any one hundred and eighty (180) consecutive minutes or more than sixty (60) minutes in any twenty four (24) consecutive hours (excluding periods when the facility is not operating).

b. Lime Kilns. The emissions of particulate matter from each lime kiln stack shall not exceed [~~a monthly arithmetic average of~~]:

(1) 0.50 kilogram per metric ton [~~(one (1)~~ 1.0 pound per ton) of production as a daily arithmetic average; [~~and~~]

(2) 0.46 gram[~~s~~] per dry standard cubic meter (0.20 grain[~~s~~] per dry standard cubic foot) as a daily arithmetic average in accordance with LRAPA Section 33-060 and the Department Source Test Manual; and

(3) The visible emission limitations in LRAPA section 33-070-C.4.

c. Smelt Dissolving Tanks. The emission of particulate matter from each smelt dissolving tank stack shall not exceed: [~~a monthly arithmetic average of 0.25 Kg/metric ton (one half (1/2) pound per ton of production.~~]

(1) A daily arithmetic average of 0.25 kilogram per metric ton (0.50 pound per ton) of production; and

(2) The visible emission limitations in LRAPA section 33-070-C.4.

d. Replacement or Significant Upgrading of existing particulate pollution control equipment after July 1, 1988 shall result in more restrictive standards as follows:

(1) Recovery Furnaces.

(a) The emission of particulate matter from each affected recovery furnace stack shall not exceed 1.00 kilogram per metric ton (2.00 pounds per ton) of production as a daily arithmetic average; and

(b) 0.10 gram per dry standard cubic meter (0.044 grain per dry standard cubic foot) as a daily arithmetic average in accordance with LRAPA Section 33-060 and the Department Source Test Manual.

(2) Lime Kilns.

(a) The emission of particulate matter from each affected lime kiln stack shall not exceed 0.25 kilogram per metric ton (0.50 pound per ton) of production as a daily arithmetic average; and

(b) 0.15 gram per dry standard cubic meter (0.067 grain per day standard cubic foot) as a daily arithmetic average in accordance with LRAPA section 33-060 and the Department Source Test Manual when burning gaseous fossil fuel; or

(c) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average; and

(d) 0.30 gram per dry standard cubic meter (0.13 grain per dry standard cubic foot) as a daily arithmetic average in accordance with LRAPA section 33-060 and the Department Source Test Manual when burning liquid fossil fuel.

(3) Smelt Dissolving Tanks. The emissions of particulate matter from each smelt dissolving tank vent stack shall not exceed 0.15 kilogram per metric ton (0.30 pound per ton) of production as a daily arithmetic average.

3. Sulfur Dioxide (SO_2). Emissions of sulfur dioxide from each recovery furnace stack shall not exceed a [~~daily~~] 3-hour arithmetic average of 300 ppm on a dry-gas basis except [~~during start-up and shut-down periods~~] when burning fuel oil. The sulfur content of fuel oil used shall not exceed the sulfur content of residual and distillate oil established in LRAPA section 46-025 2.B.

4. [~~New facility Compliance. As soon as practicable, but not later than within 180 days of the start up of a new kraft mill or of any new or modified facility having emissions limited by these regulations, that facility shall be operated, controlled, or limited to comply with the applicable provisions of these regulations and the mill shall conduct source sampling or monitoring as appropriate to demonstrate~~

~~compliance.~~] All kraft mill sources with the exception of recovery furnaces shall not exceed an opacity equal to or greater than 20 percent for a period exceeding three (3) minutes in any one (1) hour.

5. New Source Performance Standards. New or modified sources that commenced construction after September 24, 1976, are subject to each provision of this section and the New Source Performance Standards, LRAPA section 46-075, whichever is more stringent.

6. Each mill with any recovery furnace, lime kiln, or smelt dissolving tank not in compliance by July 1, 1991 with the emission limitations of this section shall submit by November 1, 1991 a program and schedule for achieving compliance as soon as practicable but not later than July 1, 1992.

D. More Restrictive Emission Limits

The Authority may establish more restrictive emission limits than the numerical emission standards contained in rule 33-070, C. and maximum allowable daily mill site emission limits in kilograms per day for an individual mill upon a finding by the Authority that:

(1) [~~t~~] The individual mill is located or is proposed to be located in a special problem area or an area where ambient air standards are exceeded or are projected to be exceeded[~~,~~] or where the emissions will have a significant air quality impact in an area where the standards are exceeded; or

(2) An odor or nuisance problem has been documented at any mill, in which case the TRS emission limits may be reduced below the regulatory limits; or

(3) Other rules which are more stringent apply.

E. Plans and Specifications

Prior to construction of new kraft mills or modification of facilities affecting emissions at existing kraft mills, complete and detailed engineering plans and specifications for air pollution control devices and facilities, and such other data as may be required to evaluate projected emissions and potential effects on air quality, shall be submitted to and approved by the Authority. All construction shall be in accordance with plans as approved in writing by the Authority.

F. Monitoring

1. General:

a. The details of the monitoring program for each mill shall be submitted to and approved by the Authority. This submittal shall include diagrams and descriptions of all monitoring systems, monitoring frequencies, calibration schedules, descriptions of all sampling sites, data reporting formats and duration of maintenance of all data and reports. Any changes that are subsequently made

in the approved monitoring program shall be submitted in writing to the Authority for review and approved in writing prior to change.

b. All records associated with the approved monitoring program including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least [~~365 days~~] two calendar years and shall be furnished to the Authority upon request.

c. All source test data; TRS and SO_2 concentrations (ppm), corrected for oxygen content, if required, that are determined by continuous monitoring equipment; and opacity as determined by continuous monitoring equipment or EPA Method 9 will be used to determine compliance with applicable emission standards.

All continuous monitoring data, excluding the above, will be used to evaluate performance of emitting processes and associated control systems, and for the qualitative determination of plant site emissions.

2. Total Reduced Sulfur (TRS). Each mill shall [~~continually~~] monitor TRS continuously in accordance with the following:

a. The monitoring equipment shall determine compliance with the emission limits and reporting requirements established by these regulations, and shall [~~continually~~] continuously sample and record concentrations of TRS.

b. The sources monitored shall include, but are not limited to, [~~the~~] individual recovery furnaces [~~stacks and the~~] and lime kilns [~~stacks~~]. All sources shall be monitored downstream of their respective control equipment, in either the ductwork or the stack, in accordance with the Department Continuous Emissions Monitoring (CEMS) Manual.

c. At least [~~one~~] once per year, vents from other sources as required in subsection 33-070, C, 1, [~~d~~] e., Other Sources, shall be sampled to demonstrate the representativeness of the emissions of TRS using EPA Method 16, 16A, 16B or continuous emissions monitors. EPA methods shall consist of three (3) separate consecutive runs of one hour each, in accordance with the Department Source Test Manual. Continuous emissions monitors shall be operated for three consecutive hours in accordance with the Department Continuous Emissions Monitoring Manual. [~~and the~~] All results shall be reported to the Authority.

d. Smelt dissolving tank vents shall be sampled for TRS quarterly except that testing may be semi-annual when the preceding six source tests were less than 0.0124 gram/Kg Bls (0.025 lb/ton Bls) using EPA Method 16, 16A, 16B or continuous emission monitors. EPA methods shall consist of three (3) separate consecutive runs of one hour each, in accordance with the Department Source Test Manual.

3. [~~a.~~] Particulate Matter.

a. Each mill shall sample the recovery furnace(s), lime kiln(s) and smelt dissolving tank[~~(s)~~] vent(s) for particulate emissions [~~with:~~] , in accordance with the Department Source Test Manual.

[~~(1) The sampling method; and~~

~~(2) The analytical method approved in writing by the Authority.~~]

b. Each mill shall provide [~~continual~~] continuous monitoring of opacity of emissions discharged to the atmosphere from [~~the~~] each recovery furnace stack or particulate matter from the recovery furnace(s) in a manner approved in writing by the Authority. (or)

c. Where monitoring of opacity from each recovery furnace is not feasible, provide continuous monitoring of particulate matter from each recovery furnace using sodium ion probes in accordance with the Department Continuous Emissions Monitoring Manual.

d. Recovery furnace particulate source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 0.225 gram/dscm (0.097 grain/dscf) for furnaces subject to LRAPA section 33-070-2 or 0.075 gram/dscm (0.033 grain/dscf) for furnaces subject to LRAPA section 33-070-2.

e. Lime kiln source tests shall be performed semi-annually.

f. Smelt dissolving tank vent source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 0.187 Kilogram per metric ton (0.375 pound per ton) of production.

4. Sulfur Dioxide (SO_2). Representative sulfur dioxide emissions from [~~the~~] each recovery furnace[~~(s)~~] shall be determined at least once each month by the average of three (3) one-hour source tests in accordance with the Department Source Test Manual or from continuous emission monitors. If continuous emission monitors are used, the monitors shall be operated for three consecutive hours, in accordance with the Department Continuous Emissions Monitoring Manual.

5. Combined Monitoring. The Authority may allow the monitoring of a combination of more than one emission streams if each individual emission stream has been demonstrated to be in compliance with all the emission limits of rule 33-070, C, with the exception of opacity. The emission limits for the combined emission stream shall be established by the Authority.

G. Reporting

Unless otherwise authorized or required by permit, data shall be reported by each mill for each calendar month by the fifteenth day of the subsequent month as follows:

1. Applicable [D]daily average emissions of TRS gases expressed in parts per million of H_2S on a dry gas basis with oxygen concentrations, if oxygen corrections are required, for each source included in the approved monitoring program.

2. [~~Monthly~~] Daily average emissions of TRS gases in [~~kilograms~~] pounds of total reduced sulfur per [~~metric~~] equivalent ton of pulp processed, expressed as H_2S for each source included in the approved monitoring program.

3. [~~Monthly~~] 3-hour average emissions of SO_2 based on all samples collected in one sampling period from the recovery furnace(s), expressed as ppm, dry basis.

4. [~~Monthly average emissions of particulates in grams per standard cubic meter and kilograms per metric ton of pulp produced based upon the sampling conducted in accordance with the approved monitoring program.~~] All daily average opacities for each recovery furnace stack where transmissometers are utilized.

5. [~~Average monthly equivalent kraft pulp production.~~] All 6-minute average opacities from each recovery furnace stack that exceeds 35 percent.

6. [~~Average daily and the value of the maximum hourly opacity, and/or the average daily and the value of the maximum hourly particulate emissions in grams per standard cubic meter for each recovery furnace stack on a daily basis.~~] Daily average kilograms of particulate per equivalent metric ton (pounds of particulate per equivalent ton) of pulp produced for each recovery furnace stack. Where transmissometers are not feasible, the mass emission rate shall be determined by alternative sampling conducted in accordance with Section 33-070-F.3(c)

7. The results of each recovery furnace particulate source test in grams per standard cubic meter (grains per dry standard cubic foot) and for the same source test period the [~~continual~~] hourly average opacity [~~or~~], where transmissometers are used, and the particulate monitoring record obtained in accordance with the approved [~~continual~~] or the alternate monitoring program [~~required~~] noted in Section 33-070-F.3(c).

8. Unless otherwise approved in writing, [~~the cumulative number of hourly averages each day that the recovery furnace particulate and TRS, and lime kiln TRS emissions exceed the numerical regulatory or permit limits~~] all periods of non-condensible gas bypass shall be reported.

9. Upset conditions shall be reported in accordance with Section 33-070, H., 3.

10. Each kraft mill shall furnish, upon request of the Authority, such other pertinent data as the Authority may require to evaluate the mill's emission control program.

11. Monitoring data reported shall reflect actual observed levels corrected for oxygen, if required, and analyzer calibration.

12. Oxygen concentrations used to correct pollutant data shall reflect oxygen concentrations at the point of measurement of pollutants.

13. The Authority shall be notified at least ten (10) days in advance of all scheduled reference method testing including all scheduled changes.

H. Upset Conditions

1. Each mill shall [~~immediately~~] report to the Authority abnormal mill operations including control and process equipment maintenance, or [~~breakdowns~~] unexpected upsets [~~which~~] that result in [~~violations~~] emissions in excess of the regulatory or air contaminant discharge permit limits within one hour or, when conditions prevent prompt notice, as soon as possible but no later than one hour after the start of the next LRAPA working day. The mill shall also take immediate corrective action to reduce emission levels to regulatory or permit levels.

2. [~~Significant~~] [~~u~~]Upsets shall be reported in writing with an accompanying report on measures taken or to be taken to correct the condition and prevent its reoccurrence, within the time period requested by the Director.

3. Each mill shall report the cumulative duration in hours each month of the upsets reported in section (1) of this rule and classified as to:

a. Recovery Furnace:

(1) TRS;

(2) Particulate.

b. Lime Kiln:

(1) TRS;

(2) Particulate

c. Smelt Tank Particulate.

I. Chronic Upset Conditions

If the Authority determines that an upset condition is chronic and correctable by installing new or modified process or control procedures or equipment, a program and schedule to effectively eliminate the deficiencies causing the upset conditions shall be submitted. Such reoccurring upset conditions causing emissions in excess of applicable limits [~~may be exempted from Rule 21-050 and~~] may be subject to civil penalty or other appropriate action.

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 36

Excess Emissions

Following the reporting and recordkeeping prescribed herein, approval of procedures for startup, shutdown or maintenance shall not absolve permittees from enforcement action. If the approved procedures are not followed, or if excess emissions are determined to be avoidable, enforcement action may occur pursuant to section 36-030.

Section 36-001 General Policy and Discussion

1. Emissions of air contaminants in excess of applicable standards or permit conditions are considered unauthorized and are subject to enforcement action, pursuant to sections 36-010 through 36-~~025~~030. These rules apply to any permittee operating a source which emits air contaminants in violation of any applicable air quality rule or permit condition resulting from the breakdown of air pollution control equipment or operating equipment, process upset, startup, shutdown, or scheduled maintenance.

2. The purpose of these rules is to:

   A. Require that, where applicable, all excess emissions be reported by sources to the Authority immediately;

   B. Require permittees to submit information and data regarding conditions which resulted or could result in excess emissions; and

   C. Identify criteria to be used by the Authority for determining whether enforcement action will be taken against a permittee for excess emissions.

Section 36-005 Definitions

The following definitions are relevant for the purposes of Title 36, only. Additional definitions can be found in Title 12, "Definitions."

1. "Event" means any period of excess emissions.

2. "Excess Emissions" means emissions which are in excess of an Air Contaminant Discharge Permit or any applicable air quality rule.

3. "Immediately" means one of the following:

   A. During LRAPA's normal work hours, 8:00 a.m. to 5:00 p.m. Monday through Friday, report is to be made as soon as possible but no more than one (1) hour after the beginning of the excess emissions; or

   B. During LRAPA's off-duty hours or on weekends or holidays, report is to be made as soon as possible but no more than one (1) hour after the beginning of the excess emissions, using LRAPA's electronic telephone answering equipment. If the person reporting the incident is unable to access the telephone answering equipment because of overloaded telephone circuits or telephone equipment malfunction, the report must be made to the LRAPA business office at the beginning of the next working day.

4. "Permittee" means the owner or operator of the facility, in whose name the operation of the source is authorized by the Air Contaminant Discharge Permit.

5. "Process Upset" means a failure or malfunction of a production process or system to operate in a normal and usual manner.

6. "Shutdown" means that time during which normal operation of an air contaminant source or emission control equipment is terminated.

7. "Startup" means that time during which an air contaminant source or emission control equipment is brought into normal operation.

8. "Unavoidable" means events which are not caused entirely or in part by poor or inadequate design, operation, maintenance, or any other preventable condition in either process or control equipment.

9. "Upset" or "Breakdown" mean any failure or malfunction of any pollution control equipment or process equipment which may cause excess emissions.

Section 36-010 Planned Startup and Shutdown

1. Where startup or shutdown of a production process or system may result in excess emissions, prior Authority approval shall be required for the startup/shutdown procedures that will be used to minimize excess emissions. Application for approval of procedures shall be submitted and received by the Authority in writing at least seventy-two (72) hours prior to the event, and shall include the following:

   A. The reasons why the excess emissions during startup and shutdown could not be avoided;

   B. Identification of the specific production process or system causing the excess emissions;

C. The nature of the air contaminants likely to be emitted, and an estimate of the amount and duration of the excess emissions;

D. Identification of specific procedures to be followed which will minimize excess emissions.

2. In cases where planned startup and shutdown occurs on a periodic or regular schedule, approval of the schedule and procedures may be obtained by providing the information specified in 36-010-1. In such cases, the 72-hour approval requirement is waived. This pre-approval must be renewed annually.

3. Approval of the startup/shutdown procedures by the Authority shall be based upon determination that said procedures are consistent with good pollution control practices and will minimize emissions during such period, to the extent practicable, and that no adverse health impact on the public will occur. The permittee shall record all excess emissions in the upset log as required in subsection 36-025-3.

~~4. Except where a regular schedule of startup or shutdown has been pre-approved under 36-010-2, a 24-hour notice shall be provided prior to the planned startup or shutdown.~~

~~5~~4. No planned startup or shutdown resulting in excess emissions shall occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced "Stage I Red" woodstove advisory period within areas designated by the Authority as PM_{10} Nonattainment Areas.

~~6~~5. In cases where the Authority has not received notification of a planned startup or shutdown within the required seventy-two (72) hours prior to the event, or where such approval has not been waived pursuant to subsection 36-010-2, the permittee shall immediately notify the Authority by telephone of the situation, and shall be subject to the requirements under Upsets and Breakdowns in section 36-020.

Section 36-015 Scheduled Maintenance

1. Where it is anticipated that shutdown, by-pass, or operation at reduced efficiency of production equipment or air pollution control equipment for necessary scheduled maintenance may result in excess emissions, the source operator must obtain prior Authority approval of procedures that will be used to minimize excess emissions. Application for approval of procedures associated with scheduled maintenance shall be submitted and received by the Authority in writing at least seventy-two (72) hours prior to the event, and shall include the following:

A. The reasons explaining the need for maintenance, including why it would be impractical to shut down the source operation during the period, and why the

by-pass or reduced efficiency could not be avoided through better scheduling for maintenance or through better operation and maintenance practices;

B. Identification of the specific production or emission control equipment or system to be maintained;

C. The nature of the air contaminants likely to be emitted during the maintenance period, and the estimated amount and duration of the excess emissions, including measures such as the use of overtime labor and contract services and equipment that will be taken to minimize the length of the maintenance period;

D. Identification of specific procedures to be followed which will minimize excess emissions.

2. In cases where maintenance occurs on a periodic or regular schedule, approval of the schedule and procedures may be obtained by providing the information specified in 36-015-1. In such cases, the 72-hour approval requirement is waived. This pre-approval must be renewed annually.

3. Approval of the above procedures by the Authority shall be based upon determination that said procedures are consistent with good pollution control practices and will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur. The permittee shall record all excess emissions in the upset log as required in subsection 36-025-3.

~~4. Except where regular scheduled maintenance has been pre-approved under 36-015-2, a 24-hour notice shall be provided prior to the scheduled maintenance.~~

5~~4~~. No scheduled maintenance which is likely to result in excess emissions shall occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced "Stage I Red" woodstove advisory period, in areas determined by the Authority as PM_{10} Nonattainment Areas.

6~~5~~. In cases where the Authority has not received notification of maintenance that is likely to cause excess emissions within the required seventy-two (72) hours prior to the event, or where such approval has not been waived pursuant to subsection 36-025-2, the permittee shall immediately notify the Authority by telephone of the situation, and shall be subject to the requirements under Upsets and Breakdowns in section 36-020.

Section 36-020 Upsets and Breakdowns

1. All permittees must notify the Authority immediately by telephone of all cases of excess emissions due to upset or breakdown. In addition, the event is to be record-

ed in the upset log as required in subsection 36-025-3. Submittal of a written report may be requested, based on the severity of the event, pursuant to subsections 36-025-1 and 36-025-2.

2. During any period of excess emissions due to upset or breakdown, the Authority may require that a source immediately reduce or cease operation of the equipment or facility until such time as the condition causing the excess emissions has been corrected or brought under control. Such action by the Authority would be taken upon consideration of the following factors:

   A. Whether potential risk to the public or environment exists;

   B. Whether any Air Pollution Alert, Warning, Emergency, or yellow or red woodstove curtailment period exists; or

   C. Whether shutdown could result in physical damage to the equipment or facility, or cause injury to employees;

   D. Whether continued excess emissions are determined by the Authority to be avoidable.

3. In the event of an on-going period of excess emissions due to upset or breakdown, the source shall cease operation of the equipment or facility no later than forty-eight (48) hours after the beginning of the excess emission period, if the condition causing the emissions is not corrected within that time. The source need not cease operation if it can obtain Authority approval of procedures that will be used to minimize excess emissions until such time as the condition causing the excess emissions is corrected or brought under control. Approval of these procedures shall be based on the following information supplied to the Authority:

   A. The reasons why the condition(s) causing the excess emissions can not be corrected or brought under control. Such reasons shall include, but not be limited to, equipment availability and difficulty of repair or installation.

   B. Information as required in section 36-010.

4. Approval of the above procedures by the Authority shall be based upon determination that said procedures are consistent with good pollution control practices and will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur.

Section 36-025 Reporting and Recordkeeping Requirements

1. For any period of excess emissions, the Authority may require the permittee to submit a written excess emission report within fifteen (15) days of the date of the event, which includes the following:

A. The date and time each event was reported to the Authority;

B. Information as described in subsections 36-030-1.A through 36-030-1.C; and

C. The final resolution of the cause of the excess emissions.

2. Based on the severity of the event, the Authority may waive the 15-day reporting period and specify either a shorter or longer time period for report submittal. The Authority may also waive the submittal of the written report if, in the judgement of the Authority, the period or magnitude of excess emissions was minor. In such cases, the permittee shall record the event in the upset log pursuant to subsection 36-025-3.

3. All permittees shall keep an upset log of all planned and unplanned excess emissions. The upset log shall include all pertinent information as required by subsections 36-025-1.A through 36-025-1.C.

4. At each reporting period specified in a permit, or sooner if required by the Authority, the permittee shall submit a copy of the log entries for the reporting period. Upset logs shall be kept by the permittee for two (2) calendar years.

Section 36-030 Enforcement Action Criteria

In determining if a period of excess emissions is avoidable, and whether enforcement action is warranted, the Authority shall consider the following information submitted by the source:

1. Whether the event was due to negligent or intentional operation by the source. For the Authority to find that an incident of excess emissions is not due to negligent or intentional operation by the source, the permittee must demonstrate, upon Authority request, that all of the following conditions were met:

A. The process or handling equipment and the air pollution control equipment were at all times maintained and operated in a manner consistent with good practice for minimizing emissions.

B. Repairs or corrections were made in an expeditious manner when the Operator(s) knew or should have known that emission limits were being or were likely to be exceeded. Expeditious manner may include such activities as use of overtime labor or contract labor and equipment that would reduce the amount and duration of the excess emissions.

C. The event was not one in a recurring pattern of incidents which indicate inadequate design, operation, or maintenance.

2. Whether appropriate remedial action was taken.

3. Whether the event occurred during startup, shutdown, maintenance, or as a result of a breakdown or malfunction.

4. Whether the Authority was furnished with complete details of the event--i.e., the equipment involved, the duration or best estimate of the time until return to normal operation, the magnitude of emissions and the increase over normal rates or concentrations as determined by continuous monitoring or a best estimate (supported by operating data and calculations).

5. Whether the amount and duration of the excess emissions were limited to the maximum extent practicable during the period of excess emissions;

6. Whether notification occurred immediately pursuant to subsections 36-020-1 through 36-020-2.

TITLE 34
Air Contaminant Discharge Permits

It is proposed to adopt a new Title 36, "Excess Emissions," in order to bring LRAPA's rules into compliance with federal and state rules. Because the excess emissions rules are to be contained in a new, separate title, it is also proposed to delete the existing rules, Title 34, Section 035 Upset Conditions.

~~Section 34-035 Upset Conditions~~

~~1. Emissions exceeding any of the limits established in these rules may not be deemed to be in violation of these rules, if they were caused as a direct result of upset conditions in or breakdown of any operating equipment which was unavoidable and which was not caused or contributed to through careless or unsafe operation, or as a direct result of the shutdown of such equipment for scheduled maintenance, if the requirements of this section are met.~~

~~2. If the Director determines that the excessive emissions are harmful to the public health or welfare, they will be deemed to be in violation of these rules.~~

~~3. Each such occurrence shall be reported to the Director as soon as reasonably possible but at least within four (4) hours of the occurrence of the breakdown or upset condition.~~

~~4. The person responsible for the source of excessive emissions shall, with all practicable speed, initiate and complete appropriate actions to correct the conditions causing the excessive emissions. Upon request of the Director, that person shall submit to the Director a full written report of the occurrence, the known causes and the actions taken to mitigate the emissions and meet the requirements of this section.~~

~~5. No later than forty eight (48) hours after the start of an upset condition or breakdown, the person responsible for the source of excessive emissions shall discontinue operation of the equipment or facility causing the excess emissions. The Director may, for demonstrated good cause which includes but is not limited to equipment availability, difficulty of repairs and nature and quantity of emissions, authorize an extension of operation beyond the 48 hour period.~~

~~6. For scheduled maintenance which will produce excessive emissions, a report shall be submitted at least twenty four (24) hours prior to shutdown and contain the following information:~~

~~A. Identification of the specific facilities to be taken out of service;~~

~~B. Statement of the nature and quantity of emissions of air contaminants likely to occur during the shutdown period;~~

~~C. Identification of the measures that will be taken to minimize the length of the shutdown period and minimize air contaminant emissions. If mitigating measure are impractical, reasons acceptable to the Director must be given.~~

STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

Legal Authority

ORS 183, 468.535, the Federal Clean Act Amendments of 1990, and LRAPA Rules and Regulations Title 13.

Need for Amendments

Revisions of the Kraft Pulp Mill regulations, contained in LRAPA Title 33, are required to comply with federal Clean Air Act Section 110 and Section 111(d) Emission Standards. These changes have also been adopted by the Oregon Environmental Quality Commission. In addition, obsolete parts are being removed from certain sections of Title 33 as a housekeeping revision.

Principal Documents Relied Upon

1. Attorney General's Uniform and Model Rules of Procedure
2. LRAPA Title 33
3. LRAPA Staff Report to LRAPA Board of Directors, March 12, 1991
4. Clean Air Act Amendments of 1977 (PL 95-95)
5. Clean Air Act Amendments of 1990
6. ORS 183 and 468, et. seq.

STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

Legal Authority

ORS 183, 468A.135. ORS 183, LRAPA Titles 13 and 14.

Need for Amendments

These revisions are needed to bring LRAPA's excess emission rules into conformance with current federal enforcement policy and make them consistent with state rules. Federal law places responsibility on the permittees to demonstrate to the appropriate authority that a period of excess emissions was a result of an unavoidable condition, for which prompt agency notification and remedial action occurred. The new rules would provide necessary information to evaluate whether enforcement action is warranted, provide a complete record of the occurrences of excess emissions and help insure that excess emissions are minimized to the fullest extent possible. It is advantageous to place these rules under their own title in order to facilitate ease of access to the information.

Principal Documents Relied Upon

1. Attorney General's Uniform and Model Rules of Procedure
2. LRAPA Title 34, Section 035
3. LRAPA Staff Report to LRAPA Board of Directors, March 10, 1992
4. OAR 340-20-355 through 340-20-380
5. EPA Region 10: Guidance For the Preparation of SIP Excess Emission Regulation
6. Clean Air Act Amendments of 1990

Summary of Proposed Revisions

These revisions would repeal LRAPA section 34-035 and replace it with rules under Title 36 which would require that, where applicable, prior notice of planned excess emissions be provided and unplanned excess emissions be reported immediately. The new rules would require permittees to submit information and data regarding conditions which resulted or could result in excess emissions, and identify criteria to be used by the Authority for determining whether enforcement action will be taken against a permittee for excess emissions.

FISCAL AND ECONOMIC IMPACT STATEMENT

Impact on State Agencies: None.

Impact on Local Agencies: These rules will require some additional staff time to modify the existing permit for the pulp mill (only one affected source in Lane County).

Impact on Public: None.

Impact on Industry: Weyerhaeuser Co. has estimated economic impact to be $809,000 plus ongoing costs of $63,000 per year.

LAND USE CONSISTENCY STATEMENT

The proposed rule amendments are consistent with land use as described in applicable land use plans in Lane County.

DRA/MJD
03/20/91

FISCAL AND ECONOMIC IMPACT STATEMENT

Impact on State Agencies: None.

Impact on Local Agencies: **Negative**. Increased workload due to requirements to make determinations regarding possible enforcement or other action which is deemed appropriate when excess emissions are determined to be avoidable. Implementation of these rules together with other tracking requirements for permitted sources will necessitate additional FTEs. Current FTE estimate for these rules is approximately .25. **Positive**. The stricter requirements of Title 36 will provide a greater degree of industrial compliance with clean air regulations. The reporting requirements will increase LRAPA's awareness of excess emissions episodes and will also provide better information for use in enforcement actions.

Impact on Public: **Positive**. The stricter regulations for allowing excess emissions and for reporting of emissions will likely result in fewer, shorter-duration episodes of excess emissions due to maintenance procedures. It is also an incentive to keep emissions from upset/breakdown episodes to a minimum and to avoid those situations wherever possible.

Impact on Industry: **Negative**. It is expected that these rules will have a moderate impact on all permittees. The immediate notification requirement is similar to the existing rule section 34-035, except that the 4-hour reporting deadline is shortened to 1 hour. Subject to the written reporting requirements, certain permittees of major sources may experience additional time to prepare written reports. Some permittees may also experience more frequent enforcement actions, as determined from excess emission reports. **Positive**. The greater vigilance encouraged by these rules will help industries to keep overall emissions down and should also help operators to keep closer track of day-to-day operations and possibly avoid large enforcement actions.

LAND USE CONSISTENCY STATEMENT

The proposed rule amendments are consistent with land use as described in applicable land use plans in Lane County.

DRA/RM
03/10/92

NOTICE OF INTENT TO ADOPT AMENDMENTS TO OREGON'S AIR QUALITY IMPLEMENTATION PLAN

In accordance with Title 42 of the Lane Regional Air Pollution Authority (LRAPA) Rules and Regulations, the Board of Directors is proposing:

To amend LRAPA Title 33, "Prohibited Practices and Control of Special Classes" (change Section 070, Kraft Pulp Mills, to conform with federal and state rules; add Section 005, Definitions, to add clarity to Title 33; delete Section 025, Wigwam Waste Burners, because it is no longer needed; remove Sub-Sections 045-B, 060-A(4), 060-B(3), 060-C(6) and 060-D(8) as obsolete; delete Subsections D, E and F from Section 065, Charcoal Producing Plants, as obsolete).

WHO IS AFFECTED: Weyerhaeuser Co. in Springfield is affected by the changes to pulp mill rules. Deletion of the obsolete parts has no effect on any existing source in Lane County.

PUBLIC HEARING:

Public hearing on the above rule adoption will be held before the LRAPA Board of Directors at its regular meeting of Tuesday, May 14, 1991.

Location: *City Council Chambers*
Springfield City Hall
225 North 5th Street
Springfield, OR

Time: 12:15 p.m.

Copies of the proposed rules, as well as Statements of Need and Fiscal Impact, are available for review at the LRAPA office located at 225 North 5th, Suite 501 (Springfield City Hall building), Springfield, OR 97477 until May 14, 1991. The public may comment on the proposed regulations by calling the LRAPA business office, 726-2514; and written comment may be submitted until May 13, 1991, to 225 North 5th, Suite 501.

To Be Published: Wednesday, April 10, 1991

OREGON BULLETIN

VOLUME 31, No. 10
Issue Date: April 1, 1992

This issue contains Administrative Rule Orders and Notices of Proposed Rulemaking officially filed **February 14, 1992, 8:00 a.m. through March 13, 1992, 5:00 p.m.**

Published by
PHIL KEISLING
Secretary of State

SUMMARY: Establishes procedures for resolving employee representation issues when school districts are merged.
LAST DATE FOR COMMENT: 4-21-92
CONTACT PERSON: Esther M. Forrest
ADDRESS: Employment Relations Board, Old Garfield School Building, 528 Cottage Street, NE, Suite 400, Salem, OR 97310
TELEPHONE: 378-3807

* * * *

Energy, Department of
Chapter 330

DATE:	TIME:	LOCATION:
4-16-92	10 AM	Department of Energy 625 Marion NE Salem, OR 97310

HEARINGS OFFICER: Michael W. Grainey
STATUTORY AUTH: ORS 469.752 to 756, Chapter 487, Oregon Laws 1991, Senate Bill 807, 1991 Legislature
ADOPT: OAR 330-110-000
SUMMARY: Offers an incentive to state agencies to implement conservation projects by:
1) Allowing the agency to retain 50% of the net savings after debt service;
2) Allowing the state agency's budget to remain intact, and not be cut as a result of the project's savings of fuel and operating expenses;
3) Allowing the agency to administer a revolving fund of deposited savings.
LAST DATE FOR COMMENT: 4-16-92
CONTACT PERSON: Linda Jordan
ADDRESS: Department of Energy, 625 Marion St. NE, Salem, OR 97310
TELEPHONE: 373-7980

* * * *

Environmental Quality, Department of
Chapter 340

Lane Regional Air Pollution Authority

DATE:	TIME:	LOCATION:
4-14-92	12:15 PM	City Council Chambers Springfield City Hall 225 North 5th Springfield, OR

HEARINGS OFFICER: Donald R. Arkell
STATUTORY AUTH: ORS Chapter 183 and 468, OAR 340-020-047 and OAR 340-20-355 through 380, the following action is proposed.
ADOPT: LRAPA Title 36 "Excess Emissions"
REPEAL: LRAPA Title 34, Section 35, Upset Conditions
SUMMARY: These revisions would repeal LRAPA section 34-035 and replace it with rules under Title 36 which would require that, where applicable, prior notice of planned excess emissions be provided and unplanned excess emissions be reported immediately. The new rules would require permittees to submit information and data regarding conditions which resulted or could result in excess emissions, and identify criteria to be used by the Authority for determining whether enforcement action will be taken against a permittee for excess emissions. The proposed revisions are needed to bring LRAPA's excess emissions rules into conformance with current federal enforcement policy and make them consistent with state rules.
LAST DATE FOR COMMENT: 4-13-92
CONTACT PERSON: Donald R. Arkell, Director
ADDRESS: Lane Regional Air Pollution Authority, 225 North 5th, Suite 501, Springfield, OR 97477
TELEPHONE: 726-2514

* * * *

DATE:	TIME:	LOCATION:
4-15-92	9 AM	Dept. of Environmental Quality 811 SW Sixth Avenue Conference Room 3A Portland, OR

HEARINGS OFFICER: Kent Ashbaker
STATUTORY AUTH: ORS 468.065
AMEND: OAR 340-45-075
SUMMARY: The Department proposes to amend the water quality permit fee schedule by adding an additional permit processing fee category to cover general permits not specifically identified in the existing fee schedule. This will allow the Department to continue to develop and adopt general permits without the necessity to modify the fee schedule in each instance. An additional category is proposed to account for the costs associated with plan review and site evaluations associated with permit issuance so that those costs don't have to be reflected in the base fee schedule. In addition, a housekeeping change is proposed to combine fee categories where the annual compliance determination fees are the same.
LAST DATE FOR COMMENT: 4-17-92 - 5 PM
CONTACT PERSON: Jerry Turnbaugh
ADDRESS: Department of Environmental Quality, 811 SW Sixth Avenue, Portland, OR 97204
TELEPHONE: 229-5374

* * * *

DATE	TIME:	LOCATION:
4-16-92	7 PM to 9 PM	City Hall - Mayor's Office 1220 SW 5th Ave - Room 321 Portland, OR

P. O. BOX 10188 PHONE (503) 485-1234
EUGENE, OREGON 97440

Legal Notice 12371

Legal Notice Advertising

☐ Tearsheet Notice

☐ Duplicate Affidavit

LANE REG. AIR POLLUTION AUTH
DONALD ARKELL, DIRECTORY
225 N FIFTH #501
SPRINGFIELD OR 97477

AFFIDAVIT OF PUBLICATION

STATE OF OREGON,)
COUNTY OF LANE,) ss.

I, WENDY L. WALSH, being first duly sworn, depose and say that I am the Advertising Manager, or his principal clerk, of the Eugene Register-Guard, a newspaper of general circulation as defined in ORS 193.010 and 193.020; published at Eugene in the aforesaid county and state; that the NOTICE OF INTENT, a printed copy of which is hereto annexed, was published in the entire issue of said newspaper for ONE successive and consecutive DAY in the following issues:

MARCH 18, 1992

NOTICE OF INTENT TO ADOPT AMENDMENTS TO OREGON'S AIR QUALITY IMPLEMENTATION PLAN

In accordance with Title 14 of the Lane Regional Air Pollution Authority (LRAPA) Rules and Regulations, the Board of Directors is proposing:

To rescind LRAPA Section 34-035, "Upset Conditions," and adopt new LRAPA Title 36, "Excess Emissions." These revisions are needed to bring LRAPA's excess emission rules into conformance with current federal enforcement policy and make them consistent with state rules. Federal law places responsibility upon the permittees to demonstrate to the appropriate authority that a period of excess emissions was a result of an unavoidable condition, for which prompt agency notification was given and remedial action taken. The new rules would provide necessary information to evaluate whether enforcement action is warranted, provide a complete record of the occurrences of excess emissions and help insure that excess emissions are minimized to the fullest extent possible.

WHO IS AFFECTED

Operations subject to LRAPA's Air Contaminant Discharge Permit requirement.

PUBLIC HEARING

Public hearing on the above rule adoption will be held before the LRAPA Board of Directors at its regular meeting of Tuesday, April 14, 1992.

Location:
City Council Chambers
Springfield City Hall
225 North 5th Street
Springfield, OR

Time: 12:15 p.m.

Copies of the proposed rules, as well as Statements of Need and Fiscal Impact, are available for review at the LRAPA office located at 225 North 5th, Suite 501 (Springfield City Hall building), Springfield, OR 97477 until April 14, 1992. The public may comment on the proposed regulations by calling the LRAPA business office, 726-2514; and written comment may be submitted until April 13, 1992, to 225 North 5th, Suite 501.

No. 12371 -- March 18, 1992.

Wendy L. Walsh

Subscribed and sworn to before me this MAR. 23, 1992

Shannon Pool
Notary Public of Oregon

My Commission Expires: 11-13-93

AFFIDAVIT

LANE REGIONAL

AIR POLLUTION AUTHORITY

(503) 726-2514
225 North 5th, Suite 501, Springfield, OR 97477

Donald R. Arkell, Director

M E M O R A N D U M

To: Oregon Environmental Quality Commission

From: Donald R. Arkell, Hearings Officer

Date: June 26, 1991

Subject: Public Hearing, May 14/June 11, 1991, Regarding Proposed Amendments to LRAPA Title 33, "Prohibited Practices and Control of Special Classes"

SUMMARY OF PROCEDURE

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Pollution Authority at 12:55 p.m. on May 14, 1991 in the Springfield City Council Chamber at 225 North 5th in Springfield. LRAPA had received designation from the DEQ Director as hearings officer for the Oregon Environmental Quality Commission, and this was a concurrent EQC/LRAPA hearing. The purpose of the hearing was to receive testimony concerning proposed adoption of amendments to LRAPA Title 33, "Prohibited Practices and Control of Special Classes." Written comments had been received from Weyerhaeuser Co. in Springfield, the company on which the proposed amendments would have the greatest impact. Staff recommended several revisions to the original proposal which resulted from discussions with Weyerhaeuser (see attached minutes of May 14, 1991 meeting). There was one Weyerhaeuser representative present who commented on the proposed rules.

Because there were not enough board members present to constitute a quorum, no action could be taken at the May meeting, and the hearing was held open until the June 11, 1991 meeting. Staff presented a review of the revisions to the proposed amendments. The hearing was reopened on June 11, and no further testimony was taken.

SUMMARY OF TESTIMONY

Jerry Ritter, Weyerhaeuser Co., Springfield. (*Regarding the discussion about retaining the current particulate matter emissions rate for recovery furnaces instead of reducing them as originally proposed, in order to allow Weyerhaeuser to retain its banked emissions.*) Ritter commented about the effects of the company's emissions bank on expansion plans. He said the new expansion which they have in mind is not expected to result in significant measurable air quality impact and would, therefore, not be affected by the presence or absence of an emissions bank.

ACTION OF THE LRAPA BOARD OF DIRECTORS

Based on the information presented, the board voted unanimously to adopt the amendments to LRAPA Title 33, as revised.

DRA/MJD

LANE REGIONAL

AIR POLLUTION AUTHORITY

(503) 726-2514
225 North 5th, Suite 501, Springfield, OR 97477

Donald R. Arkell, Director

MEMORANDUM

To: Record of Adoption Proceedings, LRAPA Title 36

From: Donald R. Arkell, Hearings Officer

Subject: Public Hearing, April 14, 1992

Summary of Procedure

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Pollution Authority at 12:43 p.m. on April 14, 1992 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA had received designation from the DEQ Director as hearings officer for the Oregon Environmental Quality Commission, and this was a concurrent EQC/LRAPA hearing. The purpose of the hearing was to receive testimony concerning proposed adoption of new LRAPA Title 36, "Excess Emissions," and repeal of existing Section 34-035, "Upset Conditions." There was no one present who wished to comment on the proposed rules.

Summary of Testimony

There was no testimony presented at the hearing.

Action of the LRAPA Board of Directors

Prior to the authorization for hearing, the proposed rules were distributed to affected industrial sources for comment; and staff met with interested parties, including industrial representatives, regarding their concerns. The concerns raised during that process and prior to the hearing were addressed in the final version of the rules which was presented to the board. Information regarding specific concerns is contained in the April 14 staff report (Attachment A).

Based on the information presented, the board voted unanimously to adopt new Title 36 and repeal Section 34-035.

DRA/MJD

Environmental Quality Commission

☒ Rule Adoption Item
☐ Action Item
☐ Information Item

Agenda Item K-1
July 23, 1992 Meeting

Title:

Amendments to the Oregon Visibility Protection Plan for Class I areas, as a revision to the Oregon State Implementation Plan

Summary:

The Oregon Visibility Protection Plan, adopted by the Commission in 1986, was designed to prevent future impairments to visibility and demonstrate reasonable further progress in alleviating visibility impacts in Class I areas (in Oregon this includes 11 wilderness areas and Crater Lake National Park). Recent monitoring has shown significant improvements in reducing visibility impairments in both the northern and central Cascades. Monitoring has shown that there are impacts from field burning in the Eagle Cap Wilderness Area and Central Oregon Cascade wilderness areas.

Based on public comment and recommendations from the Oregon Visibility Advisory Committee the Department proposes that: 1) the period of burning restrictions be extended by approximately 15 days; 2) the visibility protection provisions of the Union and Jefferson county field burning ordinances be incorporated in the Plan; 3) formal review of the program be extended from 3 to 5 years; 4) the annual acreage allowed for research and hardwood conversion burning be reduced from 1200 to 600 acres a year; 5) the Willamette Valley field burning rules be revised to allow hardship requests beyond August 10th for exemptions from weekend visibility restrictions. The Department considered, and rejected, additional recommendations by some Committee members for more protective measures because of the progress already obtained.

Department Recommendation:

Adopt the amendments to the Plan in order to better protect Class I areas from summertime visibility impairment as recommended by the Visibility Advisory Committee and outlined in Attachment A of the staff report.

Report Author	Division Administrator	Director Acting
Brian Finneran	Greenwood	Stephanie Hallock

July 7, 1992

Oregon

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

REQUEST FOR EQC ACTION

Meeting Date: July 23, 1992
Agenda Item: K-1
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption: Amendments to the Oregon Visibility Protection Plan for Class I areas, as a revision to the Oregon State Implementation Plan.

PURPOSE:

To assure reasonable further progress toward reducing visibility impairment (haze) in wilderness areas, as required by the Clean Air Act.

ACTION REQUESTED:

X	Adopt Rules	
	Proposed Rules	Attachment A
	Rulemaking Statements	Attachment B
	Fiscal and Economic Impact Statement	Attachment C
	Public Notice	Attachment D
	Land Use Compatibility Statement	Attachment E
	Advisory Committee Recommendations	Attachment F
	Hearing Officer's Report	Attachment G

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

DESCRIPTION OF REQUESTED ACTION:

The Oregon Visibility Protection Plan was developed by the Department of Environmental Quality six years ago to meet the requirements of the 1977 Clean Air Act to show reasonable further progress in the "prevention of any future, and the remedying of any existing impairment of visibility in mandatory Class I federal areas which impairment results from manmade air pollution". Actual adoption of the Plan by the Environmental Quality Commission occurred on October 24, 1986.

Oregon's 12 Class I areas include 11 wilderness areas and Crater Lake National Park. Monitoring conducted since the early 1980s has shown significant improvements in reducing visibility impairment by nearly 65% in the Northern Cascades and nearly 75% in the Central Cascades. This is consistent with the goal of eventually achieving a 60%-90% improvement in visibility over 1982-1984 levels, as recommended by the Oregon Visibility Advisory Committee in 1985.

Recent monitoring has also shown that summertime agricultural field burning in the Grande Ronde Valley of Union County accounts for approximately 1/4 of the visibility impairment within the Eagle Cap Wilderness Area. Summer field burning in Jefferson County has also been identified as a source of impairment within the Central Oregon Cascade Wilderness areas.

The 1990 Clean Air Act Amendments reaffirmed the requirement for states to develop rules which assure that reasonable further progress is made toward visibility improvements. In January, 1992, the Oregon Visibility Advisory Committee recommended the following improvements to the Department of Environmental Quality, which the Department is now proposing as amendments to the Visibility Protection Plan: 1) expand the period during which restrictions to protect visibility apply by approximately 15 days, that is from the existing period of July 4th weekend - Labor Day, to the new period of July 1 - September 15th; 2) incorporate the Class I area visibility protection provisions of the Union and Jefferson County field burning ordinances; 3) extend the frequency of formal review of the Visibility Program by the Department from 3 to 5 years; 4) reduce the annual acreage allowed for research and hardwood conversion burning from 1200 to 600 acres per year; and 5) revise the Willamette Valley field burning restriction emergency clause to allow hardship requests for visibility protection exemptions beyond August 10th of each year. The long-term element of the strategy would also be revised to eliminate increased fire- wood

removal as a method of enhancing visibility protection.

The Visibility Protection Program relating to prescribed forestry burning is administered by the Oregon Department of Forestry (ODF), and is closely linked to the Oregon Smoke Management Plan (i.e., implementation of certain provisions of the Visibility Plan must be conducted through the Smoke Management Plan).

AUTHORITY/NEED FOR ACTION:

_X_ Statutory Authority: ORS 468.305 Attachment ___
___ Pursuant to Rule: _____ Attachment ___

_X_ Pursuant to Federal Law/Rule:

Federal Clean Air Act Amendments of 1990. Attachment ___

___ Other: Attachment ___

_X_ Time Constraints:

The proposed revisions to the Plan outlined on the previous page need to be adopted in order to be implemented by mid-summer. These provisions are being proposed for rule adoption concurrently with the amendments to the Oregon Slash Burning Smoke Management Plan.

DEVELOPMENTAL BACKGROUND:

These amendments were authorized for public hearing by the Director on April 10, 1992.

During May 18-22, 1992, four public hearings were held in the state to accept testimony on these amendments as well as amendments to the Oregon Slash Burning Smoke Management Plan.

The following summary represents the more significant issues raised at these hearings. See the Hearing Officer's Report in Attachment G for the full list of issues and responses.

1. The Visibility Protection Plan is too limited and does not attempt to protect all Class I areas in the state.

2. The Department should not delete the existing provision which allows for fire wood removal from forest lands as a method of enhancing visibility protection, since this does not contribute to woodstove smoke problems in PM_{10} nonattainment areas.

3. The expanded visibility protection period for Class I areas in the Plan is still too limited, and should be extended to a 90 day period the first year, and then to a 120 day period the next year.

4. The visibility protection period should include Willamette Valley field burning seven days a week, not just on weekends.

5. In addition to protecting the Eagle Cap Wilderness Area from field burning smoke impacts, the Plan amendments should address slash burning impacts as well.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Testimony from members of state, federal and private forest land managers was mostly in support of the proposed amendments (see also Attachment C, Fiscal and Economic Impact Statement). The issues summarized above were raised by representatives of various environmental groups, who favored additional protection of all Class I areas in the state[1] .

The Department's response to these issues is as follows (see also Attachment G, Hearing Officer's Report):

1. The Visibility Protection Plan is too limited and does not attempt to protect all Class I areas in the state.

The strategies identified in the Visibility Protection Plan are based on visibility monitoring data from primarily Class I areas in the Oregon Cascades. Given the choice between focusing efforts on 1) only those Class I areas where the extent of visibility impairment was known, or 2) all Class I areas, including those where impairment is not known, the Visibility Advisory Committee chose the former. The Department supports this approach, as well as the Committee's additional recommendation to identify visibility impairment problems within other Class I areas. The long-term strategy outlined on page A-17 of the Plan does include numerous provisions for making reasonable further progress for all Class I areas over the next 10-15 years.

---

[1] These representatives supported the recommendations contained in the Minority Report of the Visibility Advisory Committee, which follows the Advisory Committee Recommendations in Attachment F. The issues summarized above are also discussed in the minority report.

2. The Department should not delete the existing provision which allows for fire wood removal from forest lands as a method of enhancing visibility protection, since this does not contribute to woodstove smoke problems in PM_{10} nonattainment areas.

The goal of this provision was to lessen fuel loadings and lower emissions from prescribed burning. However, if firewood removal were to transfer the burning of this wood into PM_{10} nonattainment areas, this could add to smoke problems there. Given this possibility, the Department agrees with the Visibility Advisory Committee that it should not continue to encourage firewood removal, as this would be contrary to the State Implementation Plan (SIP) control strategy to reduce woodstove smoke in PM_{10} nonattainment areas. (It should be pointed out that the net effect of this deletion neither encourages nor discourages firewood removal.) The Department also would not want to support a tradeoff in which visibility improvement, which is an aesthetic issue, is placed over PM_{10} attainment, which is a health issue. The Department still strongly supports slash utilization for purposes such as power generation, where the use pollution control equipment can significantly minimize PM_{10} emissions.

3. The expanded visibility protection period for Class I areas in the Plan is still too limited, and should be extended to a 90 day period the first year, and then to a 120 day period the next year.

The Minority Report of the Visibility Advisory Committee recommended this extension of the protection period. However, given the recent success in visibility improvement, the Department believes the July 1 - September 15 extension contained in these amendments is more appropriate at this time, but would consider further expansion of the protection period at the next plan review period if an increase in visibility impairment occurs.

4. The visibility protection period should include Willamette Valley field burning seven days a week, not just on weekends.

The Visibility Advisory Committee acknowledged in their recommendations that since 1986 visibility impairment in Class I areas in the Cascades been significantly reduced through the curtailment of Willamette Valley field burning

on summer weekends. Neither the Committee in their recommendations, nor the Department thought it was appropriate to additionally curtail field burning on weekdays, given the success of this effort. This would also severely restrict the practice of open field burning, since it only can occur [redacted] during the summer. Extension of the visibility protection period to July 1 - September 15 as proposed in these amendments will include curtailment on approximately 2 additional weekends for Willamette Valley field burning. The phase down of open field burning as mandated by the 1991 Oregon Legislature will provide additional visibility improvement.

5. In addition to protecting the Eagle Cap Wilderness Area from field burning smoke impacts, the Plan amendments should address slash burning impacts as well.

The Department found through monitoring in the Eagle Cap Wilderness Area that field burning smoke impacts occurred during the summer months. No demonstrated impacts were found from slash burning during this same time period. In fact, nearly all slash burning in this area has been shifted to the spring and fall, due in part to the fire hazard conditions which exist during the summer months.

PROGRAM CONSIDERATIONS:

Extending the visibility protection period as proposed in these amendments will provide approximately 15 additional days of protection for visitors to Class I areas during the summer. These additional days are high visitation days, and represent an estimated 10% of the annual visitation which occurs in the states' Class I areas.

The proposed revisions to the Visibility Protection Plan will require the Oregon Departments of Forestry and Agriculture to issue visibility protection forecasts for slash and field burning on approximately 15 more days per year.

Incorporation of the visibility protection provisions of the Jefferson and Union County field burning smoke management programs will help protect neighboring Class I areas from future visibility impairment.

The elimination of the provision for firewood removal as a means of enhancing visibility protection will help alleviate woodstove smoke problems in PM_{10} nonattainment areas.

Beyond the visibility improvements achieved through the

above measures, significant visibility benefits in the Cascade wilderness areas will result from the phase down of Willamette Valley field burning acreage mandated by the 1991 Oregon Legislature.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Rely on the existing Visibility Protection Plan and statutory requirements to phase down Willamette Valley field burning to provide sufficient progress in remedying impairment in wilderness areas.

2. Adopt the amendments to the Plan in order to better protect Class I areas from summertime visibility impairment as recommended by the Visibility Advisory Committee.

3. Adopt additional protective measures for Class I areas as contained in the Minority Report of the Visibility Advisory Committee.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the second alternative, specifically that the Commission adopt the amendments to the Visibility Protection Plan as proposed. The Department believes these revisions to the Plan will help ensure reasonable progress toward reducing haze in class I areas occurs. Given the success over the last 10 years in reducing visibility impairment in the state, the Department does not support additional protective measures beyond those currently proposed at this time. Should future monitoring indicate reasonable further progress is not being achieved, the Department would advocate additional plan amendments at the next periodic review period in five years.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed revisions are consistent with Goals 2, 3, 4, and 5 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy. The proposed strategy and supporting rules are consistent with the Oregon Benchmarks goal of increasing the percentage of Oregonians living in areas which meet ambient air quality standards.

ISSUES FOR COMMISSION TO RESOLVE:

Do the proposed amendments to the Plan represent adequate progress toward reducing haze in Class I areas ?

INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan containing the revised Visibility Protection Plan to EPA for approval.

2. Monitor slash and field burning activity during the year to assess whether the new summer protection period is adequate.

3. Track reasonable further progress as required by the Clean Air Act consistent with the goal of 60% - 90% visibility improvement, and if necessary make further revisions to plan.

Approved:

Section: Brian Finneran for John Kowalczyk

Division: Sue Greenwood

Director: Stephanie Hallock, acting

Report Prepared By: Brian Finneran 229-6278

Date Prepared: July 6, 1992

BRF:a
RPT\AH60021
7/6/92

VISIBILITY PROTECTION PLAN FOR CLASS I AREAS
(OAR 340-20-047, Section 5.2)
- DRAFT of February 6, 1992 -

Note: Deleted text is enclosed in crossed out [----]; text additions is redlined.

5.2 Visibility Protection for Class I Areas
5.2.1 Definitions

5.2.2 Introduction
5.2.2.1 Assessment of Visibility Impairment

5.2.3 Visibility Monitoring
5.2.4 Procedures For Review, Coordination and Consultation
5.2.4.1 Annual Meetings
5.2.4.2 Strategy and Reasonable Further Progress Review
5.2.4.3 Other Meetings

5.2.5 Control Strategies
5.2.5.1 Strategy Elements as Related To The National Goal
5.2.5.1 (A) Short-Term Strategy for Visibility Protection
-Strategy Overview Willamette Valley Field Burning
-Jefferson & Union County Field Burning
-Exemptions to Restrictions
-Prescribed Burning
Exemptions to Prohibition
Prescribed Burning Emergency Clauses 5.2.5.1
(B) Long-Term Strategy for Visibility Protection
-Strategy Overview
-Field Burning Element
-Prescribed Burning Element
5.2.5.2 Protection of Integral Vistas
5.2.5.3 Best Available Retrofit Technology
5.2.5.4 New Source Review & Prevention of Significant Deterioration
5.2.5.5 Maintenance of Control Equipment
5.2.5.6 Interstate Visibility Protection
5.2.5.6 (A) Field Burning Element
5.2.5.6 (B) Prescribed Burning Element
5.2.5.7 Emission Reductions Due To On-Going Control Programs

Tables
1. Lands Protected Under The Plan
2. Field Burning Long-Term Strategy
3. Prescribed Burning Long-Term Strategy

Appendices
A. Field Burning Smoke Management Plan
B. Prescribed Burning Smoke Management Plan
C. New Source Review Rule
D. Jefferson County Ordinance
E. Union County Ordinance

5.2 Visibility Protection for Class I Areas

This section of the Oregon State Implementation Plan describes the Department of Environmental Quality's Visibility Protection Plan for the states Class I wilderness and national park lands. Referred to herein as the Plan, this document describes Oregon's commitment to visibility monitoring, control strategies to remedy existing impairment and ensure future visibility protection, periodic plan review, coordination and consultation. The Plan has been developed in consultation with the Federal Land Managers, the Oregon Visibility Advisory Committee, the Oregon Department of Forestry, the Oregon Seed Council and other groups. The Plan represents a further step toward remedying existing impairment and protecting future visibility conditions within Oregon's Class I areas.

This Plan provides for the protection of the mandatory federal Class I areas promulgated by the U.S. Environmental Protection Agency (EPA) on November 30, 1979 and incorporated in OAR 340-31-120 as well as lands redesignated to Class I by the State of Oregon. The Plan has been developed in response to the requirements of Section 169 (A)(a)(4) of the Clean Air Act of 1990. ~~[promulgated by the US EPA on December 2, 1980 (45 FR 80089).]~~

The intent of the Oregon Visibility Protection Plan is to insure significant reasonable further progress toward achievement of the National Visibility Goal of "the prevention of any future and the remedying of any existing impairment in Mandatory Federal Class I areas which impairment results from manmade air pollution". The Department has adopted this same goal for areas redesignated to Class I by the State of Oregon.

The Plan is directed at the (a) protection of visibility within Oregon's Class I areas, (b) the mitigation of visibility impairment within the Mt. Hood and Central Oregon Cascade wilderness areas through short and long-term control strategies for forest prescribed burning and Willamette Valley agricultural field burning and (c) mitigation of impairment in the Eagle Cap Wilderness and Central Oregon Cascades resulting from agricultural field burning. Visibility protection for all of Oregon's Class I areas is administered under the provisions of a diversity of regulations including the Prevention of Significant Deterioration, New Source Review rules and the U.S.D.A. Forest Service forest planning process.

The objective of this Plan is to assure compliance with the requirements of the Clean Air Act and US EPA Phase I program requirements. These requirements specify the adoption of strategies directed toward the control of existing stationary sources impairing visibility, the evaluation of visibility impacts of new stationary sources, the control of other existing

sources not meeting the more stringent source size requirements for existing stationary facilities and, finally, the adoption of control strategies designed to achieve reasonable progress toward meeting the National Visibility Goal. Future phases of the EPA regulations will extend the program by addressing more complex problems such as regional haze.

The Department believes that the Oregon Visibility Protection Plan not only meets the requirements of the EPA Phase I requirements but will make substantial progress in reducing impairment caused by regional haze.

Mandatory Class I Federal Areas

Wilderness and National Park Lands included within the scope of the Visibility Protection Plan are listed in Table I, below. These lands have been designated in whole or in part as federal mandatory Class I Areas under the Clean Air Act, Public Law 95-95. Visibility Protection for the Mandatory Federal Class I Areas, defined in Section 5.2.1 below, is required by the Clean Air Act Amendments of [~~1977~~] 1990.

Table I
Wilderness and National Park Lands
Protected Under The Visibility Protection Plan

Class I Area	Acreage	Public Law Establishing	Federal Land Manager
Crater Lake	166,149	57-121	USDI-NPS (1)
Diamond Peak Wild.	36,637	88-577	USDA-FS (2)
Eagle Cap Wild.	293,476	88-577	USDA-FS
Gearhart Mtn. Wild	18,709	88-577	USDA-FS
Hells Canyon Wild.	108,900	94-199	USDA-FS
Mountain Lakes Wild.	23,071	88-577	USDA-FS
Mt. Hood Wild.	14,150	88-577	USDA-FS
Mt. Jefferson Wild.	100,208	90-548	USDA-FS
Mt. Washington Wild.	46,116	88-577	USDA-FS
Strawberry Mtn. Wild.	33,003	88-577	USDA-FS
Three Sisters Wild.	199,902	88-577	USDA-FS
Kalmiopsis Wild.	76,900	88-577	USDA-FS

Notes: (1) U.S. Department of Interior, National Park Service. 22,410 acres of Park additions were set aside as Class I lands by the Clean Air Act Amendments of 1990.
(2) U.S. Department of Agriculture, Forest Service

Areas Redesignated to Class I

Lands redesignated under OAR 340-31-120 through 130 to Class I status will be included in future Plan revisions if the Department, in consultation with the Federal Land Manager, determines that visibility within these lands is important to the visitor's experience. Upon completion of this determination, the Class I area will be included within the Plan. Revision of the Restrictions on Area Classifications Section of the Standard for Air Purity and Quality Rule (OAR 340-31-120 (1)), will also be made to assure that the Rule incorporates all Class I areas.

5.2.1 Definitions

Definitions applicable to this section of the SIP are listed below:

"Best Available Technology (BAT)" means an emission reduction technique which will provide the maximum degree of reduction in air contaminant emissions, taking into account energy, environmental and economic impacts, compatibility with other Federal Land Manager practices and other costs, as determined on a case-by-case basis. BAT technologies applicable to prescribed burning include, but are not limited to, accelerated mopup, rapid ignition techniques, burning during optimum emission-reduction fuel moisture conditions, utilization of residues in lieu of burning and the reduction of emissions in lieu of broadcast or pile burning.

"Best Available Retrofit Technology" means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established on a case-by-case basis, taking into consideration the technology available, the cost of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

"Class I Areas" are those mandatory Federal Class I areas and Class I areas designated by the Department within which visibility has been identified as an important resource. Oregon's 12 Class I areas are those listed under OAR 340-31-120.

"Integral Vistas" means a view perceived from within the mandatory Class I Federal area of a specific landmark or panorama located outside the boundary of the mandatory Class I area.

"July 1 to September 15th" means the period of time between July

1 and September 15th, inclusive, during which restrictions to agricultural and forestry burning apply for purposes of visibility protection. This period is also referred to as the "visibility protection period".

"Meteorological Impairment" occurs during time periods in which hydrometeors (e.g., fog, rain, clouds, snow or sleet) impair visibility within a Class I areas.

"Manmade Air Pollution" is pollution which results directly or indirectly from human activities.

"Natural Conditions" includes naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast or coloration. These phenomenon include fog, clouds, wind blown dust, rain, sand, naturally ignited wildfires and natural aerosols.

"Prescribed Natural Fire" means fire ignited by natural sources (lightning, volcanoes, etc.) within any federally managed lands which are permitted to burn within predetermined conditions outlined in the Land Manager's fire management plan.

"Prescribed Burning" means the controlled application of fire to wild land fuels in either their natural or modified state, under such conditions of weather, fuel and soil moisture, as allows the fire to be confined to a predetermined area while producing the intensity of heat and rate of fire spread required to meet planned objectives including silviculture, wildlife habitat management, grazing and fire hazard reduction.

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

"Substantial Impairment" means the percent of daylight hours, during the period of July 1 to September 15, which equals or exceeds 0.8×10^{-4} per meter, hourly average light scattering coefficient excluding periods of natural visibility impairment measured at an ambient air monitoring site representative of a Class I area. Evaluation of the frequency and cause of impairment will be made annually in consultation with the Federal Land Managers.

"Reasonably Attributable" means attributable by visual observation or any other technique the Department deems appropriate.

"Visibility Advisory Committee" means a group of Federal Land Managers, forestry, environmental, tourism and public-at-large representatives, appointed by the Director of the Department.

"Visibility Impairment" means any humanly perceptible change in visibility (visual range, contrast or coloration) from that which would have existed under natural conditions.

"Visibility In Any Mandatory Class I Federal Area" includes any integral vistas associated with that area.

5.2.2 Introduction

Legislation to protect our nation's wilderness heritage began with the National Park Service Organic Act of 1916 and the Wilderness Act of 1964. These Acts set aside areas to be preserved in their natural state, unimpaired by human activities. The protection of the pristine nature of these areas was again addressed in the Clean Air Act Amendments of 1977 and 1990. The Amendments recognized the importance of "preserving, protecting and enhancing" the air quality, within the nations's Class I areas. In Oregon, eleven of the state's wilderness areas and Crater Lake National Park were designated by Congress as mandatory federal Class I areas. An additional twenty three areas were designated as wilderness lands under The Oregon Wilderness Act of 1984. These lands have not been designated as Class I areas by Congress.

The importance and value of these lands to Oregon lie not only in the intrinsic value of their beauty but also in their importance to tourism in Oregon. These areas are also a valuable recreational resource for Oregon residents. The Clean Air Act Amendments recognize the importance of air quality related values, including visibility, and set forth as a national goal:

> "The prevention of any future and the remedying of any existing impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution".

The Amendments instructed EPA to promulgate regulations to assure reasonable further progress toward attainment of the national visibility goal. The principal effect of the EPA visibility regulations is to require states to (a) revise their State Implementation Plans (SIPs) to establish long-range goals, (b) commit to a planning process to protect visibility and (c) to implement procedures requiring visibility protection for mandatory Class I Federal areas. This revision of the SIP

describes the visibility protection plan that Oregon will follow to comply with the requirements of ~~Section 169A of~~ the Clean Air Act.

5.2.2.1 Assessment of Visibility Impairment

An assessment of visibility impairment in Oregon's Class I areas is prepared by the Department each year ~~in a document entitled "Visibility in Oregon's Wilderness and National Park Lands".~~ These reports present results from visibility monitoring conducted during the summers of 1982-1984 and concluded that (a) visibility is frequently impaired by uniform haze and, to a lesser extent, ground based layered haze within several of Oregon's Class I areas and that (b) haze can often be attributed to a known sources including smoke from dispersed agricultural field burning, forest prescribed burning and wildfire activity.

~~Perceptible manmade impairment within the Mt. Hood and Central Cascade Wildernesses and Crater Lake National Park during the summer periods of 1982 to 1984 were estimated to occur 17%, 33% and 4% of the daylight hours during the summer months of highest visitor use. An estimated average of 48% of the fine particle mass at the Mt. Hood site was associated with prescribed burning while 24% was from field burning.~~

~~About 40% of the wilderness areas visitation occurs on Saturdays and Sundays, while 79% occurs during the months of July and August. Nearly 96% of the visitation occurs during the mid-June to mid-September period.~~

Monitoring conducted since implementation of the Oregon Visibility Protection Plan indicates that the frequency of substantial impairment (relative to the 1982-84 period) within the Mt. Hood and Central Cascade wilderness areas has decreased by 63% and 82%, respectively, during the period 1986-1990. This is within the 60% to 90% frequency of impairment reduction goal recommended by the Oregon Visibility Advisory Committee in 1985.

New monitoring results for the summers of 1984 to 1989 suggest that from 23 % to 31 % of the visibility impairment cases documented within the Eagle Cap Wilderness are caused by agricultural field burning in the Grande Ronde Valley. The Department has also identified Jefferson County agricultural field burning as a source of impairment within the Central Oregon Cascade Wilderness areas.

~~Monitoring has not yet been conducted within the Gearhart Mountains, Hells Canyon or Mountain Lakes Wilderness areas since these areas have much lower visitation.~~

Based on the studies referenced above, the Department finds that (A) significant impairment exists within the Mt. Hood, Mt. Jefferson, Mt. Washington, Eagle Cap and Three Sisters Wilderness areas; (B) control strategies to remedy existing visibility impairment are required to correct existing impairment within these wilderness areas; (C) the control strategy should be directed toward mitigation of impacts from Willamette Valley, Jefferson County and Union County field burning as well as forest prescribed burning during the visibility protection period; (D) control strategies to ensure future protection of all Class I areas are required and (E) an interstate visibility protection program coordinated with the State of Washington is essential to assure the protection of visibility within Oregon's Class I areas.

5.2.3 Visibility Monitoring

The Oregon Department of Environmental Quality has established and will continue to operate a monitoring system to identify the degree, if any, of visibility impairment in Class I areas and the sources of the pollutants causing the impairment. To the extent practicable, the visibility monitoring program will extend statewide with the intent of documenting and evaluating visibility within Class I areas of the State of Oregon.

The monitoring system will be operated in cooperation with the USDI National Park Service and the USDA Forest Service. A visibility monitoring strategy is essential to the evaluation of visibility impairment trends, as a means of differentiating manmade and natural visibility reduction, to assess the effectiveness of visibility control strategy programs and to identify the major contributing sources. To meet these objectives, the monitoring program will document visibility within Class I areas on a long-term basis. In addition, the monitoring plan will strive to meet the needs of, and be a cooperative effort with, the Federal Land Managers.

~~Oregon's visibility monitoring plan has been developed by the Department of Environmental Quality, in consultation with the USDI National Park Service, the USDA Forest Service and other agencies. Objective of the Department's visibility monitoring plan includes measurements intended to document visibility within Class I areas, short-term fine particle concentration variability, atmospheric relative humidity and pollutant transport. Fine particle samplers are included to chemically characterize the haze-producing particles.~~

The monitoring network will be operated annually, at minimum, from July through September, the period of the heaviest Class I area visitation. A major effort will be made each year to begin the monitoring program as soon as spring weather and snow pack conditions permit and to continue the program as late into

the fall as weather permit. Measurements to be included in the program are:

* Visual observations of impairment phenomena, meteorological conditions and visual range.

* A standardized photographic and standard visual range monitoring program to record actual visibility and target contrast.

* A network of integrating nephelometers to measure extinction due to light scattering caused by fine particles.

* A meteorological network consisting of relative humidity, wind speed and wind direction.

* A fine particle sampling network to identify source impacts on visibility and fine particle mass using receptor models.

* Other monitoring and analytical methods that may be appropriate to achieve the objective of the monitoring plan.

5.2.4 Procedures for Review, Coordination and Consultation

The Department has made and will continue a commitment to a strong State-Federal Land Manager (Land Manager) coordination program. This section of the Plan explains procedures for maintaining coordination between involved agencies for rulemaking, New Source Review, periodic program reviews and revision of the SIP. For purposes of these reviews, the Department will maintain a mailing list of interested parties which will be advised of the following meetings:

5.2.4.1 Annual Meetings

All state and federal agencies involved in the Plan will be invited to an annual meeting, to be held no later than April of each year, to review the Visibility Protection Plan. The meeting will be open to public participation and input with meeting notification sent to members of the Visibility Advisory Committee, the news media and interested persons included on a Department mailing list.

Issues to be addressed will include (a) assessment of the effectiveness of the control strategies; (b) a review of the monitoring program design; (c) progress toward achievement of long-term control strategy plan elements (d) discussion of reasonable progress toward achievement of the national visibility

goal and (e) review of reports describing findings of the State Forester and the Director of the Department of Environmental Quality relative to enactment of the prescribed burning restriction emergency clause described in Section 5.2.5.1 (A) of this Plan. A report summarizing the proceedings of these meeting will be distributed to the Land Managers, EPA, the Oregon Visibility Advisory Committee and other interested parties. These reports will form an important element of the periodic Plan review process.

5.2.4.2 Strategy and Reasonable Further Progress Review

On ~~third~~ five year intervals beginning in ~~1989~~ 1997, the Department will conduct a formal meeting to review the Plan, providing an opportunity for the Land Managers to consult with the Department on all matters involving the development of the Visibility Protection Plan. The meeting will provide an opportunity for affected Land Managers, the Oregon Visibility Advisory Committee, the Oregon Seed Council, other affected parties and the public to present their (a) assessment of visibility impairment; (b) recommendations regarding the development of long-term control strategies; (c) assessment and consultation of visibility impairment trends as related to the Reasonable Further Progress provisions of the Plan; (d) periodic review of the monitoring program and findings developed therefrom; (e) additional measures which may be needed to assure reasonable further progress; (f) review of proposed integral vistas and/or new wilderness lands to be included within the Plan; (g) assessment of proposed and/or actual impacts from major new or modified point sources and (h) a review of progress made in decreasing impacts from field and prescribed burning including rescheduling, utilization and emission reduction programs.

All available monitoring and emission data applicable to Class I visibility impact assessment will be summarized and provided for use during the review of the Plan. A report summarizing the available data and proceedings of these meeting will be distributed to the Land Managers, EPA and other interested parties.

5.2.4.3 Other Meetings

Meetings may be called by any interested party at any time to discuss the Plan with the Department.

5.2.5 Control Strategies

The protection of visibility in Oregon's Class I areas requires both correction of existing visibility impairment within the Mt. Hood, Eagle Cap and Central Cascade Wilderness areas and protection of all Class I areas from future impairment.

The Oregon Visibility Protection Plan incorporates strategies to make reasonable progress toward remedying impairment caused by Willamette Valley, Jefferson and Union County agricultural field burning as well as forest prescribed burning. The Plan also includes provisions for the protection of all Class I areas from future impairment through the visibility impacts assessment requirements of the New Source Review rule. This section of the SIP describes the major elements of the Plan.

5.2.5.1 Strategy Elements as Related to the National Goal

The principal elements of the control strategy as they relate to the national visibility goal are described in this section. These elements of the Plan include (a) short-term goals to be accomplished over a 5 year period to mitigate existing visibility impairment; (b) long-range goals to reduce fine particle emissions from agricultural field burning and forest prescribed burning and (c) on-going visibility protection afforded through the New Source Review permitting process and emission reductions achieved as a result of in-place control strategies. Each of these Plan elements is discussed below:

(A) Short-Term Strategies For Visibility Protection

Strategy Overview

The short-term control strategies are directed at remedying visibility impairment during the visibility protection period ~~(July 4th weekend through Labor Day)~~ (July 1 through September 15, inclusive) caused by distinct and dispersed plume impacts, from agricultural field burning and forest prescribed burning. The strategy will also reduce regional haze impairment caused by these sources and assure the prevention of impairment associated with emission growth and new source construction through elements A-H of the long-term strategy.

Willamette Valley Field Burning

Short term strategies for reducing impairment caused by field burning are listed in Table IIa and subject to the emergency provisions described below. The strategies are based mainly on smoke management; however, strategies 1 and 4 listed on Table IIa will result in some emissions reductions. Since all Willamette Valley field burning occurs during July through October, these short term strategies are automatically directed at remedying impairment during the summer peak visitation period. Further attention to weekend visitation periods is provided by Strategy 5 which is expected to reduce field burning related visibility impairment on most visibility important weekend days.

These short term strategies have been incorporated into the Willamette Valley field burning smoke management program (OAR

340, Division 26). Specifics of the Willamette Valley Field Burning Smoke Management Plan are included in Appendix A.

Jefferson County Field Burning

Agricultural field burning in Jefferson County has been found to impair visibility within the Central Cascade Wilderness areas. The short term strategy to mitigate the impairment of visibility caused by Jefferson County agricultural field burning is through a mandatory county smoke management program described and enforced through Jefferson County ordinance 0-38-91 (Attachment D). The ordinance requires that all burning be conducted such that smoke will not be transported into Class I areas at any time. The enforcement provisions of the ordinance are sufficiently stringent to assure that smoke management instructions issued by the smoke management coordinator are followed. Since most of the burning is accomplished during the visibility protection period and burning is prohibited on weekends, the benefits of the strategy will occur during the peak visitor use period within the wilderness areas.

Union County Field Burning

Agricultural field burning in Union County has been found to impair visibility within the Eagle Cap Wilderness. The short term strategy to mitigate the impairment of visibility caused by agricultural field burning is through a mandatory county smoke management program enforced through a Union County ordinance 1991-6 (Attachment E). The ordinance requires that Union County growers implement an enforceable smoke management program with sufficient technical merit to assure that smoke from field burning is not transported into the Eagle Cap Wilderness at any time. Since most of the burning is accomplished during the summer and early fall, the benefits of the program coincide with the period of heaviest wilderness visitor use.

Field Burning Restriction Emergency Clause

This section provides for the modification of field burning restrictions in the event of a joint finding by the Directors of Agriculture and Environmental Quality that undue, adverse economic impacts on the grass seed industry may be likely because of unusual weather or burning conditions. The finding will be based on a review, by August 10th ~~and~~ or periodically thereafter, of burning accomplished to date to determine if burning restrictions should be modified or suspended. A report, describing the findings of the Directors shall be prepared for review during the Annual meetings (Section 5.2.4.1) in the event of enactment of the Emergency Clause.

Prescribed Burning

The prescribed burning strategy is directed at the controlled application of fire to wild land fuels for silvacultural, wildlife habitat, fuels management or ecosystem purposes and includes both intention, man-ignited fires and naturally ignited fires.

Prescribed Natural Fire

Prescribed natural fires are lightning ignited fires which contribute to the management of natural areas and are one means through which Federal Land Managers achieve certain resource management objectives in Class I areas. Prescribed natural fire programs are approved by the Federal Land Managements for Class I areas when an approved Fire Management Plan has been adopted by the agency and which includes consideration of smoke impacts. The Oregon Department of Environmental Quality and the Oregon Department of Forestry will participate in the development and be provided an opportunity to comment on draft fire management plans developed by the Federal Land Managers.

Prescribed Burning Other Than Natural Fires

The prescribed burning short-term strategy includes a reduction in substantial visibility impairment within the Mt. Hood, Mt. Jefferson, Mt. Washington and Three Sisters Wilderness Areas by restricting summer prescribed burning and setting aside these Class I lands as protected areas under the Smoke Management Plan. The estimated goal of the short-term strategy is a 60-90% reduction in substantial visibility impairment from the 1982 to 1984 monitoring baseline. This program should not result in additional impacts in other designated areas at any time during the year, nor should it result in additional summertime impairment within other Class I areas within Oregon or Washington.

The prescribed burning short - term strategy applies to Western Oregon (Lane, Linn, Marion, Clackamas, Multnomah, Hood River, Columbia, Clatsop, Tillamook, Yamhill, Polk, Benton, Lincoln and Washington counties).

The following strategy elements apply to non - meteorologically impaired periods within the Mt. Hood, Mt. Jefferson, Mt. Washington and Three Sisters Wilderness Areas during the ~~July 4th weekend to Labor Day~~ July 1 to September 15 period. A general prohibition on prescribed burning will apply within the above counties, except as noted below. The intent of the strategy is to shift burning that would be accomplished during the July - mid-September period to the Spring and Fall months of lesser Class I area visitation and higher fuel moisture and not reduced acreage burned.

To encourage Spring and Fall burning while maintaining protection of areas designated under the Smoke Management Plan, improvements in the Plan have been made to accommodate the additional burning activity.

It is expected that the visibility improvements accomplished by these short-term strategies can be achieved without significantly reducing, annual acreage burned by prescription below historical levels.

For purposes of visibility protection, the Mt. Hood, Mt. Jefferson, Mt. Washington, Three Sisters and Diamond Peak Wilderness areas and Crater Lake National Park as well as all State of Washington Class I areas have been set aside under the Department of Forestry's Smoke Management Plan as "Smoke Sensitive" areas during the ~~July 4th weekend to Labor Day~~ July 1 to September 15 period to be protected from visibility impairment.

Visibility within all Oregon Class I Areas will be protected during the ~~July 4th weekend to Labor Day~~ July 1- September 15 period under the smoke management provisions of the U.S.D.A Forest Service National Forest Management Plans.

Exemptions To Prohibition

(1) Coastal Burning

Coastal conifer and hardwood conversion burning impacts on Class I area visibility will be minimized by management of emissions through the Department of Forestry Smoke Management Plan. The intent of the Plan is to prevent visibility impairment from coastal burning by considering upper level wind trajectories and likely transport winds over the next 2 day period. In issuing burning instructions, the Department of Forestry may require application of BAT as necessary to accomplish the visibility protection and enhancement goals of this strategy.

(2) Western Cascade Burning

(A) Research & Hardwood Conversion Burning. Research fires and hardwood conversion burning are exempt from summer burning restrictions. The burning of these units will, however, be conducted in accordance with the Smoke Management Plan under which the Northern and Central Cascade Wilderness Areas will be treated as "Smoke Sensitive" areas. Research and hardwood conversion burning permitted under this exemption are not expected to exceed ~~1,200~~ 600 acres during the ~~July 4th weekend to Labor Day~~ July 1-September 15th period. Best Available Technology may be required by the Department of

Forestry if greater than ~~1,200~~ 600 acres is burned annually, as necessary to accomplish the visibility improvement and protection goals of this Plan. A report of acres burned and likely impacts on Class I areas visibility will be prepared by the Department of Forestry for inclusion in the annual Smoke Management Report.

All reasonable attempts will be made to accomplish burning permitted under this exemption on meteorologically impaired days. Western Oregon Cascade burning includes the East Lane, Linn and Clackamas-Marion Forest Protection Districts as well as Mt. Hood and Willamette National Forest lands west of the crest of the Cascade Range.

(B) Willamette National Forest Burning. Burning is allowed at elevations above 5000 feet during the July 1-September 15th period, with Class I areas treated as "Smoke Sensitive" areas.

Prescribed Burning Restriction Emergency Clause

This section provides for the modification of burning prohibitions in the event of a joint finding by the State Forester and the Director of the Department of Environmental Quality that undue, adverse economic impacts on the forestry industry may be likely because of unusual weather conditions. A joint report, describing the findings of the State Forester and the Director of the Department of Environmental Quality shall be prepared for review during the annual meetings (Section 5.2.4.1) in the event of enactment of the Emergency Clause.

~~(1) Spring Review. By not later than June 15th of each year, the State Forester will determine if, in his judgement, Spring burning conditions have been such that adverse economic impacts are likely to occur should prescribed burning during the July 4 - Labor Day weekend period be prohibited. Upon concurrence by the Director of the Department of Environmental Quality, the summer burning prohibitions will be modified to the extent necessary to accomplish burning of the required acreage. All summer weekend burning accomplished under this clause will be conducted under the Class I area "Smoke Sensitive" provisions of the Smoke Management Plan.~~

~~(2) Fall Review. By August 31st of each year, the State Forester will determine if burning accomplished to date is adequate to avoid undue, adverse economic impacts on the forest land managers. Upon concurrence of the Director of the Department of Environmental Quality, every effort will be made to increase the tonnage~~

~~limitations and decrease the unit distance requirements during the remainder of the year, within the constraints of the Oregon Smoke Management Plan, to assure that the burning is accomplished. The Department of Forestry shall manage the burning to insure the protection of the Designated areas.~~

The finding will be based on periodic reviews by the State Forester of burning accomplished to date to determine if burning prohibitions should be modified or suspended. Upon concurrence by the Director of the Department of Environmental Quality, burning restrictions will be modified or suspended to the extent necessary to accomplish burning of the required acreage. The Department of Forestry shall manage the burning under the Smoke Management Plan to issue the protection of designated areas identified in the Smoke Management Plan. All summer weekend burning accomplished under this clause will be conducted under the Class I area "Smoke Sensitive" provisions of the Smoke Management Plan.

The Department of Forestry shall manage the burning to insure the protection of the Designated Areas. The specifics of the prescribed burning short-term strategy will be contained in the Smoke Management Plan, Appendix B.

(B) Long-Term Strategy for Visibility Protection

During the development of the long-term strategy, several factors have been considered. These include (a) emission reductions due to ongoing control programs; (b) additional emission limitations and schedules for compliance; (c) measures to mitigate the impacts of construction activities; (d) the enforceability of emission limitations and control measures; (e) visibility impairment associated with new industrial sources; (f) smoke management techniques for agricultural and forest management purposes - including the current field and prescribed burning smoke management plans and (g) source retirement and replacement:

(1) Emission reductions due to on-going programs are discussed in section 5.2.5.7, below.

(2) Additional emission limitations and schedules for compliance were not considered important to the long-range strategy since monitoring program results support the finding that industrial point sources are not a contributing cause of visibility impairment.

(3) Measures to mitigate construction impacts related to point sources are administered through the Air Contaminant Discharge Permitting and PSD rule process while soil dust entrained as a result of construction activities is controlled under the A-95 review process, State and Federal Forest Practices Acts and permitting processes.

(4) Enforceability of emission limitations was not considered important to the long-term strategy because of the reasons outlined in (2), above.

(5) Smoke Management Techniques are essential elements of the strategy, as discussed below.

(6) Source Retirement and Replacement was considered. However, because visibility impairment from individual point sources has not been found to be significant, source retirement has not been viewed as beneficial. On-going stationary source emission reductions may, however, reduce impairment associated with urban plume impacts on Class I areas in the future.

As noted above, the long-term strategy focuses on mitigation of field and prescribed burning visibility impacts, emission reductions and the avoidance of plume impairment caused by future industrial sources.

Long-Term Strategy Overview

This section of the Plan outlines the long-term strategy for making reasonable progress toward the national visibility goal over the next 10-15 year period. Provisions A-D of the long term strategy apply to all Class I areas within Oregon while all provisions of the long-term strategy apply to visibility impaired Class I areas (Mt. Hood, Mt. Jefferson, Mt. Washington, Eagle Cap and Three Sisters Wilderness areas):

(A) New Source Review
(B) Intergovernmental Review (A-95) Process
(C) Emission reductions due to ongoing programs
(D) Prevention of Significant Deterioration Rule
(E) Development of new crops not requiring field burning
(F) Development of grass straw utilization technology
(G) Grass seed industry research and development efforts to seek, develop and promote viable alternative to burning
(H) A goal of reducing annual forest prescribed burning emissions within Western Oregon by 22%, relative to 1984 emissions, through BAT application without further deterioration of visibility within other Class I areas of the state.

The elements of the long-term strategy have been coordinated

with existing plans and goals, including those provided by the Federal Land Managers, which may affect visibility impairment within the Class I areas. Future coordination will be accomplished through the annual and ~~3~~ 5-year Plan review process specified in Section 5.2.4.

New Source Review Element of the Long-Term Strategy

The visibility impact protection provisions of the New Source Review Rule (OAR 340-20-220 through 280) assure that major new or modified industrial sources will not impair Class I area visibility (see Section 5.2.5.4). This provision of the long-term strategy applies to all Class I areas, statewide.

Field Burning Element of the Long-Term Strategy

Long term strategies for Willamette Valley field burning are listed in Table IIb. When fully implemented, these will result in a 40% reduction in the maximum annual emissions and a 45% reduction in average emissions from the 1982-84 baseline period. The long-term strategies are being developed through an ongoing research program investigating alternatives to open field burning established under ORS 468 in 1977. Additional funding can be expected thru the Oregon New Crops Development Board, from Oregon Lottery Commission funds (ORS 814) and from the federal Critical Agricultural Materials Program.

Progressive implementation of these strategies will occur as they are developed to the point of economic feasibility. The three year review process provides the opportunity to adopt and incorporate strategies as appropriate. Further, the Oregon Environmental Quality Commission has the authority under ORS 468 to reduce the maximum acreage that can be open burned each year if it finds that reasonable and economically feasible alternatives to the practice of open field burning have been developed.

These strategies are reasonable and adequate because (1) they will result in a substantial reduction in impairment from the 1982-84 base period, (2) ongoing research programs are in place to provide for continued progress in their development, and (3) progressive implementation is provided for through the ~~3~~ 5-year review process and by existing statutory authority vested in the Environmental Quality Commission.

Prescribed Burning Element of the Long-Term Strategy

The long-term objective of this portion of the Plan is to meet the objectives established in the Clean Air Act as referenced in section 51.300 (a) of the EPA Regulations. In light of current technology, the Department believes that an additional 22% emission reduction in Western Oregon prescribed forest

burning emissions from that which occurred during 1982-1984 period is achievable.

Emission reductions to be achieved under this provision of the long-term strategy will be implemented in a reasonably linear manner throughout the 15 year period of this strategy.

Implementation of this strategy is expected to result in an additional 4% reduction in summer visibility impairment in addition to the 60-90% reduction in substantial impairment afforded by the short-term strategy.

The Departments of Environmental Quality and Forestry, in consultation with the Federal Land Managers and private land owners, shall though the Oregon Smoke Management Plan, implement a long-term strategy to further remedy existing and prevent future impairment through development and application of the Best Available Technology (BAT) elements listed in Table III, attached.

Research programs to implement these strategy elements will be encouraged and supported by the USDA Forest Service, Bureau of Land Management, National Park Service and others, to the extent possible within available budgets.

Provisions for annual and ~~3~~ 5-year review of the Plan (Section 5.2.2) will provide a forum to review progress toward achieving these long-term emission reduction goals. In addition, new technologies will be reviewed to determine the advisability of increasing the 22% emission reduction goal.

5.2.5.2 Protection of Integral Vistas

The EPA regulations of December 2, 1980 require protection of those integral vistas designated by the Land Managers as important to the visitor's visual enjoyment of the area. Such vistas could be identified by the Land Managers prior to December, 1985 in accordance with criteria developed by the designating agency following reasonable notice and opportunity for public comment. The Department need not consider any integral vistas which have not been identified in accordance with these criteria. Should the Department disagree with the Land Manager regarding integral vista designation, the Department will provide opportunity for the Land Manager to discuss the identification with the Governor. In addition, the Department may, under its own authority, identify integral vistas to be afforded protection under this Plan.

As no integral vistas have been designated by the Land Managers or by the Department, integral vista protection afforded under the Plan is limited to that associated with the control strategies included herein. Given that the Plan represents a

strong commitment by the State of Oregon to achieve significant improvements in Class I area visibility, benefits of the Plan are expected to extend to potential integral vistas within Oregon.

5.2.5.3 Best Available Retrofit Technology

Section 51.302 (c) of the EPA regulations describes the general requirements of the SIP. These regulations require that the states identify and analyze for Best Available Retrofit Technology (BART) each existing stationary facility which may reasonably be anticipated to cause or contribute to impairment of visibility within Class I areas within which the impairment can reasonably be attributable to the source (51.302(c)(2)(iii)).

As noted in Section 5.2.2.1 of this document, results from the visibility monitoring program have not identified any visibility impairment conditions which can reasonably be attributed to stationary source emissions within Oregon's Class I areas. Since the conditions described in Section 51.302 of the EPA regulations do not apply, Best Available Retrofit Technology rules have not been included in the Plan.

5.2.5.4 New Source Review & Prevention of Significant Deterioration

The New Source Review rule (OAR 340-20-220 through 280) contains requirements for visibility impact assessment and mitigation associated with emissions from major new and modified stationary sources. The rule describes mechanisms for visibility impact assessment and review by the Department and Land Managers; Land Manager - Department coordination procedures, impact modeling methods and requirements.

In conducting these reviews, the Department will ensure that new source emissions do not impair visibility within Class I areas, thereby providing an important element of the control strategy; that of assuring that future visibility impairment caused by new stationary sources is mitigated prior to facility construction. The New Source Review Rule is attached as Appendix C.

The ambient air increment provisions of the Prevention of Significant Deterioration Rule (OAR 340-31-100 through 115) limit Class I pollutant concentration increases to specific increments above baseline air quality levels, thereby assuring that visibility impairment associated with increased particulate and nitrogen dioxide concentrations will not exceed that allowed by the increment.

5.2.5.5 Maintenance of Control Equipment

This Plan requires, through the Air Contaminant Discharge

Permit provisions of the SIP (OAR 340-20-140 through 185), the maintenance and proper operation of emission control equipment in use at industrial point sources throughout Oregon. These requirements will apply to all new sources for which Air Contaminant Discharge Permits are issued.

5.2.5.6 Interstate Visibility Protection

In recognition of the importance of interstate transport of pollutants which can impair visibility within Oregon's Class I areas, the Department will continue to work with neighboring States to coordinate visibility protection plans as required under Section 126 of the Clean Air Act. This coordination will attempt to ensure that economic and social effects of controls are administered fairly and as uniformly as possible. Affected Land Managers and state agencies within the State of Washington, the State of California and other states, as necessary, will be invited to participate in the periodic Plan reviews.

To assure that the State of Washington Visibility Protection Plan provides a comparable level of visibility protection to that afforded under this Plan, the Department will work with the Washington Department of Ecology to improve the current Washington Interstate Protection Plan which is only directed toward summer weekend protection. The Department will work with the State of California Air Resource Board to ensure that the Oregon and California Visibility Protection Plans are compatible.

The Oregon Visibility Protection Plan Control Strategy, Sections 5.2.5.8 and 5.2.5.9 describing the Agricultural Field Burning and Forest Prescribed Burning Smoke Management Plans contain provisions designed to minimize impacts on Washington Class I areas during periods of peak visitor use.

The principal elements of the Interstate Visibility Protection Plan include: Field Burning Element-A reduction in weekend burning upwind of Washington Class I areas during the ~~July 4 to Labor Day weekend~~ July 1 to September 15 period on "visibility important", clear weather days will result in a potential reduction in burning of 15,000 - 35,000 acres.

Although it is unlikely that Willamette Valley field burning is a major contributor to visibility impairment within Washington's Class I areas, this element of the Oregon strategy may be beneficial.

Prescribed Burning Elements

The summer prohibition on Western Oregon Cascade prescribed burning will resulted in an 1,800 ton TSP emission reduction during the ~~July 4 - Labor Day weekend~~ July 1 - September 15th period. In addition, prescribed burning conducted on the coast

range will be managed such that Class I areas in Washington will be protected as "Smoke Sensitive Areas" under the Smoke Management Plan. Combined emission reduction and smoke management elements provided under this Plan should provide a significant benefits to Washington Class I area visibility.

5.2.5.7 Emission Reductions Due To On-Going Control Programs

The Oregon Revised Statutes (ORS) Chapter 468 authorize the Oregon Environmental Quality Commission to adopt programs necessary to meet and maintain state and federal ambient air quality standards. The mechanisms for implementing these programs are the Oregon Administrative Rules (OAR).

A summary of provisions of the OAR which assure emission reduction benefiting Class I visibility are noted below. Emission growth limits within urban areas, the Department's Plant Site Emission Limitation (OAR 34-20-300) rule and other provisions of the State of Oregon Clean Air Act Implementation Plan (SIP) are intended to insure that air pollutant concentrations within Oregon are managed so as to assure that National Ambient Air Quality Standards are not violated. Further, the growth of air pollutant emissions is managed under the provisions of the SIP in a manner consistent with Clean Air Act requirements and the best interests of the people of Oregon. Each of these elements of the SIP insures that visibility impairment associated with the transport of urban haze into the Class I areas does not exacerbate visibility improvement to be achieved under the provisions of the Plan.

In addition, the provisions of the Intergovernmental Review (A-95) Process, charged the Department with the responsibility of insuring that environmental (e.g. visibility) impacts projected as a result of federally funded projects are reviewed and approved prior to implementation. USDA Forest Service Forest Management Plans and Bureau of Land Management Environmental Impact Statements are reviewed by the Department to insure that such plans are consistent with the requirements of the Clean Air Act and State of Oregon SIP. Air quality impacts associated with prescribed burning are reviewed within this process in relation to Prevention of Significant Deterioration Class I increments and conformance to this Plan.

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(2/6/92)

Table II(a)

Willamette Valley Field Burning Visibility Protection Strategies

SHORT-TERM STRATEGY (1-5)	VISIBILITY BENEFITS	LIMITATIONS OR NEGATIVES	CONTROL COST	IMPACT REDUCTION
Encourage Early Season (July): Potential for additional 10-15,000 acres, depending on weather. Requires grower education.	Significantly reduced emissions from early maturing smokey varieties for less overload on mid to late season burn days. Better utilize early season days with better ventilation. Makes required weekend burning more feasible.	Increases fire escape and liability risks. Fields need 7-10 days drying after harvest	Potential cost from delays and conflicts with harvest operations. Saving from less late-season field prep (fluffing, cutting, etc.).	Class I and urban areas (especially in August/September)
Smoke Management Improvement (on-going): Better forecasting and decision making especially under marginal or risky conditions.	Reduced frequency, intensity and duration of intrusions by reduced overload on high-risk days.	Concentrates more burning during low-risk periods. May increase Class I impacts on good ventilation days.	Potential cost for more farm personnel and equipment because of increased response to fewer opportunities.	Class I and urban areas (especially east Valley).
Improve Burning Methods (general): Rapid-ignition, lighting equipment, fluffers, etc. Requires grower education.	Reduced ground level emissions and impacts.	None.	Some investment costs for equipment	Class I and urban areas.
Evening Burning Program (currently experimental): Potential additional 15,000 acres. Requires grower certification and coordination by industry.	Reduced ground level impacts by removing high-risk acreage from Westerly flow burn regimes. Makes reduced weekend burning more feasible.	Requires strict grower compliance and increased administrative burden. Precise limits and effects on Class I areas not fully known.	Some costs for equipment and crews to qualify.	Class I and urban areas.
Reduced Weekend Burning Upwind of Class I Areas on "Visibility Important" Days (July 1 - Sept 15th): Potential loss of 15,000 - 35,000 acres. a) Develop/implement practical and flexible criteria. b) Phase-in 3 years.	Reduced impacts during high use "Visibility Important" periods.	Critically dependent on advance forecasts. Possible resultant increased burning and risk on good ventilation weekdays.	Requires equipment and crews to burn more in less time on weekdays (same as #2). Some savings from less stand-by time on weekends.	Class I, urban, and rural east Valley residential/recreation areas.

Table II(b)

Willamette Valley Field Burning Visibility Protection Strategies

SHORT-TERM STRATEGY (1-5)	VISIBILITY BENEFITS	LIMITATIONS OR NEGATIVES	CONTROL COST	IMPACT REDUCTION
Develop New Crops Not Requiring Burning (Meadowfoam, Rapeseed, etc.); Potential for replacing up to 50,000 or more acres in long-term.	Reduced acres burned.	None, except long-term commitment needed for all parties.	Substantial funding required for market and agronomic development (long-term)	Class I and urban areas.
Straw Utilization Development (i.e., Fuel) Potential for up to 50,000 acres in long-term.	Reduced acres burned.	Long-term economic and technical limits difficult to control and predict.	Substantial cost of straw removal/storage/processing must be off-set by value of available.	Class I and urban areas. straw. Tax credit offsets
Research and Development Program (on-going) and Feasibility Study: Continue to seek, develop, and promote viable alternatives. Do Feasibility Studies to define the cost/ benefits and program goals. Potential for Significant acreage reduction.	Reduced acres burned.	None, except long-term rate of progress difficult to control and predict	Potential for substantial costs for employing some alternatives Tax credits offsets available.	Class I and urban areas.

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Table III

PRESCRIBED BURNING CONTROL STRATEGIES

LONG-TERM AIR QUALITY BENEFITS		COST FACTORS	IMPACT REDUCTIONS
A. Research to improve wood residue utilization	Breakthrough to make forest residue more valuable as a by-product, therefore reducing emissions.	Research funding marketing costs; Increased residue utilization may impact soil productivity	Less TSP
1. Encourage high volume residue utilization for energy co-generation			
2. Process to separate bark from small pieces			
3. Long-term chip storage			
4. Test, evaluate, & implement smoke dispersion computer models to improve smoke	More accurate forecast and unit approval/disapproval process; less chance of risk on marginal days	More manpower, high-tech equipment needs; Training for smoke management personnel.	Virtually eliminate significant impairment of visibility
B. Test & verify emission reduction ignition methods including hardwood conversion burning			
C. Look for incentives for fuel removal			
1. Reduced transportation costs			
2. Tax credits			
3. Incentive for co-generation			

Table III

PRESCRIBED BURNING CONTROL STRATEGIES

	LONG-TERM AIR QUALITY BENEFITS		COST FACTORS	IMPACT REDUCTIONS
D.	Reduce fuel loading	Reduce emissions through reduction of residues burned	Combination of economic and environmental cost; Increase in brush and weed control needs; Not all feasible; Certain wildlife habitat sacrificed; less soil protection from big chunks left on ground; Delayed Reforestation due to brush competition	Less TSP Visibility improvement through achievement of significant reductions achieved
	1. Firewood cutting recreation use periods	Less emissions during high		
	2. Whole tree yarding	Fewer units needing to be burned		
	3. Maximum recovery through felling & bucking procedures	Fewer units needing to be burned		Few smoke plumes
	4. Chipping	Reduced residue to be	Increased fire hazard and re-resulting burned costs; Reduced net timber sale receipts due to high logging cost	
	5. YUM yarding	Piles can be burned during more favorable weather conditions		
E.	Fuel management	Reduce acres burned and thereby reduce emissions	Substantial cost in dollars and time	Improve overall visibility and reduce intrusions
	1. Chemicals			
	2. Use of explosives		Note potential increase in problems from rodents, insects, and forest pathogens	
	3. Mechanical site preparation		Increase fire hazard & suppression	

F. Based on the preceding strategies becoming feasible and practical, establish emission reduction goal of 50% from the 1976-1979 baseline by the year 2000

ATTACHMENT B

RULEMAKING STATEMENTS FOR INCORPORATION OF AMENDMENTS TO THE OREGON VISIBILITY PROTECTION PLAN FOR CLASS I AREAS AS A REVISION TO THE STATE IMPLEMENTATION PLAN

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-20-047, the Oregon Clean Air Act Implementation Plan. The amendments are proposed under authority of Oregon Revised Statutes (ORS) Chapters 468 and 477.

(2) Need for these Rules

The federal Clean Air Act requires that States adopt State Implementation Plan (SIP) revisions to assure that reasonable further progress is made toward eliminating man-made visibility impairment in Class I wilderness and national parklands.

The Oregon Visibility Protection Plan adopted by the Environmental Quality Commission on October 24, 1986 describes Oregon's plans to protect Class I area visibility from future impairment and remedy existing impairment. Visibility monitoring conducted during the period 1985 to 1990 demonstrated that (a) agricultural burning in Union and Jefferson Counties was causing visibility impairment in the Eagle Cap Wilderness Area and the Central Oregon wilderness areas, respectively. Monitoring also demonstrated that Class I area visibility was impaired at times of the year outside of the July 4 - Labor Day protection period. The Oregon Visibility Advisory Committee has recommended that the Visibility Protection Plan be revised to address these issues.

The proposed rule amendments address the recommendations of the Advisory Committee by incorporating the Union and Jefferson County agricultural field burning smoke management ordinances into the Visibility Plan and extending the visibility protection period to July 1 to September 15th, inclusive.

(3) Principal Documents Relied Upon

The Clean Air Act Amendments of 1990, Title I. 42 U.S.C. 7401 et seq., as amended. November 15, 1990.

Visibility Protection for Federal Class I Areas, US Environmental Protection Agency. FR 45:233:80084. December 2, 1980.

Recommendations of the Oregon Visibility Advisory Committee, dated January 4, 1991.

Previous staff reports to the Environmental Quality Commission (EQC):

Agenda Item E, October 24, 1986, EQC Meeting, Adoption of Visibility Protection Plan as a Revision to the State Air Quality Implementation Plan (OAR 340-20-047).

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

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(2/3/92)

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED REVISIONS TO THE OREGON VISIBILITY PROTECTION
PROGRAM AS A REVISION TO THE STATE IMPLEMENTATION PLAN**

PROPOSAL SUMMARY

The proposed revisions to the Oregon Visibility Protection Plan affect private, state and federal forest land owners as well as agricultural land owners that utilize prescribed fire as a fuels management tool. No adverse fiscal impact on small businesses (less than 50 employees) is anticipated.

IMPACT ON FOREST LAND OWNERS

Expansion of the visibility protection period by 19 days will require rescheduling of Western Oregon prescribed burning during the entire July 1 to September 15th period to other times of the year.

The cost to forest land owners is estimated at $100,000 per year to reschedule burning due to increased burning costs. These costs are based on the following assumptions: (1) the rescheduled acreage is burned within the same year; (2) expansion in the protection period does not result in a reduction of acres burned, only the scheduling of the burning; and (3) the daily increase in the cost to burn is the same during the July 1 to July 4 and Labor Day - September 15th periods as it is in the July 4 to Labor Day period. If the control strategy cost for the 60 day July 4 to Labor Day period is $450,000 (June 13, 1986 EQC Meeting Staff Report, Item F), then extension of the protection period by an additional 19 days is estimated to cost forest land owners an additional $100,000 per year.

IMPACT ON AGRICULTURAL LAND OWNERS

Affected agricultural interests include growers in the Willamette and Grande Ronde Valleys as well as those in Jefferson County. Extension of the visibility protection plan would restrict Willamette Valley field burning on an additional two weekends per year. Since records maintained by the Oregon Department of Agriculture indicate that weekend burning restrictions for visibility protection purposes during the July 4 to Labor Day period during the summers of 1987 to 1990 have not been significant, the additional cost of the protection period extension is believed to be minimal.

Inclusion of the Class I provisions of the Union and Jefferson County field burning ordinances will result in the need for growers

in these areas to reschedule some of the 12,000 acres in burning activity that occurs in each area to avoid periods of smoke transport into Class I wilderness areas. Growers fund the smoke management programs in both counties. The incremental need to reschedule burning because of the visibility protection restrictions is expected to average less than 2,000 acres per year. Costs associated with rescheduling the acreage are expected to be minimal.

IMPACT ON STATE AND LOCAL GOVERNMENT AGENCIES

Additional costs are incurred by the Oregon Department of Forestry to administer visibility protection forecasts on an additional 19 days per year, and by the Oregon Department of Agriculture which must prepare protection forecasts on an additional two weekends per year. These additional costs are not expected to be significant.

The field burning ordinances for Union and Jefferson Counties were adopted in 1991, and all costs associated with these ordinances are generated from fees assessed on growers for acreage burned. The provisions of these ordinances are administered by the Union County and Jefferson County Smoke Management Programs.

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(3/30/92)

ATTACHMENT D

NOTICE OF PUBLIC HEARING

Hearing Dates: May 18, 19, 20, 22, 1992

Comments Due: May 22, 1992

WHO IS AFFECTED:

Individuals who visit Class I areas, and private, state, and federal forest land managers as well as agricultural land owners who utilize prescribed fire as a management tool.

WHAT IS PROPOSED:

Revisions to the Oregon Visibility Protection Plan for Class I areas, to meet Clean Air Act requirements and to assure reasonable further progress toward remedying visibility impairment in wilderness areas.

WHAT ARE THE HIGHLIGHTS:

The proposed revisions to the Visibility Protection Plan are as follows:

- Expand the period during which restrictions to protect visibility apply by 19 days (from the July 4th weekend to Labor Day to July 1 to September 15th);
- Incorporate the Class I area visibility protection provisions of the Union and Jefferson County Field Burning Ordinances;
- Reduce the annual acreage allowed for research and hardwood conversion burning from 1200 to 600 acres per year;
- Revise the Willamette Valley field burning restriction emergency clause to allow hardship requests for visibility protection exemptions beyond August 10th of each year; and.
- Eliminate increased fire-wood removal as a method of enhancing visibility protection.
- Reschedule periodic reviews of the Plan from three to five year intervals.

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For

further information, call toll free 1-800-452-4011 (in Oregon), or contact Brian Finneran at (503) 229-6278.

A public hearing will be held before a hearings officer at:

7:00 pm
May 18, 1992
Sumner Hall, Rm 12
SW Oregon Comm. College
1988 Newmark
Coos Bay, Oregon

7:00 pm
May 19, 1992
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
May 20, 1992
Zabel Hall, Rm 110
Eastern Oregon State Coll.
La Grande, Oregon

3:00 pm
May 22, 1992
Conference Room 10A
DEQ Headquarters
811 SW Sixth
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received by no later than **5 pm, May 22, 1992.**

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U.S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on July 23, 1992, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

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(3/13/92)

Attachment E

DEQ LAND USE EVALUATION STATEMENT FOR RULEMAKING
AMENDMENTS TO THE VISIBILITY PROTECTION PLAN

(1) Explain the purpose of the proposed rules.

Amend the Oregon Visibility Protection Plan for Class I areas to mitigate visibility impairment caused by agricultural and forest land prescribed burning and extend the visibility protection period.

(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: Not Applicable.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes ___ No ___

If no, explain: Not Applicable.

(c) If no, apply criteria 1. and 2. from the instructions for this form and from Section III Subsection 2 of the SAC program document 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 proposed rules do not affect programs which are:

(1) Specifically referenced in the statewide planning goals; or
(2) Reasonably expected to have significant effects on:
    (a) resources, objectives or areas identified in the statewide planning goals, or
    (b) present or future land uses identified in acknowledged comprehensive plans.

(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.

Not Applicable.

Steve Greenwood — Air Quality Division

Intergovernmental Coord.

4-8-92 — Date

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(2/3/92)

Attachment F

Oregon Visibility Advisory Committee Recommendations

1. Visibility Monitoring

The Oregon Visibility Advisory Committee recommends that the Department of Environmental Quality include the following points in the State Air Quality Implementation Plan.

In the next three years, the first priority for increased funding should be monitoring. DEQ should work closely with Federal Land Managers to develop visibility guidelines and define visibility problems for each Class I area. By collecting data as described in detail of page 8 of the current SIP, DEQ should provide data and trend patterns to address these basic issues:

1. Quantify and identify sources of visibility impairment problems, if any exist, within other Class I areas.
2. Quantify visitor use data for each Class I area by month. For June and September, develop data on visitor use by week.

There are a variety of sources other than field burning and prescribed burning which may significantly impact visibility in Class I areas.

2. Redesignation

In the next three years, funds should be allocated and the required energy, economic and health impact studies conducted in order to evaluate the redesignation of those Class II wilderness lands which are contiguous with current Class I wilderness areas. Those same studies should be conducted to evaluate the redesignation of the Columbia Gorge National Scenic Area to a Class I area for purposes of visibility protection.

3. Short Term Strategies

The Oregon Visibility Advisory Committee recommends that the Department of Environmental Quality includes the following short term strategies in the State Air Quality Implementation Plan:

Jefferson County Field Burning

In a cooperative effort, grass seed and grain growers, local government and the DEQ develop an acceptable, locally administered program for smoke management which provides technical adequacy and enforceability to protect visibility in Class I wilderness areas in the Central Cascades. Technical adequacy includes better forecasting and decision making especially under marginal or risky conditions.

Union County Field Burning

In a cooperative effort, grass seed and grain growers, local government and the DEQ develop an acceptable, locally administered program for smoke management which provides technical adequacy and enforceability to protect visibility in Class I wilderness areas in the Eagle Cap Wilderness. Technical adequacy includes better forecasting and decision making especially under marginal or risky conditions.

Willamette Valley Field Burning

The Committee recognizes that the short term strategies approved in 1986 have significantly reduced visibility impairment during the weekends in the summer peak visitation period and recommends further improvements to a visibility protection program. The Committee expects that the provisions of such an improved visibility protection program will be provided by other forums.

The Committee further recommends that the current visibility protection program for Willamette Valley field burning as described on page 10 and 11 of the SIP be extended to cover the July 1 to September 15th visibility protection period and otherwise continue until the next periodic review.

Retention of the field burning restriction emergency clause is also recommended with the following changes:

1. Reword the second sentence of the clause to "The finding will be based on a review, by August 10th or periodically thereafter, of burning accomplished to date to determine if burning restrictions should be modified or suspended"
2. Include the Director of the Department of Agriculture in findings development.

Prescribed Natural Fire

Prescribed Natural Fire means fire ignited by natural sources (lightning, volcanoes, etc.) on any federally managed lands which are permitted to burn within predetermined conditions outlined in the Land Manager's fire management plan.

Prescribed natural fire contributes to the management of natural areas and is one means through which Federal Land Managers achieve certain resource management objectives in Class I areas. Prescribed natural fire programs are approved for Class I area when the Federal Land Manager has an approved Fire Management Plan which includes consideration of smoke impacts caused by smoke. The Oregon Department of Environmental Quality and Oregon Department of Forestry will be provided an opportunity to participate in the development of and comment on, draft Fire

Management Plans developed by the Federal Land Managers.

Prescribed Burning

A major focal point of the short-term strategies adopted in 1986 was to shift prescribed burning (the controlled application of fire to wild land fuels) from the summer and fall months to the spring to address the dual needs of visibility protection and emissions reduction. These short term strategies have significantly reduced overall emissions and have helped to improve visibility during the summer peak visitation period. The current visibility protection program for prescribed burning as described on pages 11-13 of the SIP including the shift to spring burning should be extended until the next periodic review.

In addition, the following modifications should be inserted as appropriate.

1. Extend the peak summer visitation period to July 1 through September 15, a 26% increase in the visibility protection period for 1991.
2. Reduce the annual acreage for research fires and hardwood conversion burning in the western Cascades to 600 acres. Such burning will not be conducted on weekends during the visibility protection period.
3. Review administration of the prescribed burning restriction emergency clause with Department of Forestry and Federal Land Managers and revise as appropriate.

4. Long Term Strategies

The Oregon Visibility Advisory Committee recommends that the Department of Environmental Quality retain the current field burning and prescribed burning elements in the long term strategy of the State Air Quality Implementation Plan. Visibility protection has been enhanced and overall emissions reduced significantly since 1986. The following amendments should be included:

1. Eliminate increased fire wood removal as a method of enhancing visibility protection.
2. Support for wildfire prevention programs that provide fire prevention and fuels management elements.

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Adopted by the Oregon Visibility Advisory Committee on December 7, 1990. Representative of The Wilderness Society, The Mazamas, The Sierra Club and the Oregon Environmental Council opposed adoption of these recommendations.

ATTACHMENT 3

MINORITY REPORT OF THE VISIBILITY ADVISORY COMMITTEE TO THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY

GENERAL COMMENTS

The Visibility Advisory Committee (Committee) of the Department of Environmental Quality (DEQ) met December 7, 1990, to consider final recommendations to the Director of the Oregon Department of Environmental Quality (Director). The Committee held its first of seven meetings April 19, 1990. The Committee considered the reports of DEQ staff and input from public, forest product, and agricultural field burning interests, regarding the periodic review State of Oregon Visibility Protection Plan (Plan).

At the final meeting, two framework proposals were considered: 1) a Resolution prepared by Larry Tuttle on behalf of Committee members seeking to expand substantially the scope of the Plan; and 2) an outline proposal prepared by Bill Dryden on behalf of forest and agricultural burning interests. The Resolution put forward by Mr. Tuttle was outlined in the October 22, 1990, Committee meeting, and the written Resolution was circulated to all Committee members by DEQ staff together with the notice of the final Committee meeting. The industry proposal had been circulated only to industry representatives in advance of the December 7 meeting, except that DEQ staff had received a facsimile copy of the proposal the day prior to the Committee meeting. John Core of the DEQ staff provided a copy of the industry proposal to Mr. Tuttle the afternoon prior to the final Committee meeting.

The Resolution submitted on behalf of Committee members by Larry Tuttle was considered first at the final meeting. The Resolution failed to obtain the necessary 2/3 majority and, therefore, failed in conformance with the Committee Bylaws. Over the objections of Committee members, the industry alternative was considered next on a section-by-section basis. Committee members were asked to consider, on a simple majority basis, individual revisions to the proposal, including last minute amendments designed specifically for the purpose of gaining a final 2/3 majority. In short, the two proposals were considered under different Committee rules; and, in the case of the industry alternative, the proposal was made available for review too late for adequate analysis.

In addition to these procedural difficulties, the DEQ Director should review future Committee operations and composition. Clearly, Oregon State Forestry and Oregon Department of Agriculture members of the Committee see themselves as advocates for the forest products and seed growing industries respectively.

Given the fact that only one member representing the environmental interests is a full time staff member of an organization, the industry and agency interests, including State of Oregon employees from Forestry and Agriculture, are in a position to dominate the decision.

A more typical committee configuration would include affected and interested parties -- members of the public, academics, industry representatives, and environmental groups. Agency representatives, state and federal, would be advisory to the Committee. Agency representatives should not be placed in the position of advocating for a particular interest. The Director should consider this and other committee structure modifications before the next periodic review.

The undersigned further recommend that in future Committee deliberations DEQ management give clear direction to Committee staff at the onset. DEQ staff wavered substantially during the Committee process from "everything is on the table" to some narrow expectations. The efforts of the Director to remedy this situation at the final meeting is appreciated. However, the Director's comments may have come too late to be of great value to the Committee proceedings. The Director's statement of position will clearly help remove any potential uncertainty at the time the Director makes final recommendations to the Environmental Quality Commission (EQC).

Lastly, the DEQ staff should be more prepared to submit empirical data such as the level of wilderness visitor use and the number of meteorologically impaired days. In the absence of such data, the Committee deliberations become positional rather than rationally based. This hinders meaningful outcomes.

RECOMMENDATIONS TO THE DIRECTOR

This Minority Report is submitted as an alternative to the Committee recommendation to the Director. The undersigned further ask that this Minority Report be incorporated into the Director's recommendations to the EQC.

The Resolution prepared by Committee members representing a minority position, and attached as Exhibit A, accomplishes the following objectives:

1) demonstrates progress in complying with the Clean Air Act.

2) improves the database for future visibility protection decisions for Oregon's Class I air quality areas and other special areas that may be determined by the Director and the EQC. At present, air quality data are available only for the areas included in the original Plan and only to a limited degree for those areas. In the absence of comprehensive monitoring data for

all Class I areas on a state-wide basis, the State should protect Class I areas until monitoring data are available showing that no visibility impairment exists. Likewise, the appropriate federal agencies should be directed to improve data collection for visitor use in wilderness areas.

3) expands the geographic boundaries of areas to be protected. At present, only a limited area of the North Oregon Cascades is protected by the Visibility Protection Plan . Class I areas south of Linn County in the Cascades; the Coast and Siskiyou Mountain Ranges; and, all of Eastern Oregon remain unprotected from smoke intrusions, including the Eagle Caps. Protection should be extended to all Class I areas.

4) increases the period of time that Class I areas are protected. To adequately protect Class I areas, the period of time protected and the level of protection within that period of time needs to be expanded. Class I areas within the present Plan are protected from the July 4 weekend to Labor Day from prescribed forest burning. These Class I areas are protected from field burning smoke only on weekend days, or about 18 days per year.

The protection of Class I areas should be extended to not less than 90 days for all areas, and then increased to 120 days in two years. The areas protected should be protected from all sources of smoke impairment. The period of protection should be adjusted to coincide with the maximum Class I visitor use days. (See attached Exhibit B, U.S. Forest Service Wilderness Strategies Environmental Assessment for an example of agency efforts to manage the distribution of visitors to wilderness areas.)

The recommendation adopted by the Committee majority does not demonstrate substantial progress for the full implementation of the Clean Air Act. The recommendation is deficient in the following ways:

1) calls for increased monitoring but does not define scope or extent of monitoring. The proposal does include direction to monitor the Columbia River Gorge National Scenic Area, which is not a Class I Area.

2) expands the geographical coverage only to the Eagle Cap Mountains in Northeastern Oregon and only to the extent of field burning smoke.

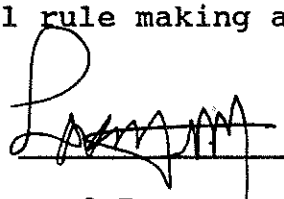
3) limits increased protection to less than 15 days annually. Depending upon the day of the week of July 4, and the date of Labor Day, the proposed majority report represents as little as an eight day expansion and a maximum of seventeen day expansion for prescribed forest burning. (Based on the average increase of 4 protected days annually from the first Plan to the recommendation by the majority, full protection of Class I areas would not occur for at least 70 years.) For Willamette Valley

field burning, the maximum expansion is the two days of the weekend following Labor Day. No consideration is given to the coincidence of visitor use.

In addition, the adopted proposal assumes that the County Courts of Jefferson and Union Counties will complete and implement satisfactory local ordinances to control and enforce field burning restrictions and control impacts on Class I areas--essentially the Jefferson Wilderness Area and The Eagle Caps.

In a significant step backward, the last section of the adopted proposal recommends that prescribed forest burning be memorialized as a preferred method for disposal of residual logging materials. This is contrary to the State of Oregon goals to eliminate sources of smoke.

The majority recommendation to the Director falls far short of adequate progress in implementing the Clean Air Act. The undersigned request that the Director reject the recommendation and substitute a rule which amends the present Plan to include substantive changes in areas to be monitored; the geographical areas protected; and, the length of time and degree of protection for Class I areas. The Resolution attached as Exhibit A more accurately reflects the long-range goals of the State. The undersigned ask the elements of the Resolution be incorporated into any final rule making and recommendation to the EQC.

Submitted by 

this 17th day of January, 1991.

On behalf of the following:

Larry Tuttle
The Wilderness Society

Ann Wheeler-Bartol
Oregon Environmental Council

Anne Klocka
Sierra Club, Columbia Chapter

Jim Hurst
The Mazamas

Note: Exhibit B, "Environmental Assessement of the Wilderness Strategies Project; Decision Notice and Finding of No Significant Impact", is available from the Department of Environmental Quality, Air Quality Division upon request.

EXHIBIT NO. A

RESOLUTION

Whereas, the Visibility Protection Plan for Class I Areas, OAR 340-20-047, Section 5.2 (SIP) "represents an initial step toward remedying existing impairment and protecting future visibility conditions within Oregon's Class I areas," (SIP, at Page 2); and,

Whereas, "[T]he Oregon Department of Environmental Quality has established and will continue to operate a monitoring system to identify the degree, if any, of visibility impairment in Class I areas and the sources of the pollutants causing the impairment. To the extent practicable, the visibility monitoring program will extend statewide with the intent of documenting and evaluating visibility within Class I areas of the State of Oregon. The monitoring system will be operated in cooperation with the National Park Service the USDA Forest Service.

A visibility monitoring strategy is essential to the evaluation of visibility impairment trends, as a means of differentiating manmade and natural visibility reduction, to assess the effectiveness of visibility control strategy programs and to identify the major contributing sources. To meet these objectives, the monitoring program will document visibility within Class I areas on a long-term basis. In addition, the monitoring plan will strive to meet the needs of, and be a cooperative effort with, the Federal Land Manager." (SIP, Section 5.2.3, at Page 7); and,

Whereas, "[O]n third year intervals beginning in 1989, the Department will conduct a formal meeting to review the Plan, providing an opportunity for the Land Managers to consult with the Department on all matters involving the development of the Visibility Protection Plan. The meeting will provide an opportunity for affected Land Managers, the Visibility Advisory Committee, the Oregon Seed Council and the public to present their (a) assessment of visibility impairment; (b) recommendations regarding the development of long-term control strategies; (c) assessment and consultation of visibility impairment trends as related to the Reasonable Further Progress provisions of the Plan; (d) periodic review of the monitoring program and findings developed therefrom; (e) additional measures which may be needed to assure reasonable further progress; (f) review of proposed integral vistas and/or new wilderness lands to be included within the Plan; (g) assessment of proposed and/or actual impacts from major new or modified point sources and (h) a review of progress made in decreasing impacts from field and prescribed burning including rescheduling, utilization and emission reduction programs." (SIP, Section 5.2.4.2, at Page 9); and,

Whereas, "[T]he intent of the Oregon Visibility Protection Plan is to insure significant reasonable further progress toward achievement of the National Visibility Goal of 'the prevention of any future and the remedying of any existing impairment in Mandatory Federal Class I areas which impairment results from manmade air pollution,'" (SIP, at Page 2); and,

Whereas, "following expiration of the [following] short term strategy, a program of comparable or greater visibility protection will be adopted by the Department," (SIP, at Page 11);

BE IT THEREFORE RESOLVED, that the Oregon Visibility Plan be amended as follows:

1) Beginning with the date of the adoption of the OAR, all Class I areas shall be protected from smoke from <u>prescribed forest burning and field burning</u>.

2) Class I areas shall be protected for 90 consecutive days during the period of April 1 to October 30. Beginning two years following adoption of the OAR, the period shall be 120 consecutive days.
   a) For Class I areas for which visitor and monitoring data is available, the period selected for protection shall be the period which coincides with maximum visitor use.
   b) For Class I areas for which DEQ has not collected visitor or monitoring data, the period of protection shall be June 1 through August 31.
   c) Meteorological impaired days are not subject to protection.
   d) Protection applies to all days of the week.

3) The DEQ shall develop and implement a plan to monitor all Class I protected areas.

4) The DEQ shall establish a visibility monitoring program for the Columbia River Gorge National Scenic Area within one year from the adoption of the OAR.

ATTACHMENT G

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY **INTEROFFICE MEMORANDUM**

DATE: July 7, 1992

TO: Environmental Quality Commission

FROM: Brian Finneran, Hearings Officer

SUBJECT: Hearings Report for Smoke Management and Visibility Plan Amendments

Four hearings were held to accept testimony on amendments to the Oregon Slash Burning Smoke Management Plan, and amendments to the Oregon Visibility Protection Plan. These amendments were authorized for public hearing by the Director on April 10, 1992.

Although these amendments are separate rulemaking actions, they are interrelated by each being administered by the Oregon Department of Forestry and tied to the practice of prescribed (slash) burning. Therefore, these amendments were held concurrently, with a representative from the Oregon Department of Forestry (Don Matlick) also in attendance.

On May 18, 1992, a public hearing was held for both amendments at Sumner Hall, Room 12, S.W. Oregon Community College, Coos Bay, Oregon. There were 6 persons in attendance; no verbal testimony was given, one written comment was submitted.

On May 19, 1992, a public hearing was held for both amendments at the Smullen Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 10 persons in attendance, seven gave verbal testimony and 4 written comments were received.

On May 20, 1992, a public hearing was held for both amendments at Zabel Hall, Room 110, Eastern Oregon State College, La Grande, Oregon. 13 persons were in attendance; 2 gave verbal testimony and 2 written comments were received.

On May 22, 1992, a public hearing was held for both amendments at Conference Room 10A, DEQ Headquarters, 811 SW Sixth Avenue, Portland, Oregon. 7 persons attended; 3 gave verbal testimony and 3 written comments were received.

A total of 10 additional persons submitted written comments prior to the May 22, 1992 deadline.

Memo To: Environmental Quality Commission
July 7, 1992

The following is a summary of the issues raised during the public comment period, both oral and written, followed by the Department's response. A list of the names of those who provided public testimony appears at the end of this report.

I. Smoke Management Plan Issues/Department Response:

1. **The 20 mile SPZ boundaries should be larger to better protect the PM_{10} nonattainment area from slash smoke impact.**

   The Smoke Management Plan Review Advisory Committee agreed that in general a 20 mile boundary would be the optimum size for the SPZs, where any planned slash burning activity should be carefully evaluated so as to avoid impacting the PM_{10} nonattainment area. The boundary would be extended under the contingency plan provisions if significant impacts continue.

2. **Expansion of the SPZ boundary under the Smoke Management Plan Contingency Measures should only extend into those areas where the slash burning which directly impacted the nonattainment area originated.**

   The contingency plan calls for expanding the SPZ into the areas where slash burning could impact the PM_{10} nonattainment area. The Department expects the new SPZ boundary would take into account areas beyond 20 miles where slash burning originated - as well as areas where potential slash burning could pose a threat of smoke impact to the nonattainment area. This expansion of the SPZ boundary would be a joint decision between DEQ and ODF.

3. **The SPZ boundaries are arbitrary and will not significantly limit slash burning impacts.**

   Each SPZ boundary was determined based on a case-by-case evaluation of geography, topography, forested areas, and meteorology around each PM_{10} nonattainment area, where the close proximity of slash burning could result in significant smoke impact in that area.

4. **The period the SPZs will be in effect should be from Nov. 1 to March 1, rather than Nov. 15 to Feb. 15, in order to match the woodburning curtailment programs.**

   The Advisory Committee did recommend the longer time period; however, the Department decided to propose a slightly

shorter period after a review of historical data on PM_{10} levels, weather conditions, and slash burning activity showed that the majority of PM_{10} air quality violations are limited to December and January, and that the probability that slash smoke impacts would contribute to a PM_{10} violation during the Nov 1-15 period and the Feb.15 - Mar.1 period is very low. The Department believes the longer time period would be more appropriate as a contingency measure, should the PM_{10} area fail to demonstrate attainment.

5. **Expanding the period of the SPZs to Nov. 1 should not occur under any circumstances, due to the critical need to conduct some slash burning in late fall prior to winter.**

The Department recognizes that there are periods of good slash burning weather conditions during the Nov.1 - Nov.15 period, however should the PM_{10} area fail to attain standards, expanding to Nov.1 is considered necessary due to the need to take additional measures to ensure that no additional slash smoke contribution occurs in the nonattainment area during potential nonattainment conditions. There would still be opportunities to burn slash during this period, providing no slash impact is likely to occur and the additional contingency measures prohibiting slash burning do not go into effect.

6. **In addition to no slash burning on "red" woodstove curtailment days, there should be a SPZ requirement for no slash burning on "yellow" days.**

The Department believes no slash burning on poor air quality days or "red" days is important to avoid the possibility of air quality violations; restricting slash burning on moderate air quality days or "yellow" days would represent a significant increase in restricted days for slash burning, which the Department believes is unnecessary at this time.

7. **In addition to the PM_{10} nonattainment areas, slash burning protection needs to be extended to the Bend area.**

The Department of Forestry is developing a voluntary smoke management plan involving forest land owners for the area around Bend, in addition to the current restricted area established around this community. Further application of a SMP to the area needs to be studied as part of an entire central and eastern Oregon issue regarding forest health and the need for increased slash burning.

8. **Slash burning protection needs to be extended to the Pendleton area.**

It is not known how frequently slash smoke impacts occur in Pendleton. At this time there is no special protective measures planned for this area until further evaluation is made as part of the forest health issue referred to above.

9. **The SPZ restrictions for La Grande and Klamath Falls should be mandatory, not voluntary.**

Currently the Department of Forestry operates a voluntary smoke management program IN portions of central and eastern Oregon, and for that reason the slash burning restrictions in La Grande and Klamath Falls are proposed as voluntary. Also, slash burning impacts in these areas are a very small percent of total PM_{10} levels. Should these areas fail to demonstrate attainment with the national ambient air quality standard (NAAQS) by the federal deadline, and slash burning smoke is a significant contributor to the nonattainment, mandatory restrictions would automatically go into effect in that area.

10. **A definition of "significant contributor" is needed for slash burning, in order to know when the proposed contingency measures would go into effect in the PM_{10} nonattainment area.**

Current federal guidance for slash burning control measures does not define this level, and instead leaves it to states to make this determination. The Department has used EPA's significant impact level for point sources, which is 5 micrograms per cubic meter for a 24-hour period, as the basis for evaluating significant source contributions in PM_{10} nonattainment areas, and for developing control strategies to bring the area into attainment with the NAAQS.

For the record, the Oregon Department of Forestry supports a slightly higher significant impact level of 8-10 micrograms per cubic meter (24-hour period) for the following reasons: 1) 5 micrograms would represent only a 3% contribution to the 24-hour standard of 150 micrograms; 2) impacts less than 5% are difficult to accurately measure; and 3) EPA's 5 microgram significant impact level applies to point sources, and area sources such as slash burning are not equivalent.

However, given that (1) there is little difference between 5

and 10 micrograms from an air quality standpoint, (2) the 5 microgram level has been used by both DEQ and EPA to prohibit new or expanding major industry, and (3) PM_{10} emissions from industrial boilers are chemically very similar to slash burning emissions, the Department believes that from an equity standpoint the 5 microgram level should be a uniform standard applied to all PM_{10} significant contributors.

11. **The contingency measures calling for a complete ban from November 1 to March 1 should occur without the need for determining the magnitude or duration of the slash impact.**

The Department believes this would restrict slash burning unnecessarily. A complete ban during this time period shall be based on a measured impact over 10 micrograms per cubic meter.

12. **The contingency measures calling for a slash burning ban based on one impact of 5-10 micrograms or >10 micrograms per cubic meter is much too restrictive.**

The Department believes (and ODF concurs) that more restrictive measures are necessary if the PM_{10} area fails to attain the NAAQS. Since EPA rules would not allow construction or modification of a major industrial source if it resulted in smoke impacts greater than 5 micrograms, it is therefore equitable to apply a similar strategy to slash burning.

13. **Do not extend the period of periodic review of the Plan from 3 to 5 years.**

Although this was not a Committee recommendation, DEQ and ODF believe a 5 year period of review is more practical from the standpoint of 1) length of time involved in developing, reviewing, and adopting amendments to the Plan, and 2) the need to have more than 1 or 2 years of monitoring data between plan reviews to evaluate trends.

14. **Slash burning should be a last resort; the Department should be promoting alternatives to slash burning.**

The Department has been working with the Department of Forestry in advocating alternatives to slash burning. ODF has added new language to the Smoke Management Plan which promotes alternatives and minimizing emissions from slash

burning.

15. **The original language recommended by the Advisory Committee for restricting slash burning in the SPZ was replaced by weaker language which gives Department of Forestry more discretion.**

The change in the language from "...allowing no burning where any chance exists to get any smoke into the nonattainment area" was changed to "when the smoke management meteorologist believes there will be no measurable smoke impacts..." The Department viewed the original language as too vague in terms of the meaning of "where any chance exists" and "any smoke", and proposed new language which is more practical from an operational standpoint.

16. **The Smoke Management Plan fails to address the problem of global warming, and the recommendations of the Oregon Task Force on Global Warming.**

Monitoring data over the last 10 years shows a 22% reduction in prescribed burning in western Oregon. Existing language and new language added to the Smoke Management Plan addresses the need to develop alternatives to slash burning, as well as to employ techniques to minimize emissions. While reducing particulate emissions, this also reduces carbon dioxide emissions - the major contributor to global warming.

17. **Additional minor changes are needed to the SMP which involve 1) delegating authority for approving burns to BLM district managers, 2) defining the meaning of "monitoring" related to units that continue to burn for three days; and 3) changing the word "adjacent" to "adjoining" related to notification of residents of planned burning activity.**

The Department of Forestry has made revisions to the SMP which address these issues, on which the Department concurs. In terms of issue 2), ODF has inserted language stating that monitoring shall require periods of intermittent observations by the landowner.

II. Visibility Protection Plan Issues/Department Response:

1. **The Visibility Protection Plan is too limited and does not attempt to protect all Class I areas in the state.**

The strategies identified in the Visibility Protection Plan are based on visibility monitoring data from primarily Class I areas in the Oregon Cascades. Given the choice between focusing efforts on 1) only those Class I areas where the extent of visibility impairment was known, or 2) all Class I areas, including those where impairment is not known, the Visibility Advisory Committee chose the former. The Department supports this approach, as well as the Committee's additional recommendation to identify visibility impairment problems within other Class I areas. The long-term strategy outlined on page A-17 of the Plan does include numerous provisions for making reasonable further progress for all Class I areas over the next 10-15 years.

2. **The Department should not delete the existing provision which recommends firewood removal from forest lands as a method of enhancing visibility protection, since this does not contribute to woodstove smoke problems in PM_{10} nonattainment areas.**

The goal of this provision was to lessen fuel loadings and lower emissions from prescribed burning. However, if firewood removal were to transfer the burning of this wood into PM_{10} nonattainment areas, this could add to smoke problems there. Given this possibility, the Department agrees with the Visibility Advisory Committee that it should not continue to encourage firewood removal, as this would be contrary to the State Implementation Plan (SIP) control strategy to reduce woodstove smoke in PM_{10} nonattainment areas. (It should be pointed out that the net affect of this deletion neither encourages nor discourages firewood removal.) The Department also would not want to support a tradeoff in which visibility improvement, which is an aesthetic issue, is placed over PM_{10} attainment, which is a health issue. The Department still strongly supports slash utilization for purposes such as power generation, where the use pollution control equipment can significantly minimize PM_{10} emissions.

3. **The expanded visibility protection period for Class I areas in the Plan is still too limited, and should be extended to a 90 day period the first year, and then to a 120 day period the next year.**

The Minority Report of the Visibility Advisory Committee recommended this extension of the protection period. However, given the recent success in visibility improvement,

the Department believes the July 1 - September 15 extension contained in these amendments is more appropriate at this time, but would consider further expansion of the protection period at the next plan review period if an increase in visibility impairment occurs.

4. **The expansion of the visibility protection period by 19 days as stated in the Plan amendments is inaccurate, and should be stated as 8 to 17 days.**

The number of days in the expanded protection period will vary from year to year based on which days the 4th of July and Labor Day weekends would fall. The Department used an estimate of the maximum days in any one year in order to estimate the maximum impact of burning costs on forest land owners/managers and agricultural land owners resulting from the inability to burn during this expanded protection period.

5. **The visibility protection period should include Willamette Valley field burning seven days a week, not just on weekends.**

The Visibility Advisory Committee acknowledged in their recommendations that since 1986 visibility impairment in Class I areas in the Cascades been significantly reduced through the curtailment of Willamette Valley field burning on summer weekends. Neither the Committee in their recommendations, nor the Department thought it was appropriate to additionally curtail field burning on weekdays, given the success of this effort. This would also severely restrict the practice of open field burning, since it only can occur in during the summer. Extension of the visibility protection period to July 1 - September 15 as proposed in these amendments will include curtailment on approximately 2 additional weekends for Willamette Valley field burning. The phase down of open field burning as mandated by the 1991 Oregon Legislature will provide additional visibility improvement.

6. **In addition to protecting the Eagle Cap Wilderness Area from field burning smoke impacts, the Plan amendments should address protection from slash burning impacts as well.**

The Department found through monitoring in the Eagle Cap Wilderness Area that field burning smoke impacts occurred during the summer months. No demonstrated impacts were found from slash burning during this same time period. In

fact, nearly all slash burning in this area has been shifted to the spring and fall, due in part to the fire hazard conditions which exist during the summer months.

7. **The Visibility Protection Plan fails to address the problem of global warming, and the recommendations of the Oregon Task Force on Global Warming.**

See the response outlined in I.12 above. The Visibility Protection Plan, which is part of the Slash Burning Smoke Management Program, is designed to reduce visibility impairment through methods which include an overall reduction in slash burning emissions of approximately 22% in Western Oregon from 1982-84 levels, as part of the long-term strategy identified in the Visibility Protection Plan (see Attachment A, page 18). While reducing particulate emissions, this also reduces carbon dioxide emissions - the major contributor to global warming.

8. **Do not extend the period of periodic review of the Plan from 3 to 5 years.**

Although this was not a recommendation made by the Visibility Committee, DEQ and ODF believe a 5 year period of review is more practical from the standpoint of 1) length of time involved in developing, reviewing, and adopting amendments to the Plan, and 2) the need to have more than 1 or 2 years of monitoring data between plan reviews to evaluate trends.

Memo To: Environmental Quality Commission
July 7, 1992

Public Testimony on Amendments to Smoke Management and Visibility Protection Plans

Testimony		Name and Affiliation
I. Coos Bay Hearing, May 18, 1992:		
1.	W	Jim Carr, Menasha Corporation
II. Medford Hearing, May 19, 1992:		
2.	V	Gary Stevens, Jackson County Air Quality
3.	B	Paul Wyntergreen, Oregon Environmental Council
4.	B	Mike Kohn, Oregon Chimney Sweeps Association
5.	B	Greg Miller, SOTIA
6	V	Vera Morrell, Coalition to Improve Air Quality
7.	B	Ron McKenna, citizen
8.	V	Hank Snow, citizen
III. La Grande Hearing, May 20, 1992:		
9.	B	Grant Darrow, Oregon Chimney Sweeps Association
10.	B	Dorothy Fleshman, Air Improvement Resolve
IV. Portland Hearing, May 22,1992:		
11.	V	Larry Tuttle, The Wilderness Society
12.	B	Dr. Robert J. Palzer, Sierra Club
13.	B	Ann Kloka, Sierra Club
14.	W	Jim Britton, Oregon Department of Agriculture
V. Miscellaneous Letters Received:		
15.	W	Thomas R. Holt, Willamette Industries
16.	W	D. Dean Bibles, BLM
17.	W	R. M. Richmond, Wallowa-Whitman National Forest
18.	W	Don Johnson, Rough and Ready Lumber
19.	W	David R. Jessup, Oregon Forest Industries Council
20.	W	Stephen L. Cafferata, Weyerhaeuser
21.	W	Jon Schweiss, EPA Region X
22.	W	Blair A. Holman, Georgia-Pacific Corporation
23.	W	Mike Hyde, City of Pendleton
24.	W	James H. Gilliam, Oregon Chimney Sweeps Association

KEY: V = Verbal Testimony W = Written Testimony B = Both

brf 7/7/92

Environmental Quality Commission

☒ Rule Adoption Item
☐ Action Item
☐ Information Item

Agenda Item K-2
July 23, 1992 Meeting

Title:

Amendments to the Slash Burning Smoke Management Plan

Summary:

In order to mitigate any impacts on PM_{10} nonattainment areas from forest slash burning the Department and the Oregon Department of Forestry developed amendments to the Smoke Management Plan. The modifications include additional restrictions on prescribed burning within 20 miles of the six PM_{10} nonattainment areas in Oregon. Restrictions within these Special Protection Zones (SPZ) for western Oregon include: 1) prohibitions on burning if weather forecasts predict smoke impacts on nonattainment areas; 2) monitoring of burns for at least 3 days for potential smoke impacts; 3) prohibition on ignition of fires from Dec. 1 to Feb 15 when "Red" woodburning curtailment days are in effect in adjoining nonattainment areas. For eastern Oregon SPZs these restrictions would be voluntary. Should the nonattainment area fail to reach compliance with federal ambient air quality standards by 1994, and slash burning is determined to be a significant contributor, the revised plan calls for several contingencies to be put in place. These include: 1) expansion of the zones to include sources of slash burning causing the impact; 2) expansion of the period of burning restrictions by 30 days; 3) prohibitions on all slash burning within a zone in December and January if smoke impact exceeds 5-10 $\mu g/m^3$ (24 hour average) 4) prohibition of all slash burning within a zone from Nov. 1 to Mar. 1 if an impact greater than 10 $\mu g/m^3$ occurs; 5) establishment of mandatory smoke management plans near La Grande and Klamath Falls.

Department Recommendation:

Adopt the Special Protection Zone requirements and other minor changes as outlined in Attachment A of the staff report.

Report Author	Division Administrator	Director
Brian Zimmerman	Steve Greenwood	Stephanie Hallock (acting)

July 7, 1992

Oregon

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

REQUEST FOR EQC ACTION

Meeting Date: July 23, 1992
Agenda Item: K-2
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption: Amendments to the Slash Burning Smoke Management Plan, as a revision to the State Implementation Plan.

PURPOSE:

To provide additional protection to PM_{10} nonattainment areas and Class I wilderness areas.

ACTION REQUESTED:

X	Adopt Rules	
	Proposed Rules	Attachment A
	Rulemaking Statements	Attachment B
	Fiscal and Economic Impact Statement	Attachment C
	Public Notice	Attachment D
	Land Use Compatibility Statement	Attachment E
	Advisory Committee Recommendations	Attachment F
	Hearing Officer's Report	Attachment G

DESCRIPTION OF REQUESTED ACTION:

Smoke from forest slash burning occasionally impacts both PM_{10} nonattainment and Class I areas (certain wilderness areas and Crater Lake National Park). Even though slash smoke levels measured in all PM_{10} nonattainment are relatively minor compared to

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woodstove smoke, industrial smoke, and fugitive dust, significant public comments were made during the PM_{10} State Implementation Plan adoption process in 1991 on the issue of providing greater protection from forest slash burning smoke impacts.

The Department and the Oregon Department of Forestry have developed improvements to the current Smoke Management Plan (SMP) which would include additional restrictions and contingency plans for slash burning near the PM_{10} nonattainment areas. The proposed amendments include elements of the June 1991 recommendations of the Smoke Management Plan Review Advisory Committee. The Department negotiated with the Oregon Department of Forestry further desirable provisions for PM_{10} area protection after the Advisory Committee completed it's recommendations.

The proposed restrictions involve establishing a Special Protection Zone (SPZ) around each of the six PM_{10} nonattainment areas in Oregon. A 20 mile boundary, based on geography, meteorology, and the location of forested areas, was determined to be the optimum size for the SPZs. In western Oregon between Nov. 15 and Feb. 15, the following slash burning restrictions would be mandatory: 1) a prohibition on burning in the SPZ if the Department of Forestry forecaster determines weather conditions are likely to cause a smoke intrusion into the adjacent PM_{10} nonattainment area; 2) monitoring of burns for at least 3 days and requirements to extinguish fires to prevent smoke from smoldering fires from impacting the nonattainment area; and 3) a prohibition on new ignitions during "Red" woodburning curtailment days in adjacent nonattainment areas between Dec. 1 and Feb. 15th. In eastern Oregon SPZs, these three conditions would be voluntary, since a mandatory SMP has not been established for this area, and slash burning impacts in the current PM_{10} nonattainment areas (La Grande and Klamath Falls) are infrequent.

Backup or contingency measures for each SPZ would be required in the event the PM_{10} nonattainment area fails to attain the National Ambient Air Quality Standard by the Clean Air Act deadline - and a measured impact from slash smoke is determined to be a significant contributor to the PM_{10} nonattainment. These measures include: 1) expansion of the SPZs beyond 20 miles to include the area from which burning is causing the smoke impact; 2) expansion of the SPZ burning restrictions by 30 days, to Nov. 1 - Mar. 1 (except Klamath Falls to Nov. 1 - Apr. 1); 3) a prohibition on all slash burning (regardless of the likelihood of impact) within the SPZ in December and January, if a

slash smoke impact of 5-10 micrograms per cubic meter (24-hour average) occurs after the contingency measures go into effect; 4) a similar prohibition on all slash burning from Nov. 1 - Mar. 1 if an impact greater than 10 $\mu g/m^3$ PM_{10} occurs; and 5) establishment of mandatory smoke management programs near La Grande and Klamath Falls.

There are also numerous housekeeping changes to the SMP, the more significant of which include: 1) revising the definition of slash to exclude brush generated by residential development land clearing (so that this burning is regulated by the Department's open burning rules); 2) policy revisions to provide greater focus on methods to minimize emissions; and 3) rescheduling periodic review of the Plan from three to five year intervals.

AUTHORITY/NEED FOR ACTION:

_X_ Statutory Authority: ORS 468.305 Attachment ___

Oregon statutes require the Oregon Department of Forestry (ODF) and the Department of Environmental Quality to jointly approve a plan for the purpose of managing smoke in designated areas. ODF is responsible for adopting smoke management rules and implementing them. The Commission has authority to incorporate the smoke management plan into the State Implementation Plan (SIP) to meet federal air quality requirements.

___ Pursuant to Rule: Attachment ___

_X_ Pursuant to Federal Law/Rule:

Federal Clean Air Act Amendments of 1990. Attachment ___

___ Other: Attachment ___

_X_ Time Constraints:

The proposed restrictions in the Smoke Management Plan are complementary to other PM_{10} strategies adopted by the EQC to help assure attainment and maintenance of the PM_{10} air quality standards in Oregon's nonattainment areas, it is desirable that the revisions be completed in a timely manner and incorporated in the SIP.

DEVELOPMENTAL BACKGROUND:

These amendments were authorized for public hearing by the Director on April 10, 1992.

During May 18-22, 1992, four hearings were held in the state to accept testimony on amendments to the Oregon Slash Burning Smoke Management Plan.

The Department believes the following represents a summary of the more significant issues raised at these hearings. See the Hearing Officer's Report in Attachment G for the full list of issues and responses:

1. The 20 mile SPZ boundary should be larger to better protect the PM10 nonattainment area from slash smoke impact.

2. The SPZ boundary is arbitrary and will not significantly limit slash smoke impacts.

3. The period the SPZ will be in effect should be Nov. 1 to Mar. 1 in order to match the woodburning curtailment programs.

4. Expansion of the SPZ period to Nov 1 should not occur under any circumstances, due to the critical need to conduct slash burning just prior to winter.

5. No slash burning should be allowed on "yellow" woodstove curtailment days (in addition to "red" days).

6. Additional protection from slash burning impacts needs to be provided for Bend.

7. The SPZ restrictions for La Grande and Klamath Falls should be changed from voluntary to mandatory.

8. A definition of "significant contributor" is needed for slash burning, in order to know when the proposed contingency measures would go into effect.

9. The contingency measures calling for slash burning bans based on one impact of 5-10 micrograms or >10 micrograms is too restrictive.

10. Additional minor changes are needed to the SMP which involve 1) delegating authority for approving burns to BLM district managers, 2) defining the meaning of "monitoring" related to units that continue to burn for three days; and 3) changing the word "adjacent" to "adjoining" related to notification of residents of planned burning activity.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Issues 2, 4, 8, and 9 were raised in testimony from members of state, federal and private forest land managers who generally supported the proposed amendments (see also Attachment C, Fiscal and Economic Impact Statement). Issues 1, 2, 3, 5, 6, 7, and 8 were raised by representatives of various environmental organizations, who generally favored tighter slash burning restrictions. (Both sides raised issues 2 and 8.)

The Department's response to these issues is as follows (see also Attachment G, Hearing Officer's Report):

1. The 20 mile SPZ boundary should be larger to better protect the PM10 nonattainment area from slash smoke impact.

The Smoke Management Plan Review Advisory Committee agreed that in general a 20 mile boundary would be the optimum size for the SPZs, where any planned slash burning activity should be carefully evaluated so as to avoid impacting the PM_{10} nonattainment area. The boundary would be extended under the contingency plan provisions if significant impacts continue.

2. The SPZ boundary is arbitrary and will not significantly limit slash smoke impacts.

Each SPZ boundary was determined based on a case-by-case evaluation of geography, topography, forested areas, and meteorology around each PM_{10} nonattainment area, where the close proximity of slash burning could result in significant smoke impacts in that area.

3. The period the SPZ will be in effect should be Nov. 1 to Mar. 1 in order to match the woodburning curtailment programs.

The Advisory Committee did recommend the longer time period; however, the Department decided to propose a slightly shorter period after a review of historical data on PM_{10} levels, weather conditions, and slash burning activity showed that the majority of PM_{10} air quality violations are limited to December and January, and that the probability that slash smoke impacts would contribute to a PM_{10} violation during the Nov 1-15 period and the Feb.15 - Mar.1 period is very low. The Department believes the longer period would be more appropriate as a contingency measure, should the PM_{10} area fail to demonstrate attainment.

4. Expansion of the SPZ period to Nov 1 should not occur under any circumstances, due to the critical need to conduct slash burning just prior to winter.

The Department recognizes that there are periods of good slash burning weather conditions during the Nov. 1 to Nov. 15 period, however should the PM_{10} area fail to attain standards, expanding to Nov. 1 is considered necessary due to the need to take additional measures to ensure that no additional slash smoke contribution occurs in the nonattainment area during potential nonattainment conditions. There would still be opportunities to burn slash during this time, providing no smoke impact is likely to occur, and the additional contingency measures prohibiting slash burning do not go into effect.

5. No slash burning should be allowed on "yellow" woodstove curtailment days (in addition to "red" days).

The Department believes no slash burning on poor air quality days or "red" days is important to avoid the possibility of air quality violations; restricting slash burning on moderate air quality days or "yellow" days would represent a significant increase in restricted days for slash burning, which the Department does not believe is necessary at this time.

6. Additional protection from slash burning impacts needs to be provided for Bend.

The Department of Forestry is developing a voluntary smoke management plan involving forest land owners for the area around Bend, in addition to the current restricted area established around this community. Further application of a SMP to the area needs to be studied as part of an entire central and eastern Oregon issue regarding forest health and the need for increased slash burning.

7. The SPZ restrictions for La Grande and Klamath Falls should be changed from voluntary to mandatory.

Currently the Department of Forestry operates a voluntary smoke management program in portions of central and eastern Oregon, and for that reason the slash burning restrictions in La Grande and Klamath Falls are proposed as voluntary. Also, slash burning impacts in these areas are a very small percent of total PM_{10} levels. Should these areas fail to demonstrate attainment by the federal deadline and slash burning smoke is found to be a significant contributor to the nonattainment, mandatory restrictions would

automatically go into effect in that area.

8. A definition of "significant contributor" is needed for slash burning, in order to know when the proposed contingency measures would go into effect.

Current federal guidance for slash burning control measures does not define this level, and instead leaves it to states to make this determination. The Department intends to use EPA's significant impact level for point sources, which is 5 micrograms per cubic meter for a 24-hour period, as the basis determining a significant contribution, since this level has been used by the Department for evaluating significant source contributions in PM_{10} nonattainment areas, and for developing control strategies to bring the area into attainment with the NAAQS.

For the record, the Oregon Department of Forestry supports a slightly higher significant impact level of 8-10 micrograms per cubic meter (24-hour period) for the following reasons: 1) 5 micrograms would represent only a 3% contribution to the 24-hour standard of 150 micrograms; 2) impacts less than 5% are difficult to accurately measure; and 3) EPA's 5 microgram significant impact level applies to point sources, and area sources such as slash burning are not equivalent.

However, given that (1) there is little difference between 5 and 10 micrograms from an air quality standpoint, (2) the 5 microgram level has been used by both DEQ and EPA to prohibit new or expanding major industry, and (3) PM_{10} emissions from industrial boilers are chemically very similar to slash burning emissions, the Department believes that from an equity standpoint the 5 microgram level should be a uniform standard applied to all PM_{10} significant contributors.

9. The contingency measures calling for slash burning bans based on one impact of 5-10 micrograms or >10 micrograms is too restrictive.

The Department believes (and ODF concurs) that more restrictive measures are necessary if the PM_{10} area fails to attain the NAAQS. Since EPA rules would not allow construction or modification of a major industrial source if it resulted in smoke impacts greater than 5 micrograms per cubic meter, it is therefore equitable to apply a similar strategy to slash burning.

10. Additional minor changes are needed to the SMP which involve 1) delegating authority for approving burns to BLM

district managers, 2) defining the meaning of "monitoring" related to units that continue to burn for three days; and 3) changing the word "adjacent" to "adjoining" related to notification of residents of planned burning activity.

The Department of Forestry has made revisions to the SMP which address these issues, on which the Department concurs. In terms of issue 2), ODF has inserted language stating that monitoring shall require periods of intermittent observations by the landowner.

PROGRAM CONSIDERATIONS:

The proposed SPZ restrictions are not required by the Environmental Protection Agency (EPA). However, the Department feels that the SPZ restrictions and contingency measures for slash burning are necessary to provide a high level of assurance that slash burning will not interfere with attainment of the PM_{10} air quality standard in nonattainment areas.

The proposed revisions to the SMP will require new air monitoring work to quantify slash burning air quality impacts near each of the six PM_{10} nonattainment areas. The Department will be seeking funds to support the needed additional monitoring.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Rely on the existing Smoke Management Plan to protect PM_{10} nonattainment areas from slash burning smoke impacts.

2. Adopt the SPZ requirements, along with the minor revisions as outlined in #10 above, in order to better protect PM_{10} nonattainment areas during winter months when periods of poor air quality occur.

3. Adopt even more stringent requirements for slash burning around during the winter months.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the second alternative, specifically that the Commission adopt the amendments to the Department of Forestry's Smoke Management Plan, along with the minor changes outlined in issue #10. The Department believes that these additional measures are needed to help assure the success of the PM_{10} control strategies adopted by the Commission last fall,

and will further improve visibility in Class I areas. Given the recent efforts of state, federal, and private forest land managers in reducing summertime slash burning in order to prevent continued visibility impairment in federal Class I areas, the Department believes even tighter controls on slash burning than those proposed would be unnecessarily restrictive.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed revisions are consistent with Goals 2, 3, 4, and 5 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy. The proposed strategy and supporting rules are consistent with the Oregon Benchmarks goal of increasing the percentage of Oregonians living in area which meet ambient air quality standards.

ISSUES FOR COMMISSION TO RESOLVE:

Do the proposed amendments to the SMP go far enough in protecting PM_{10} nonattainment and Class I areas from forest slash burning smoke impacts ?

INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan containing the revised Smoke Management Plan to EPA for approval.

2. Monitor slash burning activities within the SPZs during the winter months to determine the effectiveness of the SPZ burning restrictions.

3. Track progress toward attainment of PM_{10} air quality standards in the nonattainment areas. If PM_{10} standards are not met in any of these areas by the December 31, 1994 deadline, immediately implement the SPZ contingency measures for that area.

Approved:

Section: Brian Finneran - for John Kowalczyk

Division: Elaine Greenwood

Director: Stephanie Hallock, Acting

Report Prepared By: Brian Finneran
Date Prepared: July 6, 1992

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10/91 -- P.N.

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

DRAFT DRAFT MARCH 31, 1992 VER 1.8

Wording that is underlined in brackets are proposed additions. Proposed deletions are noted by strike-outs.

PURPOSE: This directive sets forth the operational guidance for the Oregon Smoke Management Program. Contained herein are the objective, concept of operations, organizational guidance, and instructions for administration of the Oregon Smoke Management program.

SCOPE:

The Smoke Management Directive is:

1. Developed in cooperation with Federal and State agencies, landowners, and organizations which will be affected by the Smoke Management Program.

2. Jointly approved by the State Forester and (the Director of) DEQ.

3. Applicable to ~~all~~ prescribed burning on forest~~s~~ [land] in ~~western Oregon and selected portions of central~~ Oregon ~~as defined on Exhibit 2, OAR 629-43-043, Smoke Management Program~~ [within ODF forest protection district or national forest boundaries where the intent is to maintain the land in use for forest management purposes or as a commercial forest operation . Reporting requirements are described in Appendix 1.

   Smoke Management Plan provisions do not apply to any burning that occurs after the filing of any legal document that indicates the land use will change from forest use to some other use (agriculture, housing development, etc). Burning on private land, at any time, outside of a protection district is not part of the Smoke Management Plan. All such burning shall be conducted in accordance with requirements of state or local agency air quality regulations.

   Smoke Management Plan provisions do not apply to prescribed natural fires. Prescribed natural fires are naturally ignited fires (ie: ignited by lightning or other such natural phenomena)

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

that are allowed to burn when pre-determined conditions exist. The conditions may be defined in management plans for a given area.]

SITUATION:

1. Authority:

ORS 477.515(3)(a) states:

"For the purpose of maintaining air quality, the State Forester and the Department of Environmental Quality shall approve a plan for the purpose of managing smoke in areas they shall designate."

ORS 477.515(3)(b) states:

"The State Forester shall promulgate rules to carry out provisions of the Smoke Management Plan . . ."

ORS 468.275 through 468.355 provides authority to DEQ to establish air quality standards including emission standards for the entire state or an area of the state.

ORS 468.450 through 468.495 gives DEQ the authority to regulate field burning.

2. Under this authority:

a. The State Forester:

(1) Coordinates the administration and operation of the plan.

(2) Issues additional restrictions on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.

(3) Issues daily burning instructions when needed.

(4) Annually, ~~analyzes and~~ evaluates state-wide burning operations under the plan and provides copies of the summary to interested parties.

b. The Department of Environmental Quality:

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

SITUATION: (Cont.)

(1) Maintains a real-time air quality monitoring network that is used by ODF.

(2) Provides information on field burning activity.

(3) Establishes criteria for air pollution emergencies and notifies ODF of episode stages such as alerts, warnings, and emergencies.

(4) Regulates the emission of air pollutants to ensure compliance with adopted standards, limits, and control strategy plans. [The ODF Smoke Management Plan is the jointly developed plan that governs forest burning.]

(5) Notifies the Department of Forestry when the air in the entire State or portions thereof is or would likely become adversely affected by smoke.

~~3. Prescribed Burning in Oregon: An average of 104,000 acres is burned annually in western Oregon on 3,300 units. Tonnage burned has varied between a low of approximately 1.6 million in 1984 and a high of approximately 4.5 million in 1976. Burning activity varies according to seasonal weather and fuel conditions, and reforestation and land management needs.~~

~~4.~~[3.] Cooperating Agencies: The policies and resources of many public and private agencies and organizations have substantial influence on the administration of the Smoke Management Program. The entities and their responsibilities are:

a. State Agencies

(1) Department of Environmental Quality: policy, information and resources.

(2) Washington Department of Natural Resources information.

b. Federal Agencies

(1) USDA, Forest Service: resources.

(2) Bureau of Land Management: resources.

OPERATIONAL GUIDANCE FOR THE OREGON
SMOKE MANAGEMENT PROGRAM

SITUATION: (Cont.)

(3) Bureau of Indian Affairs: information.

(4) U.S. National Park Service: information.

(5) U.S. Fish & Wildlife Service: information.

(6) National Weather Service: information and resources.

c. Other

(1) Regional air pollution authority: information.

(2) Oregon Forest Industries Council: information.

~~5.~~[4.] Program Resources: The State Forester maintains a staff ~~of four personnel~~ in Salem and a field force of ~~65~~ foresters throughout ~~western Oregon and central~~ Oregon who participate in the smoke management program to accomplish the inspection, enforcement, monitoring, and reporting tasks. In addition, the USDA Forest Service and BLM maintain field forces ~~of approximately 80 supervisory personnel and professional foresters~~ trained in techniques of prescribed burning and the elements of the smoke management program.

DEFINITIONS: See OAR 629-43-043 (2a-p).

POLICY:

The policy of the State Forester is to:

1. Regulate prescribed burning operations on forest land recognizing the need to maintain forest productivity and the need to maintain air quality in populated areas and areas sensitive to smoke.

2. Achieve strict compliance with the smoke management plan, directive and instructions.

3. ~~Encourage cost-effective utilization of forest residues as a means to reduce burning.~~[Minimize emissions from prescribed burning, where appropriate, by encouraging: cost effective utilization of forest residue; alternatives to burning; and alternative burning practices.]

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

SITUATION: (Cont.)

OBJECTIVE: To prevent smoke, resulting from burning on forest lands, from being carried to or accumulating in designated areas and other areas sensitive to smoke; to provide maximum opportunity for essential forest land burning ~~while minimizing emissions;~~ to coordinate with other state smoke management programs; to conform with state and federal air quality and visibility requirements; to protect public health; and to encourage the reduction of emissions.

PROGRAM ELEMENTS:

1. The Smoke Management Plan: The Smoke Management Plan (OAR 629-43-043) provides a specific framework for the administration of the smoke management program as administered by the State Forester.

   The plan instructs the State Forester and each field administrator to maintain a satisfactory atmospheric environment in designated areas and other areas sensitive to smoke consistent with the plan objectives and smoke drift restrictions.

   In administering the Smoke Management Program, the Forester and the Field Administrators ~~are required to continually~~ [will] monitor weather factors and air quality conditions in designated areas and other areas sensitive to smoke.

   The plan establishes a set of limitations applicable to specified burning and mixing conditions. These limitations relate to tonnage of fuel per 150,000 acres which, ideally, may be burned under various sets of mixing conditions. Experience has shown that these standards are adequate to protect designated areas only under ideal conditions. Frequently, in order to meet air quality objectives, more specific restrictions must be applied through issuance of smoke management instructions by the State Forester.

2. Operator's Written Plan: ~~OAR 629-43-045 requires that prior to prescribed burning,~~ A forest landowner or operator shall, ~~in cooperation with the State Forester,~~ develop a written [burn] plan [when the ODF district determines that the plan is needed for fire control or Air quality reasons.] ~~which shall include consideration of air quality.~~

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

PROGRAM ELEMENTS: (Cont.)

3. Smoke Management Forecasts: [During periods of extended or extensive burning] the Salem [Forestry Weather Center] ~~and Medford Forestry Fire Weather office~~ provide[s] smoke management forecasts daily. The forecast is for the following day (the forecast period) with an update as necessary on the morning of the forecast period ~~(Salem only)~~.

   ~~An extended forecast may be provided depending on the weather influences involved at any given time.~~[Extended forecasts also are provided. The Medford Fire Weather office may also provide smoke management forecasts.]

   The forecasts include reference to transport winds and mixing for the restricted area and other areas sensitive to smoke. Burning will be conducted in accordance with the current forecast information, including updated forecasts, when issued.

4. Smoke Management Instructions: Smoke management instructions will be issued only by the [state meteorologists at the] Salem Forestry ~~Fire~~ Weather Center and only during periods when weather is favorable for significant amounts of burning (usually late ~~May~~[March] through ~~October~~ [November]). The instructions provide constraints on burning ~~in areas~~ where the restrictions, set forth in the Smoke Management Plan, may be inadequate to protect designated areas or other areas sensitive to smoke.

   [Any significant burning outside of the period when routine instructions are issued should be done after consultation with the smoke management meteorologist. Any burning in a special protection zone, during its protection period, must have the approval of the meteorologist.]

   The instructions are based upon an analysis of the atmospheric conditions affecting smoke transport, dispersion, and air quality ~~and visibility conditions~~ in designated areas and other areas sensitive to smoke.

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

PROGRAM ELEMENTS: (Cont.)

~~5. Priority Burning System: The Forest Land Burning Priority Rating System was initiated to reduce the amount of forest land burning during the time when the maximum acreage of grass seed fields are being burned in the Willamette Valley. There are approximately 60 days during mid-summer when field burning has been given a high priority for use of the air shed in the valley for smoke dispersal. The Priority Burning System was developed by the Department of Forestry in coordination with the Department of Environmental Quality and with the cooperation of public and private forest land managers.~~

~~The priority burning period is established by the Department of Forestry upon the recommendation of the Department of Environmental Quality. The exact period varies from year to year and may extend for more or less than 60 days.~~

~~The Priority Burning System limits forest land burning during the 60-day period to units which must be burned during that time to meet the burning objectives. Only units with a high priority rating will be burned when the Priority Burning System is in effect. The Forester will provide notice to all Field Administrators when the Priority Burning System is initiated and rescinded.~~

~~The procedures for rating and prioritizing burn units are included in Appendix 3 of this directive. These procedures will apply to all units which may be burned when priority burning restrictions are in effect.~~

6[5]. Enforcement: All forest land prescribed burning will be done in accordance with the daily Smoke Management Instructions and this directive:

a. On [non-federal land]~~private land~~: Violations of the Smoke Management Plan, Directive or the daily instructions issued by the State Forester are subject to enforcement action by the State Forester:

(1) Burning without a permit is a violation of ORS 477.515.

(2) Burning not in compliance with the Smoke Management Plan and Directive is a violation of OAR 629-24-301(7).

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

PROGRAM ELEMENTS: (Cont.)

b. On Federal forest land: Violations of the Smoke Management Plan Directive or the daily instructions issued by the State Forester are subject to federal enforcement action under Section 118 of the Clean Air Act, as amended in ~~1977~~[1990].

> Section 118 states that "Each . . . agency . . . of the Federal Government . . . engaged in any activity resulting . . . in the discharge of air pollutants . . . comply with all Federal, State, interstate, and local requirements, . . . respecting the control and abatement of air pollution in the same manner, and to the same extent as any nongovernmental entity."

~~7~~[6]. Air Stagnation Advisories: Air stagnation advisories are issued by the National Weather Service Forecast Office in Portland when atmospheric conditions are such that the potential exists for air pollutants to accumulate for an extended period. During such times smoke and other pollutant sources within designated areas will create substantial air quality deterioration without the addition of smoke from outside sources. This condition is recognized in the administration of the smoke management plan.

Smoke management instructions issued during an air stagnation advisory will limit forest land burning to units which will not contribute smoke to a designated area covered by an air stagnation advisory or an air pollution alert issued by DEQ. Burning during such periods will be closely controlled.

~~8~~[7]. Monitoring: The State Forester will monitor prescribed burning operations [when necessary] ~~periodically~~ by aircraft and other means:

1. to insure compliance with the smoke management program;

2. to determine the effectiveness of smoke management procedures.

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

PROGRAM ELEMENTS: (Cont.)

Real-time air quality monitoring data is available to the State Forester through computer link with DEQ. This information will be used in the preparation and validation of daily smoke management instructions as appropriate.

To evaluate compliance with the Smoke Management Program, the State Forester shall conduct a review of approximately 1% of the units burned each year [in the restricted area. Approximately one-half of the audits will be conducted on the day of the burn and approximately one-half will be pre-burn audits.] All units to be audited will be randomly selected. Each [burn day] audit will include a site visit during burning, visual tracking and documentation of long range plume behavior and a determination of compliance with (a) the conditions of the burning permit; (b) the provisions of the Smoke Management Administrative Rules and Directives; and (c) compliance with the [daily] smoke management ~~program~~ [burning] instructions. [Each pre-burn audit will include a site visit before burning. An independent fuel inventory will be conducted to determine compliance with the smoke management administrative rules and directives.]

The Department of Environmental Quality may jointly participate in ~~some~~ audits. Following completion of the audits, a written report of all findings shall be prepared. Significant findings shall be ~~included in the Smoke Management Program Annual Report.~~ [submitted to DEQ].

~~9~~[8]. Reporting and Analysis: Information is needed from the Field Administrators to provide for analysis of the program[.] ~~procedures.~~ Reporting will be accomplished in accordance with Appendix 1, Detailed Instructions for the Oregon Smoke Management Reporting System.

~~10~~[9]. Annual Report: The State Forester will prepare an annual report of statewide forest land prescribed burning~~,~~ ~~wildfire~~ and smoke management activities. The report will summarize burning activities of the previous year and intrusion events[.] ~~and make pertinent observations toward improved operational efficiency in the program.~~

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

STANDARDS:

1. Quantification of Forest Residues: The consistent estimation of the tons of fuel consumed in each prescribed burn is important to the development and equitable operation of the smoke management program. ~~To determine~~ The fuel consumed by a prescribed burn [is calculated by]:

   a. Determine[ing] total pre-burn fuel tonnage load.

   [b. Determining average pre-burn duff depth.]

   ~~b.~~[c.] Calculate[ing] woody fuel consumption using ~~1000-hour~~ [appropriate] timelag fuel moisture[s] and ~~algorithm~~ [models] developed to predict ~~large~~[woody] fuel consumption.

   ~~c.~~[d.] Calculate[ing] and add[ing] duff consumption.

   Estimation by field administrators of the total pre-burn fuel tonnage will be through the application of the "planer transect method" of inventorying forest residue. The planer transect method may be applied by the actual measurement of fuels, or by use of the publications "Photo Series for Quantifying Forest Residue", or through supplemental photographs developed by following appropriate procedures.

   Instructions for the actual measurement of fuels are contained in the "Handbook for Inventorying Downed and Woody Material", U.S.D.A. Forest Service General Technical Report INT-16, 24p, Intermountain Forest and Range Experiment Station, Ogden, Utah.

   Instructions for using the "Photo Series" are included in Appendix ~~4~~[3]. ~~The~~ Publication[s have] ~~has~~ been developed for western ~~Oregon~~ and eastern Oregon fuel types.

   Instructions for fuels inventory and consumption procedures ~~and utilization of 1000-hour fuels data~~ are contained in Appendix ~~4.~~[3.]

2. Intrusions Defined: A smoke intrusion occurs when smoke from prescribed burning enters a designated area or other smoke sensitive area at ground level. When measurements or observations are available, intrusions are characterized [in the following manner based on nephelometer values above the clean air background:

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

STANDARDS: Cont.

Light: less than 1.8×10^{-4} B-scat
Moderate: 1.8×10^{-4} B-scat to 4.9×10^{-4} B-scat
Heavy: greater than 4.9×10^{-4} B-scat]

~~as light, moderate, or heavy based on hourly nephelometer measurement of less than 1.8×10^{-4} B-scat, between 1.8×10^{-4} and 4.9×10^{-4} B-scat, and 5.0×10^{-4} B-scat and greater, respectively, above the clean air background.~~ The clean air background is the average nephelometer reading for the 3 hours prior to the intrusion.

When no nephelometer data are available, the following visibility table will be used when visibility data are available. Standard National Weather Service visibility observation criteria will be used for reporting purposes. (See Appendix 2.)

INTRUSION CLASSIFICATION BASED ON VISIBILITY
(For instructions on use see Appendix 2)

Background Visibility (Miles)*	INTRUSION INTENSITY** LIGHT	MODERATE	HEAVY
	REDUCED VISIBILITY - RV (MILES)		
>50	RV≥ 11.4	11.4<RV ≥4.6	RV<4.6
25-50	RV≥ 10.5	10.5<RV ≥4.4	RV<4.4
20-24	RV≥ 8.1	8.1<RV ≥4.1	RV<4.1
15-19	RV≥ 7.5	7.5<RV ≥3.8	RV<3.8
10-14	RV≥ 6.2	6.2<RV ≥3.5	RV<3.5
5-9	RV≥ 3.7	3.7<RV ≥2.5	RV<2.5
3-4	RV≥ 2.5	2.5<RV ≥1.8	RV<1.8
1-2	RV≥ 1	1<RV ≥0.5	RV<0.5
0	RV≥ -	-	0

* Background based on 3-hour visibility prior to reduction due to activity smoke. Visibility changes during naturally occurring periods of change, may have to be factored into the classification on a case-by-case basis (i.e., from daylight to dark, during a rain shower, etc.).

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

STANDARDS: (Cont.)

** Reduced visibility must be determined to be predominantly from prescribed burning in order to determine intensity class.

Intrusions will be reported to the Smoke Management Program Administrator who will notify DEQ on a timely basis. See Appendix 2, Smoke Intrusion Report Form 1-4-1-301.

3. Daily and Annual Maximum Tonnage: The Department of Environmental quality, in cooperation with the State Forester, federal land management agencies, and private forest land owners shall develop maximum annual and daily emission limits in accordance with federal PSD (Prevention of Significant Deterioration) regulations.

SPECIAL GUIDANCE:

1. Instructions: Smoke Management Instructions will be issued from Salem [by]~~at approximately~~ 3:15 PM daily for the entire restricted area. By ~~7~~[8]:00 AM each day a message will be placed on an automatic answering phone only if the previous 3:15 PM instructions will be updated. If the 3:15 PM instructions are still valid at ~~7~~[8]:00 AM they will remain on the recording. If there is to be an update, burning shall not be initiated in the affected area until updated instructions are issued. Any amended instructions (either written or verbal) that are issued during the working day shall be strictly complied with.

The instructions shall be considered as directives from the State Forester. The authority for approving prescribed burning is delegated to the District Forester for burning ~~regulated directly by the State Forester (private and BLM forest land)~~[conducted within ODF protection district boundaries.], ~~and~~ [This authority is also delegated] to the Forest Supervisor for the U.S.D.A., Forest Service, and the Park Superintendent for the National Park Service for burning [in their administrative areas that shall be] coordinated with the State Forester. These delegates and their designated personnel are "field administrators". Any planned variances from the daily burning instructions will be discussed with the Smoke Management Duty Forecaster. If the Smoke Management Duty Forecaster and ~~District Forester~~ [field administrator] cannot agree on deviation from the instructions, [the issue will be resolved through supervisory channels, with final resolution at] the Deputy State Forester [level.]~~will discuss the situation and~~

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

SPECIAL GUIDANCE: (Cont.)

~~provide final resolution. If the Forest Supervisor or Park Superintendent and the Smoke Management Duty Forecaster cannot agree on deviation from the instructions, the Deputy State Forester will discuss the situation and make final resolution.~~

Variances or revisions to the instructions shall be recorded by the ~~Protection Division.~~[Smoke management forecaster.]

~~2. Requests for Information: The State Forester's Office will provide more specific information to Field Administrators when requested by telephone. The following telephone numbers will be used in regards to the Smoke Management Instructions:~~

~~378-2800: "Automatic Answering Phone" recording with Smoke Management Instructions. Instructions will be recorded by approximately 7:00 AM (as needed) and 3:15 PM.~~

~~378-2153: Smoke Management Duty Forecaster. Call this number for forecasts, instructions, and other daily operations. Do not call between 2:30 PM and 3:15 PM, or prior to 8:30 AM. These times are used to prepare instructions.~~

~~378-2509: Salem Fire Weather Forecast Service. Use this for fire weather needs; not smoke management.~~

~~378-2518: Salem Communications. For assistance in getting unit numbers, planning and resulting units or other daily data needs. Do not use for daily decision-making assistance.~~

~~3~~[2]. Reduction of Emissions: The Department of Forestry will encourage private forest landowners to burn only those units that must be burned to achieve the landowners' objectives. Forest Practices Foresters, through the administration of the Forest Practices Act, will encourage utilization of residue, fuel reduction measures, [low emmission-producing burning methods] and alternate treatment practices that are consistent with the purposes of the Forest Practices Act. The Department of Forestry supports efforts to reduce prescribed burning emissions[.] ~~and will strive to achieve emissions reduction goals established within the Oregon Visibility Protection Plan.~~

Burning during time periods when 1000-hours and larger fuels (3 inches in diameter or larger fuels) have relatively high

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

SPECIAL GUIDANCE: (Cont.)

fuel moistures~~, such as during spring,~~ will be promoted where such burning is within the prescription necessary to achieve the objectives of the landowner.

Mass ignition methods will be encouraged to help reduce emissions where such techniques are economical and practical. [As consumption models are developed, their information will be incorporated into the consumption reporting procedures described in Appendix 4[3]. It would be the intent to increase burning when mass fire and excellent dispersion conditions exist].

To minimize impacts from residual smoke, mop-up will be initiated ~~on all units~~ consistent with atmospheric and wind conditions. Within this context, during periods of observed or forecast low level transport toward the designated areas[and when smoke impacts are predicted to occur], mop-up shall begin immediately.

~~4~~[3]. Monitoring of smoke behavior will be intensified ~~on marginal days~~. [when needed by using] ~~This will be done by use of~~ lookouts, aerial observations, and on-site observations of smoke behavior.

~~5~~[4]. Any wildfire that has the potential for smoke input into a designated area or other area sensitive to smoke will be reported immediately to the State Forester's Fire

Operations ~~Section~~ [Center which] ~~who~~ will [inform smoke management personal, who will] advise DEQ on a timely basis.

~~6. Test Burn Project: In order to determine the feasibility of alternative schedules in burning to minimize smoke impacts while maintaining burning accomplishments, a test project will be established during 1986-88. Special strategies will be employed in burning, and assessment will be made for impacts on air quality and burning accomplishment.~~

~~7~~[5]. Tonnage limits will be reviewed by the DEQ and the Department of Forestry for possible update and revision, as necessary, as uniform fuel loading estimation and consumption procedures are developed and tested.

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

SPECIAL GUIDANCE: (Cont.)

~~8. A statewide forest fuels inventory procedure will be developed by the Department of Forestry in cooperation with the Department of Environmental Quality. The new procedure will be implemented in 1987.~~

[6. Provisions contained in DEQ nonattainment area control plans pertaining to Special Protection Zone requirements will be administered under the smoke management plan. Specific control strategy restrictions for PM10 nonattainment areas adopted by DEQ and ODF are found in Appendix ~~5~~[4].

RESPONSIBILITIES:

1. State Forester: The State Forester is responsible for the coordination of the Smoke Management Plan and the Operating Details between the National Weather Service, U.S.D.A. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, forest landowners, Department of Environmental Quality, National Park Service, Bureau of Indian Affairs, Washington State Department of Natural Resources, and regional air quality authorities. In addition, the State Forester, through the Forest Protection Division, has the responsibility to issue additional restrictions [when necessary.] ~~on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.~~

2. Forest Protection Division: The Forest Protection Division is directly responsible for:

   a. Providing weather forecasting services for smoke management purposes.

   b. Issuing smoke management instructions to field administrators.

   c. Coordinating with [users] ~~Department of Forestry's Area and District offices, cooperating agencies, and forest land owners~~ in identifying training needs and in developing training programs.

   d. Monitoring the smoke management program.

   e. Providing on-the-ground assistance to field administrators as requested.

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

RESPONSIBILITIES: (Cont.)

f. Maintaining liaison with field administrators[.] ~~through the Smoke Management Meteorologist and normal staff/line relationships.~~

g. Maintaining the smoke management record system.

[h. Providing a report and analysis of smoke intrusions into designated areas to review committees at the time of the five-year periodic review. The report would recommend plan changes to prevent future intrusions.]

3. Field Administrators: Oregon Department of Forestry field administrators will administer prescribed burning according to the Smoke Management Plan, Operational Guidance for the Oregon Smoke Management Program (Directive 1-4-1-601), and the daily Smoke Management Instructions.

Federal land management agencies (U.S.D.A., Forest Service (USFS), Bureau of Land Management (BLM), National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), and the Bureau of Indian Affairs (BIA) are required by law to follow the directions of the Forester for the protection of air quality in conducting prescribed burning operations[.] ~~in the restricted area.~~ They will follow the smoke management weather forecasts~~,~~[and] smoke management instructions, ~~and priority burning restrictions~~ as provided by the Oregon Smoke Management Plan and the Operational Guidance for the Oregon Smoke Management Program (Directive 1-4-1-601). [Agency offices in the restricted area] ~~They~~ will make daily reports relating to burning operations.

4. Department of Environmental Quality (DEQ): The State Forester and the DEQ are required by ORS 477.515 to approve a plan for the purpose of the managing smoke in areas they shall designate. The Oregon Smoke Management Plan is the product of this statutory requirement.

5. Private [and Non-Federal Government] Forest Landowners: It is the responsibility of ~~private~~ forest landowners under Oregon Forest Laws to do forest land prescribed burning according to the Oregon Smoke Management Plan. They are responsible to burn according to directions from State Forestry Field Administrators and to do mop-up of prescribed burns necessary to maintain air quality and visibility in designated areas and areas sensitive to smoke. [They shall also report burning

OPERATIONAL GUIDANCE FOR THE OREGON SMOKE MANAGEMENT PROGRAM

RESPONSIBILITIES: (Cont.)

information, such as weather information, ignition and fuels data, as necessary.

Federal and non-federal landowners are encouraged to notify adjacent residents of planned burning at least one week in advance and also the day of the burning, if possible.]

CONTROL:

Review: The Smoke Management Plan and Directive shall be reviewed at least every ~~three~~[five] years. The review will be conducted jointly by the State Forester and the Director of Environmental Quality and will include representatives of affected agencies and parties.

AGREEMENT:

In witness whereof, the parties have agreed to the guidelines set forth in this Directive.

State of Oregon Department of Forestry	State of Oregon Department of Environmental Quality
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

MZ:sm
141601.Dft/D.5

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Objective: The Department of Forestry~~'s Fire Operations center~~ operates a computer program to record and process smoke management data. Data is received and transmitted through the State Forestry and U.S. Forest Service communications systems.

The objectives of the reporting system are to provide a current record of:

1. Locations and amounts of planned burning for the current day.

2. Locations and amounts of burning accomplished the previous day.

3. Annual summaries of data for air quality purposes.

Area Included: Reporting is required through the state. The procedure and frequency of reporting needs for different areas of the state are identified below. Data are grouped by Administrative Units, i.e., National Forest, Crater Lake National Park and each State Forest Protection District.

Types of Burning to be Included: All burning related to forest management activities should be included in the reporting system. Some examples are slash and brush disposal after logging, road building, scarification, or burning of brush fields for reforestation. Other examples which should be included are underburning, or brush field burning for stand improvement or wildlife habitat.

Types of Burning That Should Not be Included: Burning for debris disposal or burning related to agricultural activities should not be included in the reporting system. Some examples are household or yard maintenance debris such as paper, leaves, lumber, etc., and grass or grain stubble. Small piled slash areas such as for a homesite should not be included. ~~if the amount to be burned is less than 5 tons.~~ [Reporting of burning on forest land should not occur when the intent is to change the use of the land from forest use to some other use.] ~~While these examples~~[Such burning] would not be reported in the Smoke Management Plan Data System. ~~any burning subject to permit under ORS 477.515 must conform to the Smoke Management Plan. Also,~~ In some areas ~~"backyard" and stubble burning~~ [such burning] must be done in compliance with ~~the~~ Department of Environmental Quality (DEQ)[or local agency] rules, rather than the Oregon Smoke Management Plan.

Range improvement burning data in central and eastern Oregon should not be included in the reporting system.

Procedures: For units outside of the restricted area and right-of-way units, see the "Frequency of Reporting" paragraphs. In the restricted area, three basic steps are involved in the reporting system:

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

1. A "Unit Description" is ~~submitted to Salem~~[entered into the computer by the appropriate field administrator] for each burn unit. ~~as provided~~[Information may be collected] on Reporting System Coding Sheet (Part I, Form 1-4-1-501) [and then entered into the computer by the field administrator. The ODF Forest Practices Forest Activities Computer Tracking System (FACTS) number is the number that will be used for tracking burn units for all landowners categories. FACTS numbers are obtained thru the local ODF office.] ~~This results in a unit number assigned to the specific burn unit, anywhere from several months or weeks to a day before the burning is to be done. Field offices with access to the ODF computer network should enter the data directly into the computer.~~

2. Unit numbers of planned burns in the restricted area are submitted by field offices on the day [before] burning is to be done. This results in ~~Planned Burns"~~[a list of planned burns] (Part II of Form 1-4-1-501). Planned burns are posted daily on the communications network for all users and the list is sent to DEQ.

3. An accomplishment report is submitted by field offices in the restricted area the day after burning, again using unit number as a reference (See part III of Form 1-4-1-501). The accomplishment report is posted daily along with planned burns.

Frequency of Reporting: In the restricted area (see OAR 629-43-043), all planned and accomplished burning should be entered into the computer on a daily basis. The planned burns are encouraged to be entered ~~by 10:15 AM on the morning of the burn~~[on the day before the burn is to occur]; accomplishments are reported by ~~10:15 AM~~[noon] on the next working day after the unit is burned. Special circumstances due to an office closure or a late planned or accomplished burn should be handled through the ~~Fire Operations Center~~[Smoke Management Office] in Salem. This is not expected to be a routine practice.

Right-of-way burning should be accomplished in accordance with the instructions on Form 1-4-1-502. Basically, right-of-way units should get a unit number as per step 1 in the procedure listed above. Right-of-way units do not have to be planned or accomplished on a daily basis. Accomplishments ~~should be submitted promptly to Salem Fire Operations~~[shall be entered into the computer by the field administrator] by the 5th of each month for the prior month's activity.

Outside of the restricted area unit numbers should be obtained as per step one in the procedure listed above. Otherwise, units do not have to be planned on a daily basis nor does an accomplishment report have to be ~~submitted to Salem~~ [entered into the computer] on a daily basis. However Part 3 (Accomplishment Report) [data] of Form 1-4-1-501 must be completed for every burn with the date of the burn identified for each unit. If a unit is burned on several different dates, there should be a complete entry for each date on which the unit was

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

burned. [This information shall also be entered into the computer by the 5th of each month's activity. Daily reports may be entered into the computer if the field administrator so desires.]

~~The accomplishments should be submitted promptly to Salem Fire Operations by the 5th of each month for the prior month's activity.~~ Right-of-way burning ~~should~~[shall] be submitted as per the procedure identified above for units within the restricted area.

DETAILED INSTRUCTIONS FOR REPORTING SYSTEM CODING SHEET (FORM 1-4-1-501):

Instructions are included as pages ~~7-11~~[7-18] of Appendix 1 [and in Appendix 3]

Part 1 - Unit Description and Number Assignment (Page 1 and 2 of Form 1-4-1-501)[and pages 7-11 of Appendix 1]:

A number needs to be obtained prior to burning a unit. ~~The number will be assigned by the computer after the data is entered into the computer.~~[The number that is used is the FACTS number that would be assigned and obtained through the Forest Practices activity at the nearest ODF district or unit office. Forest Service offices need to coordinate with the appropriate ODF office to obtain FACTS numbers.] The raw data is the information needed from a field office to begin a record for a specific area to be burned. [Data should be entered directly into the computer at the field office. Forest Service offices will transfer their data electronically to Salem where the data file will be transferred into the mainframe computer.] ~~The data may be entered on the form and mailed to Salem or entered directly on a CRT that has access to the computer program. Where teletype variety communications exist, data may be transmitted via those devices, separating each field by a comma per the instructions on the coding sheet. Teletype transmitted data will then be entered into the computer by Salem Fire Operations personnel. Forms that are mailed should be addressed to:~~

~~Department of Forestry
Attn: Fire Operations Center
2600 State Street
Salem, OR 97310~~

~~Number Assignment:~~

~~Field offices that enter data directly into the computer via CRT will have the unit number displayed on the CRT after the data has been entered.~~

~~Field offices that submit data to Salem for entry into the computer will receive a printout of the data with the assigned unit number.~~

~~All offices should review the data as soon as possible. If any errors are found, correct Salem Fire Operations and provide the correct data. Salem personnel will then correct the data.~~

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Part 2 - Planned Burns (Page 3 of Form 1-4-1-501)

On the day [before] a unit is planned for burning, the information that needs to be reported is [shown on pages 10-11 of Appendix 1.] ~~the unit number, planned ignition time, acres planned for burning and the tons planned for burning. The acres and tons can be more or less than those numbers entered in Part I; they are to be your best estimate of activity on the unit for the day.~~

~~When reporting by teletype, be sure to separate the data fields by a comma. When reporting by CRT, fill in the blanks on the screen. All data should be reported by 10:15 AM.~~

[It is not required to] ~~Do not~~ plan right-of-way burns on a daily basis (See Form 1-4-1-502).

Field offices outside of the restricted area ~~should~~[need] not plan units on a daily basis. See "Frequency of Reporting" section, above.

When all planned burns have been received, a daily planned summary listing will be generated for [general] distribution ~~to field offices and DEQ.~~[and use by the smoke management forecasters in evaluating burning requests.]

Part 3 - Accomplished Burns (Page 3 and 4 of Form 1-4-1-501[and pages 11-14 of Appendix 1])

[By noon of the] ~~On the~~ day after a unit is burned, enter the data shown in Part III of Form 1-4-1-501 [into the computer].

~~When reporting by teletype, be sure to separate the data field by a comma. Also when no burning occurred on a planned unit, only the unit number and two zeroes are required (all separated by commas).~~

~~When reporting by CRT, fill in the blanks on the screen. Enter only the unit number and a zero in the tons entry field and a zero in the acres data field.~~

~~The accomplished acres and tons may be more or less than the number entered in either Part I or II depending upon the fuel and weather conditions on the site. Report the actual acreage that was burned. Include data from any slopover when the fire gets out of the unit.~~

~~All data should be reported by 10:15 AM.~~

~~Do not~~[It is not necessary to] accomplish right-of-way burns on a daily basis using the above procedure (See and use Form 1-4-1-502). [Monthly reporting is acceptable.]

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Field offices outside of the restricted area ~~should~~[need] not result unit data on a daily basis ~~via teletype or CRT.~~[, but they may if they so desire.] See "Frequency of Reporting" section, above.

All planned burns must be accomplished the following day or on the next business day if the ~~Fire Operations Center~~[Salem smoke management office] is not operational on a weekend or holiday. ~~The data fields must be completed if there was burning or "zeroed" if there was no burning.~~

~~When reporting by teletype, units burned during weekends or holidays when the Fire Operations Center is closed should be reported in groups by the date burning was done on the next workday when the Center is open.~~

OREGON SMOKE MANAGEMENT
REPORTING SYSTEM CODING SHEET
PART ONE, PAGE 1

AGENCY: ______________________ FOREST OR DISTRICT: ______________________

Forest/ District Use	NOTE: The X's below indicate the maximum number of digits that can be sent in that group.											
Date entered into Comp. or other information (no for comp. entry	Unit Number (FACTS #) 1	District Forest Ident. # 2	County No. 1 - 36 3	Owner Name (optional) 4	Owner ship 5	FPF No. (Opt.) 6	Sale Name (optional) 7	Sale Unit No. (optional) 8	Distance from DA to Mile 9	Town ship 10	Range 11	Sec. 12
	xxxxxxxxxxxx	xxx	xx	xxxxxxxxxxxxxxxxxxxx	x	xxx	xxxxxxxxxxxxxxxxxxxx	xxx	xx	xxxx	xxxx	xx

Form 1-4-1-501, Rev. 3/92, all previous editions of this form are obsolete and should be destroyed. (old form number 1-1-3-400.)

**OREGON SMOKE MANAGEMENT
REPORTING SYSTEM CODING SHEET
PART ONE, PAGE 2**

Elev. 13 xxxxx	SPZ 14 x	% Slope 15 xxx	Reason for Burn 16 x	Type of Burn 17 x	Burn Priority (Option) 18 x	Method Fuel Load 19 xx	Species of Fuel 20 x	Harvest Diameter 21 x	Cutting Date 22 xxxx	Duff Depth 23 xxx	Acres in Unit 24 xxxx	Landing Piles Tons & R/W 25 xxxxx	Piled Tons 26 xxxxx	0-.25" Fuel per Acre 27 xx	.26-1" Fuel per Acre 28 xx	1.1-3.0" Fuel per Acre 29 xx	3.1-9" Fuel per Acre 30 xx	9.1-20" Fuel per Acre 31 xxx	20"+ Fuel per Acre 32 xxx

OREGON SMOKE MANAGEMENT
REPORTING SYSTEM CODING SHEET
PART 2 & PART 3 PAGE 1
PLANNED AND ACCOMPLISHMENT REPORT - CODES

AGENCY: ______________________ FOREST OR DISTRICT: ______________________

NOTE: The X's below indicate the maximum number of digits that can be sent in that group.

Forest/ Dist. Use	PART II PLANNED BURNS								PART III ACCOMPLISHMENT REPORT						
Date entered or other Information (not for Comp. entry)	Unit Number (FACTS #) 1 xxxxxxxxxxxx	District Forest Ident. # 2 xxx	Planned Date 3 xxxxxx	Est. Ign. Time 4 xxxx	Acres Planned 5 xxxx	Landing Pile Tons 6 xxxxx	Unit Pile Tons 7 xxxxx	Broadcast Tons per Acre 8 xxx	Unit Number (FACTS #) 1 xxxxxxxxxxxx	District Forest Ident. # 2 xxx	Actual Date of Burn 3 xxxxxx	Actual Ign. Time 4 xxxx	Actual Acres Burned 5 xxxx	Landing or R/W Tons Burned 6 xxxxx	Unit Pile Tons Burned 7 xxxxx

Form 1-4-1-501, Rev. 03/92, all previous editions of this form are obsolete and should be destroyed. (Old form number 1-1-3-400.)

OREGON SMOKE MANAGEMENT
REPORTING SYSTEM CODING SHEET
PART 3 PAGE 2
ACCOMPLISHMENT REPORT - CODES

FOR BROADCAST BURNS ONLY													
Broadcast Tons per Acre Burned 8 xxx	Ign. Dura. 9 xxx	Ign. Method 10 x	Was Rapid Ignition Achieved 11 x	Wx Station Used 12 xxxxxxxxxx	10-hr Fuel Moist 13 xx	1000-hr Fuel Moist 14 xx	1000-hr Fuel Moist Method 15 x	Number Days Since Sig. Rain 16 xxx	Temp at Time of Burn 17 xxx	Humidity at Time of Burn 18 xxx	Wind Direc. 19 xx	Wind Speed (mph) 20 xx	Snow off Month 21 xx	For Forest or District Use (not for computer entry)

INSTRUCTIONS FOR
DATA FORM 1-4-1-501 FOR SMOKE MANAGEMENT
GENERAL REQUIREMENTS

Unless otherwise specified, data shown in quotation marks (" ") should be entered without the quotation marks. All entries are mandatory unless indicated otherwise.

PART 1: BASIC UNIT INFORMATION

1. Unit Number: Enter the ten (10) digit FACTS number obtained through the Forest Practices program plus a two (2) digit unit extension that can come from either the FACTS system or can be internally generated. Enter data as one, twelve digit number with no spaces, dashes, or other characters.

2. District or Forest Identifier. A three-digit code as shown in the table on page 17.

3. County Number

01	Baker	10	Douglas	19	Lake	28	Sherman
02	Benton	11	Gilliam	20	Lane	29	Tillamook
03	Clackamas	12	Grant	21	Lincoln	30	Umatilla
04	Clatsop	13	Harney	22	Linn	31	Union
05	Columbia	14	Hood River	23	Malheur	32	Wallowa
06	Coos	15	Jackson	24	Marion	33	Wasco
07	Crook	16	Jefferson	25	Morrow	34	Washington
08	Curry	17	Josephine	26	Multnomah	35	Wheeler
09	Deschutes	18	Klamath	27	Polk	36	Yamhill

4. Owner name (Optional entry): Up to 20 characters

5. Ownership type:

   USFS - blank Private - P Federal (except USFS) - F
   State, County, Municipal - S

6. FPF number (Optional entry): Up to 3 characters

7. Sale name (Optional entry): Up to 20 characters

8. Sale unit number (Optional entry): Up to 3 characters

9. Distance from nearest designated area boundary: Rounded to nearest mile. If within DA, use 0. If more than 60 miles, enter "60".

10-12. Enter legal location by township, range and section, but do not include the letters "T", "R", and "S". Partial townships may be entered. "1/4, 1/2, and 3/4" partials should be entered as "2, 5, or 7", respectively after the full township or range. Note that a three digit entry needs to be made for township and range, with an implied decimal between the second and third digit.

10. Township
11. Range
12. Section

Examples:

Legal	8	9	Field Number 10
		Entry	
T10S-R10W-S33	100S	100W	33
T10 1/2S-R11E-S25	105S	110E	25
T9 3/4S-R7 1/2E-S6	097S	075E	6

13. Elevation of burn: Elevation of burn above sea level in feet, using average elevation to the nearest 100 feet.

14. Which Special Protection Zone is the unit in?

Medford - M Oakridge - R Klamath Falls - K None - N

15. Slope (%): Enter actual slope. Example: 30% slope is entered as "30", NOT "30%". Maximum of three digits.

16. Primary Reason for burn:

Hazard Reduction - H Silviculture - S Forest Health - F
Wildlife Habitat - W Hazard and Silviculture - B Other - R

17. Type of burn:

Broadcast Activity - B Underburn Activity - U
Broadcast Natural - F Underburn Natural - N
Handpile - H Grapple Pile - G
Tractor Pile - T Landing Only - L
Right-of-way - R

18. Priority of burn - (optional entry)

High priority - H Low priority - L

19. Method for determining broadcast or underburn fuel loading:

Transect - T
Other Method - M

Photo Series: PNW51 - P1
PNW52 - P2
PNW231- P3
PNW258- P4
Local - L

In addition, for pile burns, the following codes may also be used:

Aerial photo - A Random Sample - R Ocular - C

20. Predominant Species of fuel:

Douglas Fir, Hemlock, Cedar - D
Lodgepole Pine - L
Hardwood - H
Juniper - J
Sagebrush or Bitterbrush - S
Ponderosa Pine - P
Mixed Conifer - M
Brush - B
Grass - G

21. Minimum harvest log diameter:

Harvest Specification	Entry Code
Whole tree yarding	"2"
4 inches	"4"
6 inches	"6"
8 inches	"8"
Other	"9"
Not Applicable	"1"

22. Date when 70% of the cutting was completed: use the four digit code "mmyr", i.e. "0391" means that March 1991 was the cutting time. Enter "9999" for natural fuels or no cutting.

23. Average duff depth to the nearest tenth of an inch. Do not include the decimal when reporting. Example: 1.2 inches of duff should be reported as "12".

24. Acres in unit: Actual number of acres to be treated. For piled units, enter the total number of acres from which the material was collected. If less than 1, report as 1.

25-26. Total woody loading in piles.

The entry should be made for piled units or for piles associated with broadcast burning. For piles burned in association with broadcast units, enter data in 25 and 26, only. Enter right-of-way piles in 25, only. For piled units, enter data in 26, only. The total woody loading on the unit should be reported in this entry, not just consumable tons. Do not include broadcast woody loading in this entry (See item 27-32). Duff loading should not be reported here.

25. For landing piles on units and right-of-way piles, enter the total tons for the entire unit. Enter "0" if there are none.

26. For piled burns, and piles (other than landing piles) to be burned on broadcast and underburn units, enter the pile tonnage, in total tons, in the unit. Enter "0" if there are none.

27-32. Woody loading in broadcast and underburns reported as tons per acre by size class. Do not report duff loading here. Do not include material in piles; that information should be reported in items 25 and 26. Units with less than 5 tons (total) should not be entered. For natural fuels burns that are required to be reported, include all fuel types in the appropriate size classes. Round-off all data to the nearest ton/acre.

27. 0 - 0.25" loading
28. 0.26 - 1.00" loading
29. 1.1 - 3.00" loading
30. 3.1 - 9.00" loading
31. 9.1 - 20.00" loading
32. >20" loading

PART 2: PLANNED BURN

The following information shall be entered into the computer on the day before the unit is planned for burning for all districts and forests in the restricted area, except for landing and right-of-way piles. For landing and right-of-way piles and areas outside of the restricted area, see Part 3 reporting requirements.

1. Unit number: The twelve (12) digit number that was entered in Part 1 should be entered.

2. District or forest identifier as used in Part 1.

3. Planned Date.

4. Estimated ignition time: Use the 24-hour clock and local time.

5. Number of acres that are planned to be burned.

6-7. Fuel expected to be consumed in piles:

6. For landing piles on units and right-of-way piles (if planned), enter the total tons expected to be burned. Enter "0" if there are none.

7. For piled burns, and piles (other than landing piles) that are planned to be burned on broadcast and underburn units, enter the pile tonnage, in total tons, of material predicted to be burned. Enter "0" if there are none.

8. Fuel predicted to be consumed in broadcast or underburns:

Enter the number of tons of woody fuel and duff predicted to be burned as tons per acre.

PART 3: ACCOMPLISHED BURN

The following information shall be entered into the computer on the day after the burning occurred for all districts and forests in the restricted area, except for landing piles and right-of-way piles (unless they were planned).

For landing and right-of-way piles in the restricted area and all burning outside of the restricted area, districts and forests should enter accomplished burning into the computer by the fifth of each month for the prior month's activity. Daily, or other, more frequent reporting of this information may occur if the district or forest so desires.

1. Unit number: The twelve (12) digit number that was entered in Part 1 and Part 2 should be entered.

2. District or forest identifier as used in Part 1 and Part 2.

3. Actual date of burn

4. Actual ignition time: Use the 24-hour clock and local time.

5. Number of acres actually burned. This can be more or less than the number planned. Include slop-over acres in the total.

6-7. Fuel actually consumed in piles (may be more or less than that entered in Parts 1 and 2):

6. For Right-of-way or landing piles on units, enter the <u>total tons</u> in the landings actually burned in the piles. Enter "0" if there are none.

7. For piled burns, and piles (other than landing piles) actually burned on broadcast and underburn units, enter the pile tonnage, in <u>total tons</u>, of material actually burned. Enter "0" if there are none.

8. Fuel consumed in broadcast portion of units or underburns:

Enter the number of tons actually burned as <u>tons per acre</u>. This number can be more or less than the entries made in Part 1 and Part 2.

9. Ignition duration:

Pile burns - no entry

OR

Any other type of burn - Enter the total <u>minutes</u> from the time an ignition device is first used to the time ignition stopped, including any breaks in firing.

Example: If ignition started at 0800, then stopped at 0830, then resumed at 0930 and was completed at 1100, the duration would be 180 minutes.

10. Ignition method:

Piled burns - no entry

OR

Any other type of burn - use the following:

Aerial - A Hand - H
Combination of aerial and hand - C
Other method - M

NOTE: If one method accounts for 70% or more of the acres ignited, enter that method, not "C".

11. Was rapid ignition achieved?

Piled burns - no entry

OR

Any other type of burn - use the following:

Enter "Y" or "N". Use subjective judgement to answer this question.

12. Weather station used to calculate consumption estimates:

For piled burn - no entry

OR

For any other burn - enter the weather station name or if data was taken on site enter the word "unit." If a station name exceeds four characters, enter only the first four characters. If entering a Raws station number, instead of the name, use the last four digits of the station number. Delete spaces when entering the name.

13. 10-hour fuel moisture:

For piled burn - no entry

OR

For any other burn - enter the percentage. Example: a 15% fuel moisture should be entered as "15".

14. 1000-hour fuel moisture:

For piled burn - no entry

OR

For any other burn - enter the percentage. Example: a 32% fuel moisture should be entered as "32".

15. How 1000-hr fuel moisture was determined:

For piled burn - no entry

OR

For broadcast or underburn:

Method	Entry Code
NFDR-th	"N"
Adj-th	"A"
Weighed	"W"

16. Number of days since significant rain:

For piled burn - no entry

OR

For any other type of burn -

West of the Cascades: Enter the actual number of days since 0.5 inches of rain have fallen within a 48-hour period.

East of the Cascades: Enter the actual number of days since 0.25 inches of rain have fallen within a 48-hour period.

17-20. Unit weather at the time of ignition:

For piled burn - no entry

OR

For any other type of burn -

17. Enter temperature (F)
18. Enter humidity (%)
19. Enter surface wind direction (tens of degrees). Note that direction is the direction from which the wind is coming. (i.e. direction of 270 is a west wind and would be entered as "27")
20. Enter wind speed (mph).

21. Snow-off month:

For piled burn - no entry.

OR

For any other type of burn - Enter the month snow left the unit. Enter the two-digit month code. If there never was snow, enter "00". If there

is snow in the unit at the burn time, enter the two-digit month code for the month of the burn.

Example: "03" means snow was off the unit in March. "00" means there never was snow on the unit.

SMOKE MANAGEMENT DISTRICT ID NUMBERS

521 Astoria
95_ Central Oregon
- 951 Prineville
- 952 John Day
- 953 Fossil
- 954 The Dalles
- 955 Sisters
- 956 Monument

59_ Clackamas-Marion
- 591 Molalla
- 592 Santiam

72_ Coos
- 721 Bridge
- 722 Coos Bay
- 723 Gold Beach

090 Crater Lake N.P.
01_ Deschutes NF
- 011 Bend
- 012 Crescent
- 013 Fort Rock
- 015 Sisters

73_ Douglas
- 731 North Douglas
- 732 South Douglas

771 Eastern Lane
53_ Forest Grove
- 531 Forest Grove
- 532 Columbia City

02_ Fremont NF
- 021 Bly
- 022 Lakeview
- 023 Paisley
- 024 Silver Lake

98_ Klamath-Lake
- 981 Klamath Falls
- 982 Lakeview

30- Klamath NF
- 301 Oak Knoll

56_ Linn
- 561 Sweet Home
- 562 Santiam

04_ Malheur NF
- 041 Bear Valley
- 042 Burns
- 043 Long Creek
- 044 Prairie City

06_ Mt. Hood NF
- 061 Barlow
- 062 Bear Springs
- 063 Clackamas
- 064 Columbia Gorge
- 065 Estacada
- 066 Hood River
- 069 Zig Zag

97_ Northeast
- 971 La Grande
- 972 Pendleton
- 973 Wallowa

07_ Ochoco NF
- 071 Big Summit
- 072 Paulina
- 073 Prineville
- 074 Snow Mountain

10_ Rogue River NF
- 101 Applegate
- 102 Ashland
- 103 Butte Falls
- 106 Prospect

11_ Siskiyou NF
- 111 Chetco
- 112 Galice
- 113 Gold Beach
- 114 Illinois Valley
- 115 Powers

12_ Siuslaw NF
- 121 Alsea
- 122 Hebo
- 123 Mapleton
- 124 Waldport

71_ Southwest
- 711 Central Point
- 712 Grants Pass

511 Tillamook
14_ Umatilla NF
- 142 Heppner
- 145 North Fork
- 146 Walla Walla

15_ Umpqua NF
- 151 Cottage Grove
- 152 Tiller
- 153 Diamond Lake
- 156 North Umpqua

991 Walker Range
16_ Wallowa-Whitman NF
- 161 Baker
- 162 Wallowa Valley
- 164 Hell Canyon NRA
- 165 Eagle Cap
- 166 La Grande
- 167 Pine
- 169 Unity

78_ Western Lane
- 781 Florence

55_ West Oregon
- 551 Philomath
- 552 Dallas
- 553 Toledo

18_ Willamette NF
- 181 Blue River
- 183 Sweet Home
- 184 Detroit
- 185 Ridgon
- 186 Lowell
- 187 Mckenzie
- 188 Oakridge

20_ Winema NF
- 201 Chemult
- 202 Chiloquin
- 203 Klamath

OREGON SMOKE MANAGEMENT:
MONTHLY REPORTING SYSTEM CODING SHEET FOR RIGHT-OF-WAY UNITS ONLY

Agency: _____ Month: _____ Forest or District _____

NOTE: SEE INSTRUCTIONS ON OTHER SIDE

(1) Unit #	(2) DATE BURNED (Month/Day/Year)	(3) ACTUAL IGNITION TIME Use 24 hour clock)	(4) ACTUAL TONS BURNED

GENERAL INSTRUCTIONS

1. This form is to be used for the reporting of right-of-way burn accomplishments only. [It is up to the discretion of the local office whether to enter data directly into the computer or use this form.] All other accomplishments should be reported using the format procedures outlined on form 1-4-1-501.

2. Right-of-way units ~~will~~[need] not be planned on a daily basis. They ~~will~~[need] not be reported to Salem on a daily basis.

3. On the 1st day of each month all field units should submit completed forms for the previous month to their appropriate state district headquarters or USFS forest supervisor's offices. Field Units should not send completed forms directly to Salem.

4. By the 5th of the month the respective headquarters offices should~~: (1) ensure that all field units have reported, and (2) mail the completed forms to Salem Communications. It is the responsibility of the respective headquarters to promptly submit all completed forms each month.~~[enter data into the computer.]

~~5. If no right-of-way burning was accomplished during the month for the entire national forest or state district this fact can be sent via teletype or telephone to Salem Communications by the respective headquarters.~~

~~6. After all information is received by Salem Communications each month, Salem will enter the data onto the computer file.~~

~~7~~[5]. This reporting for right-of-way units is no way affects when burning may or may not occur. Weather forecasts and ~~advisories~~[instructions] should be reviewed daily to determine if any restrictions to burning are in effect.

~~8~~[6]. Each day a unit is burned the appropriate data should be entered on form 1-1-3-420 as detailed below. If, for example, a unit was partially burned on 5 different days, there should be 5 entries on the form.

COLUMN	DATA
1	UNIT NUMBER: The [FACTS] number ~~as assigned by the computer~~ should be entered each day burning is accomplished.
2	DATE BURNED: Enter the date burned. ~~as the month, day and year i.e. a unit burned on April 19, 1983 should be entered as "4 19 83".~~
3	ACTUAL IGNITION TIME: Enter the time when ignition was started. DO NOT enter the time that ignition was completed. Use a 24-hour clock, i.e., a 6 AM ignition would be 0600; a 6 PM ignition would be 1800.
4	ACTUAL TONS BURNED: Enter the estimate of the tonnage that was actually consumed for the date in the unit.

SMOKE INTRUSION REPORT
Form 1-4-1-301

Definition

A smoke intrusion occurs when any visible or monitored smoke from prescribed forest burning enters a Designated Area or other area sensitive to smoke at ground level.

Background

An assessment of burning's impact on air quality is aided by a knowledge of when smoke entered a Designated Area. Smoke intrusions vary greatly in duration, concentration and effect on a Designated Area. Smoke accumulating at the surface and remaining overnight adversely affects air quality more than if smoke drifts through and clears in an hour or two. The State Forester is required by statute and agreement with DEQ to "analyze and evaluate state-wide burning operations under the plan." Such analysis includes intrusion analyses.

Purpose

This intrusion report provides a descriptive record of smoke intrusions as required by administrative rule. Reports are annually summarized in the Smoke Management Annual Report compiled by the Smoke Management Section.

Responsibilities

Field units, i.e., State Districts or National Forests, are responsible for monitoring smoke from burning activity and reporting intrusions to the smoke management ~~coordinator~~[meteorologist] through the use of Form 1-4-1-301. [Sections A through G should be completed and the form should be signed by the person completing the form.]

The Salem smoke management ~~Coordinator~~[section] is responsible for:

1. Combining field reports into one intrusion summary when more than one field unit is involved.

2. Liaison with Department of Environmental Quality to develop descriptive reports of smoke intrusions.

3. Preparing an annual summary of intrusions.

When to report by telephone:

Any intrusion is to be reported by telephone [to the smoke management forecaster] as soon as possible but not later than noon of the next workday after the intrusion. If 7-day operations are not in progress at Salem, then telephone by noon on the first workday after the incident. If the ~~Smoke Management Coordinator~~[forecaster] is not available, then the ~~duty forecaster for smoke management~~[fire operations center] should be notified.

SMOKE INTRUSION REPORT
Form 1-4-1-301

When to report by mail:

A completed Smoke Intrusion Report Form 1-4-1-301 shall be submitted by the appropriate field office to the smoke management ~~Coordinator~~[forecaster] within two working days of the intrusion. Sections H through L of the form will be completed by the duty forecaster and returned to the field office in two working days.

Field offices observing smoke entering a designated area from burn units outside of their administrative area should also submit telephone and written reports as outlined above. In addition, they should notify the field office that has administrative responsibility for the problem unit(s) of the fact that smoke is entering or about to enter a Designated Area.

It is helpful and desirable that field offices report potential intrusions as soon as it appears that smoke may enter a Designated Area. This allows the smoke management ~~Coordinator or duty forecaster~~[personnel] to obtain monitoring data prior to and during the incident. It also facilitates public relations work resulting from an incident.

SMOKE INTRUSION REPORT

Sections A and B must be telephoned to Salem, 378-2153, no later than noon the next workday after the intrusion. Every attempt should be made to notify Salem as soon as it is evident that smoke will impact a designated area. A completed form should be submitted to Salem within two working days of the intrusion.

A. SMOKE ORIGIN:

Unit Number(s)	District Forest	Legal Descr.	Owner Class	Elev.	Acres	Tons	Ign Time	Date Burned

B. INTRUSION DESCRIPTION:

1. Designated Area Affected_____

2. Date _____ Time _____ Smoke entered area. Duration _____hours.

3. Type: Main Plume _____ Residual Smoke _____ Drift Smoke _____

4. Describe Smoke Behavior (including distances and elevations of base of plume)_____

FORECAST AND INSTRUCTIONS:

1. Forecast transport wind direction and speed at ignition time and for next 12 hours_____

2. Observed transport wind direction and speed at ignition time and for next 12 hours_____

3. Forecast surface wind direction and speed at ignition time and for next 12 hours (24 hours if residual smoke was a factor_____

4. Observed surface wind direction and speed at ignition time and for next 12 (24) hours_____

5. Were significant changes in transport or surface wind conditions forecast _____observed_____. Describe any changes that occurred_____
_____

6. What were general weather conditions during the burn period (include conditions at least 6 hours after ignition stopped.) Give sky conditions, type and height of clouds, precipitation etc., be specific.
_____.

7. Was Salem consulted about observed weather that was different than forecast?_____

8. What were Smoke Management Instructions? Written and/or verbal_____.
_____.

D. WHAT WERE THE FUEL MOISTURES AT IGNITION TIME:
1 hour_____ 10 hour_____ 100 hour_____ 1000 hour_____

SMOKE INTRUSION REPORT

E. OTHER VISIBILITY RESTRICTING SOURCES PRESENT:
Field Smoke____ Resident Emissions___ Ag Smoke____ Unable to identify___.
Dust_____ Other prescribed Fire Smoke_____.
Other (Specify)_____ Wildfire Smoke (Fire's Name)_____.

F. EXPLAIN SPECIFICALLY THE CAUSE OF THE INTRUSION. Has the cause been the result of previous intrusions?_____
_____.

G. COMMENTS: _____.
_____.

SECTION H THROUGH L TO BE COMPLETED BY SALEM FORECASTER:

H. INTRUSION INTENSITY (see directive table):

1. Average DA prevailing visibility for 3 hours prior to start of intrusion _____ miles.

2. Lowest prevailing visibility during duration of intrusion _____ miles.

3. Average DA nephelometer for 3 hours prior to start of intrusion _____.

4. Highest nephelometer during duration of intrusion _____.

5. Classification based on visibility or nephelometer:

Light___ Moderate ___ Heavy ___ Unknown or can't determine ___ No classification (due to other sources) ____.

If moderate or heavy, the number of hours in those categories:
Moderate___ Heavy _____

I. OBSERVED MIXING DEPTH FROM NEAREST RAOB OR UPPER AIR SITE. (Identify any shear layers.)_____.

J. GENERAL SYNOPTIC CONDITIONS, BOTH LARGE AND SMALL SCALE. Be as specific as possible with feature location._____
_____

K. WERE FORECASTS AND INSTRUCTIONS ADEQUATE (Y/N) ___. Why _____
_____
_____

L. COMMENTS._____
_____
_____.

_____ _____
District/Forest Representative Smoke Management Forecaster

INTRUSION DETERMINATION FROM VISIBILITY OBSERVATIONS

Introduction

When no nephelometer data is available to determine the intensity of an intrusion, visibility data may be used as a substitute when such data is available from a reliable source. The standard observation procedure used by the national Weather Service as outlined in the Federal meteorological Handbook No. 1 should be the minimum standard accepted as a reliable indicator of visibility. The observation procedure is outlined below and should especially be utilized by field units that have the potential of impacting Designated Areas where no airport data is available. Prevailing visibility is the observation that will be used as a surrogate for nephelometer data. Using the procedure outlined below to determine prevailing visibility and the visibility table in the Smoke Management Directive 1-4-1-601, a determination of intrusion intensities will be made.

Observation Procedure

Determination of Visibility: Using all available visibility markers, determine the greatest distances that can be seen in all directions around the horizon circle. When the visibility is greater than the distance of the farthest markers, estimate the greatest distance you can see in each direction. Base this estimate on the appearance of the visibility markers. If the markers are visible with sharp outlines and little blurring of color, the visibility is much greater than the distance to the markers. If a marker can barely be seen and identified, the visibility is about the same as the distance to that marker.

Determination of Prevailing Visibility: After visibilities have been determined around the entire horizon circle, resolve them into a single value for reporting purposes. To do this, use either the greatest distance that can be seen throughout at least half the horizon circle, or if the visibility is varying rapidly during the time of the observation, use the average of all observed values. Prevailing visibility should be reported in miles.

Determination of Sector Visibility: When the visibility is not uniform in all directions, divide the horizon circle into sectors which have approximately the same visibility. Report the prevailing visibility which can be seen throughout at least half of the horizon circle.

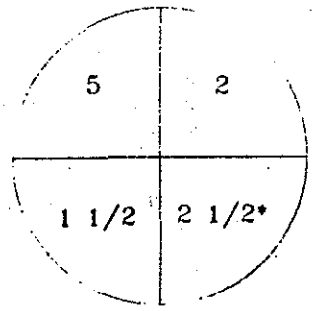
See the next page for examples of the prevailing visibility that should be reported in different scenarios.

INTRUSION DETERMINATION FROM VISIBILITY OBSERVATIONS

EXAMPLES -Determining Prevailing Visibility
(Prevailing Visibility indicated by asterisks and shading)

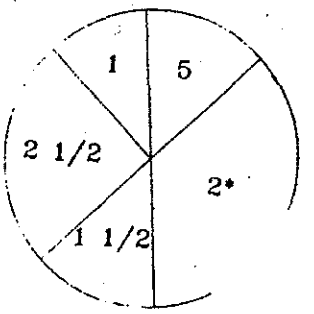
Four Sectors

Visibility (miles)	Approximate Degrees
5	90
2 1/2*	90
	180
2	90
1 1/2	90



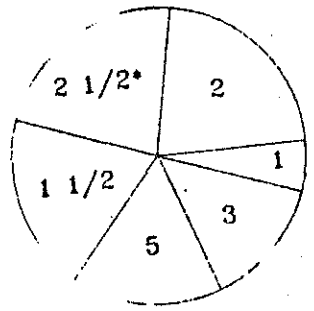
Five Sectors

Visibility (miles)	Approximate Degrees
5	50
2 1/2	90
2*	130
	270
1 1/2	50
1	40



Six Sectors

Visibility (miles)	Approximate Degrees
5	60
3	50
2 1/2*	80
	190
2	90
1 1/2	70
1	10



ESTIMATING TONS OF FUEL CONSUMED IN PRESCRIBED BURNS

Determining Fuel Loading

PHOTO SERIES

There are four PNW Photo Series available for quantifying forest residues. They provide a reasonable means for estimating the tons of fuel in a unit, and that may be consumed by a prescribed burn. These publications contain series of photographs displaying different forest residue loading levels by size class, for areas of like timber types and cutting practice.

The four photo series that are available are:

USDA Forest Service General Technical Report PNW 51, 1976. Photo Series for Quantifying Forest Residues in coastal Douglas-fir - Hemlock type and the coastal Douglas-fir - hardwood type.

USDA Forest Service General Technical Report PNW 52, 1976. Photo Series for Quantifying Forest Residues in Ponderosa Pine Type, Ponderosa Pine and Associated Species Type and Lodgepole Pine Type.

USDA Forest Service Pacific Northwest Research Station, Siuslaw National Forest, General Technical Report PNW-GTR-231, April 1989, Stereo Photo Series for Quantifying Forest Residues in Coastal Oregon Forests.

USDA Forest Service, Pacific Northwest Research Station, General Technical Report, PNW-GTR-258, May 1990. Stereo Photo Series for Quantifying Forest Residues in the Douglas-fir-hemlock Type of the Willamette National Forest.

Information with each photo includes measured weights, volumes and other residue data, information about the timber stand and harvest and thinning actions and fuel ratings. These photo series provide a fast and easy-to-use means for quantifying existing residues. It must be emphasized that this system, while not perfect, will provide reasonable estimates if used consistently. Experience in its use will increase the ease of using it and improve the accuracy of estimates.

Procedures for use of the photo series for estimating fuel tonnages which exist for total loading, or what will be consumed by fire follows[1].

---

[1]USDA Forest Service Pacific Northwest Research Station, General Technical Report, PNW-STR-258, Stereo Photo Series for Quantifying Forest Residues in the Douglas-fir-hemlock Type of the Willamette National Forest, page 6.

1. Observe each specific fuel size class of residue on the ground (for example, 3.1 to 9 inch loading).
2. Select a photo or photos that nearly match or bracket the observed fuel class.
3. Obtain the quantitative value for the characteristic being estimated from the data sheet accompanying the selected photo (or interpolate a value between photos).
4. These steps are repeated for each fuel size class or fuel characteristic needed.

The total woody loading can then be calculated by summing the estimates.

An example of the above procedure using the PNW-GTR-258 Stereo Photo Series would be:

Fuel Size Class	Photo	Tons/Acre
0.0 - 0.25	1-DFWH-PRE-16	2.5
0.26 - 1.0	1-DFWH-PRE-16	4.2
1.1 - 3.0	1-DFWH-PRE-13	5.9
3.1 -9.0	1-DFWH-PRE-13	25.3
9.1 - 20.0	1-DFWH-PRE-13	2.0
20 +	1-DFWH-PRE-12	0
Total woody per/acre fuel loading		39.9

If the general area being inventoried has areas with obvious differences in residue loading, the user should make separate determinations for each area and then weight and cumulate the loading for the whole area.

TRANSECT

The photo series is one way to determining fuel loading. A second method, the basis upon which the photo series was developed, is actual field sampling of proposed units. It is recommended that pre- and post-burn sampling be done to get a feel for consumption estimates under different moisture conditions.

The procedures for inventorying downed woody material are provided in two U.S. Forest Service technical reports published by the Intermountain Forest and Range Experiment Station in Ogden, Utah. The "Handbook for Inventorying Downed Woody Material" by James K. Brown (USDA General Technical Report INT-16, 1974) and the "Graphic Aids for Field Calculation of Dead, Downed Forest Fuels" by Hal E. Anderson (USDA General Technical Report INT-45, August 1978) are the reference documents to be followed when doing a planar intersect sample.

The intent in using the photo series or by performing an actual loading. It is helpful to become familiar with the transect procedure first and then work with the photo series.

PILE BURNING FUEL LOADING

To determine tonnage in units that will be piled the transect method or photo series as described above can be used. If units have already been piled one of the three following methods should be used:

1. Ocular Estimate of Pile Volumes
2. Statistical Sample of Pile Volume
3. Aerial Photo Interpretation

These methods are described in a publication from the Pacific Northwest Research Station, Fire and Environmental Research Applications, Guidelines For Estimating Volumes, Biomass, and Smoke Production For Piled Slash, by Colin C. Hardy.

Ocular Estimate of Pile Volumes

Step 1: Estimation of Piles:

This system assumes half-spherical shaped piles. Determine, through visual inspection, an average height, width, and number of piles on the area of consideration.

When appraising a unit many piles will be irregularly shaped. Ocularly "smooth" the lobes, ridges, and valleys into an average, half-spherical shape. Long logs and poles extending beyond the average boundary surface of the pile can be accounted for by increasing the height an appropriate distance.

If a significant number of piles appear to exist in each of several average height or diameter classes, group them into appropriate classes, noting average width, height, and number of piles for each class. It may be helpful to scale the piles' heights, relative to a 6' person.

Step 2: Calculate Gross Pile Volume:

Calculate the gross volume for the representative pile, piles, or groups of piles. The graphs on pages 14 and 15 will give total pile volume for a range of height and diameter estimates. The graph on page 14 uses width of the pile along the x-axis, with 6 heights represented by the curves. The graph on page 15 uses height along the x-axis, with width represented by the curves. Move up from the x-axis to the intersection with the appropriate curve, then turn left to the y-axis volumes.

Step 3: Calculate Gross Pile Volume For Area of Consideration:

Calculate the volume of piles on the total area by

multiplying the number of piles by the average volume. If piles have been grouped into several size classes, calculate the total volume for each group, then sum the volumes.

Step 4: Calculate Net Wood Pile Volume:

Net wood volume of the piles must be estimated by reducing the total volume by a factor to account for the volume of air in the piles. To determine the net wood volume multiply the total pile volume for the area by .20. The resulting value is the net wood volume.

Step 5: Determine the Total Tons of Wood/Fuel on the Area of Consideration:

If piles contain 25 percent or more than one wood species determine the average species mix for the entire area. Calculate the average wood density on the basis of the species or mix of species. The table below contains density weights for commonly found species in the Pacific Northwest. Multiply the proper net wood volume by the corresponding density factor from the table. Total these weights and divide by 2000 lbs to convert to total tons.

Species	Specific Gravity (dimensionless)	Density (lb/ft)
Larch	.55	34.3
Douglas-fir	.50	31.2
Hemlock	.47	29.3
Pine	.42	26.2
Alder	.41	25.6
True fir	.34	21.2
Rotten	.30	18.7

The graph on page 16 can also be used to determine wood density for the piled area. Select a diagonal line connecting the primary species and secondary species. Follow the line either left or right from the primary species to the vertical line indicating the percentage of the primary species, then follow the intersecting horizontal line to the y-axis to derive the average, mixed species wood density.

Example Unit:

Unit Description

Unit size 30 acres of grapple piles
5 piles per acre, 150 total piles
Average pile height 8 feet
Average pile width 20 feet
Species Mix: 75 percent Douglas-fir
25 percent Alder

Calculations

Gross pile volume (from graph on page 14) = 1500 cubic feet
Net wood pile volume .20:
1500 cuft X .20 (from Wood to Pile Ratio) = 300 cuft/pile

Wood Weight

300 X 75% Douglas-fir = 225 cuft x 31.2 (Density) = 7,020
300 X 25% Alder = 75 cuft X 25.6 (Density) = 1,920
Total net wood cubic feet per pile = 8,940

Total tons per pile 8,940 / 2000 = 4.47 tons per pile
Total woody tons for the unit 4.47 tons x 150 piles = 670.5 tons

Statistical Sample of Pile Volume:

A statistical sample of the piles on a given area provides valuable information regarding the distribution of shapes, sizes, and species composition of the area. This information greatly improves the accuracy of volume estimates.

Even when measuring only a sample of piles, field measurements are time-consuming and tedious. A set of six stylized shapes shown on page 17 are helpful in determining the appropriate measurements to be made on a specific pile.

Step 1: Identify a randomly-chosen set of piles to be measured on a given area. The number of piles selected is dependent on the time available and on the level of accuracy desired. Roughly sketch and number the piles on a map of the area for later identification and location.

Step 2: Visit each pile and visually determine the most representative stylized shape from the six shape codes. Illustrated on each shape are the dimensional measurements required by the respective geometric formula to calculate total volume.

Step 3: Measure each dimension required for the shape.

Step 4: Identify the primary species (by mass) of woody debris in the pile, identified species must account for 25 percent or more of the mass of the piles. If mixed-species, note the percent of the primary species and the percent of one secondary species. This data will be used to determine the net mass of fuel in the pile.

Step 5: Calculate the volume for each sampled pile using the appropriate formula below (these formulas relate to the shapes on page 17);

1. Section of a sphere
   $V = (3.14 * h/6) * (3w^2/4 + h^2)$

2. Half elliptical cylinder
   $V = (3.14/4)*w*h*L$

3. Half frustum of elliptical cone
   $V = 3.14*L * (w_1*h_1 + (w_1*h_1*w_2*h_2)^{0.5} + w_2*h_2)/12$

4. Irregular solid
   $V = ((L_1+L_2)*(w_1+w_2)*(h_1+h_2))/8$

5. Half oblate spheroid
   $V = (3.14*h*w^2)/12$

6. Half prolate ellipsoid
   $V = [(3.14*h_1/6) * (3w_1^2/4 + h_1^2)]/2$
   $+ [(3.14*h_2/6) * (3w_2^2/4 + h_2^2)]/2$
   $+ 3.14*L * (w_1*h_1 + (w_1*h_1*w_2*h_2)^{0.5} + w_2*h_2)/12$

Step 6: Calculate an average volume from the sampled pile volumes and multiply by the total number of piles on the area.

Step 7: Calculate Net Wood Pile Volume: Net <u>wood</u> volume of the piles must be estimated by reducing the total volume by a factor to account for the volume of air in the piles. To determine the net wood volume multiply the total pile volume for the area by .20. The resulting value is the net wood volume.

Step 8: Determine the Total Tons of Wood/Fuel on the Area of Consideration.

Using the mix of species determined in step 4 calculate the average wood density on the basis of the species or mix of species. The previous table contains density weight for commonly found species in the Pacific Northwest. Multiply the proper net wood volume by the corresponding density factor from the table to derive a pile-average density.

A second method is available by using the nomogram on page 16. Select a diagonal line connecting the primary and secondary species. Follow the line either left or right from the primary species to the vertical line indicating the percentage of the primary species, then follow the intersecting horizontal line to the y-axis to derive the average, mixed-species wood density. Total these weights and divide by 2000 lbs to convert to total tons.

Aerial Photo Interpretation:

Large-scale aerial photographs of slash piles in harvested units can be evaluated with an analytical stereoplotter for determining dimensions and volumes. The photogrammetric method provides accurate and efficient volume estimates for calculating fuel loadings and distributions on piled harvest units. It also eliminates the need for any ground photo-control measurements. Existing small-scale aerial photos of the units are controlled using USGS topographic maps. Control is then bridged to the large-scale photos. Volumes are then computed from the photo measurements. A second method requires 2-6 measurements of dimensions for computing volumes from the stylized shape codes (page 17). When compared with volumes computed from independent ground surveys, the first photo method has produced volumes within 11 percent of field surveyed volumes. The same comparison showed that volumes calculated from photo-derived shape dimensions were 5 percent less than from the intensive photo method.
For further details regarding analytical photogrammetric applications refer to the following documents: Reutebuch and Hardy (1991); Reutebuch, 1987; Massa, 1958; Reutebuch and Shea, 1988; Warner, 1988.

CALCULATION OF TONS CONSUMED FOR BROADCAST BURNING

WOODY FUEL CONSUMPTION

The calculation of fuel consumed should utilize the graphs included in this appendix. The graphs were taken from the following resource materials. USFS research report, "Predicting Fuel Consumption by Fire Stages to Reduce Smoke from Slash Fires" by Roger Ottmar and USDA, Forest Service Pacific Northwest Research Station, Research Report, "Improved Prediction of Fuel Consumption During Spring-Like Prescribed Burns", February, 1990. Computer programs using the equations developed for the nomograms may be used if approved by Salem Smoke Management. These programs must be approved to maintain consistency in the reporting system.

For daily reporting two options exist for estimating fuel consumption using nomograms. They consist of Summer-like conditions and Spring-like conditions. Summer-like conditions are driven by 1000-hr fuel moisture and only calculate consumption of fuels greater than 3 inches. Fuels less than 3 inches are 100 percent consumed. Spring-like conditions are driven by 10-hour and 1000-hr fuel moistures calculating consumption of both 100-hr and 1000-hr fuels. Fuels less than 1 inch are 100 percent consumed.

SELECTING THE PROPER CONDITIONS

To determine which set of nomographs to use determine the 10-hour fuel moisture of the unit to be burned. If the 10-hour fuel moisture is less than 18 percent then use the Non Spring-like procedure. If the 10-hour fuel moisture is equal to or greater than 18 percent and the NFDR 1000-hr fuel moisture is greater than 20 percent use the Spring-like procedure.

SUMMER-LIKE PROCEDURE

Use the graph on page 7 to provide an estimate of the large (3"+) fuel consumption as a function of 1000-hr fuel moisture. Three alternatives are provided to determine the 1000-hr fuel moisture, ADJ-th fuel moisture, NFDR-th hour fuel moisture or the moisture can be measured by weighing. The method for determining as well as the moisture value and weather station are reported on the coding form and when entering data into the computer.

For fuels smaller than 3", total consumption should be assumed when calculating the total woody fuel consumption. Use the procedures outlined later for calculating duff consumption.

SPRING-LIKE PROCEDURE

To determine if spring-like conditions exist for a unit to be burned determine if average 10-hr fuel moistures are 18 percent or greater and NFDR 1000-hr fuel moistures are greater than 20 percent. If NFDR 1000-hr fuel moistures are less than 20 percent the unit must be burned following the summer-like conditions. To check 10-hr fuel moistures take an average of 10 to 15 moisture meter measurements collected from across the unit from .25 to 1 inch diameter fuel. The measurements should be taken from the full fuel profile and representative of the different aspects that may exist.

For planning units to be burned use the best available 10 hour fuel moisture information. **Realize that accurate 10-hr fuel moistures are very critical for this system and are very site specific.** When planning the following recommendations can be used; establish representative 10-hr fuel sticks which can be conveniently weighed, track currently burned units, have personal use moisture meters to

measure 0.25 to 1 inch fuels when in the area. However when the unit is burned on-site actual measurements must be taken to calculate consumption to be entered into the smoke management system.

Total tons consumed should be determined as follows:

1) For 1-hr and 10-hr fuels (less than 1 inch) assume 100% consumption.

2) For 100-hr fuels (1.0 to 3.0 inch) use the Woody Fuel consumption Nomograph for 100-hr fuels, on page 8 to determine the percentage consumption (based on your measured 10-hr fuel moisture). Enter the 10-hr fuel moisture content figure on the x-axis and draw a vertical line to the curved line. Draw a horizontal line left across the graph from that point to determine the 100-hr fuel consumption in percent.

3) For 1000-hr fuels (3 inch plus) use Spring-Like Large Woody Fuel Consumption Nomograph, on page 9 to determine the 1000-hr fuel consumption in percent.

4) Total all of the calculated per acre tonnages consumed (the above three steps) and multiply by the unit acres. This is the total woody tons consumed.

An example of the above procedure using the tons/acre from the previous example assuming a 10-hr fuel moisture of 20 percent an ADJ-th fuel moisture of 40 percent and 30 acres would be:

Fuel Size Class	Tons/Acre	Estimated Percent Consumed	Tons/Acre Consumed
0.0 - 0.25	2.5	100	2.5
0.26 - 1.0	4.2	100	4.2
1.1 - 3.0	5.9	70	4.1
3.1 - 9.0	25.3	29	7.3
9.1 - 20.0	2.0	12	0.2
20 +	0	0	0
Total	39.9		18.3

Total woody consumption for the unit 30 acres x 18.3 tons = 549 tons.

Then calculate duff consumption using the procedures described later.

Additional Items To Consider For Spring Burning:

- The amount of live fuel on the unit. Live fuel provides for

a large heat sink and will reduce the effectiveness of the fire.

- Percent slope and aspect. Steeper slopes and southerly aspects will provide more successful spring burns.

- Relative humidity at time of the burn should be less than 50 to 60 percent.

- The ability to provide mass ignition to the unit.

DUFF CONSUMPTION

In addition to calculating the woody fuel consumption, the duff consumption needs to be calculated. Use the appropriate graphs on pages 10, 11, 12 and 13 to determine duff consumption: the graph you use depends on rainfall in the burn area. Instructions for using the graphs are as follows.

1. For westside units to be burned when there have been fewer than 25 days since at least a 0.5 inch or more of rain has fallen over a continuous 2 day period (i.e. duff layer is moist):

   a. Use the consumption estimate (in tons/acre) of large (3"+) woody fuels previously calculated from page 7 or 9 .

   b. Enter the large, woody fuel consumption value (tons/acre) on the x-axis of the graph on page 10 and draw a vertical line to the appropriate preburn duff depth. Turn on the duff depth line and draw a horizontal line to the left to determine duff consumption (tons/acre).

2. For westside units to be burned when there have been 25 or more days since at least 0.5 inch of rain has fallen over a continuous 2 day period (i.e. duff layer is dry):

   a. Determine the diameter reduction inches of the large (3"+), woody fuels from the graph on page 7 .

   b. Enter the diameter reduction (inches) on the x-axis of the graph on page 11 and draw a vertical line to the appropriate preburn duff depth. Turn on the duff depth line and draw a horizontal line to the left to determine duff consumption (tons/acre).

3. For eastside units use the eastside graphs on pages 12 and 13 . Using the procedures in steps 1 and 2 above, realize

the critical precipitation value is 0.25 inches instead of 0.5 inches.

NOTE: Be sure to enter the correct variable on the correct graph based on rainfall information you are using.

The graphs on pages 10, 11, 12 and 13 were provided by the Pacific Northwest Experiment Station. The limitations of the duff consumption methodology are given in Ottmar's 1985 paper "Predicting Duff Reduction to Reduce Smoke from Clearcut Slash Burns in Western Washington and Western Oregon."

TOTAL FUEL CONSUMPTION

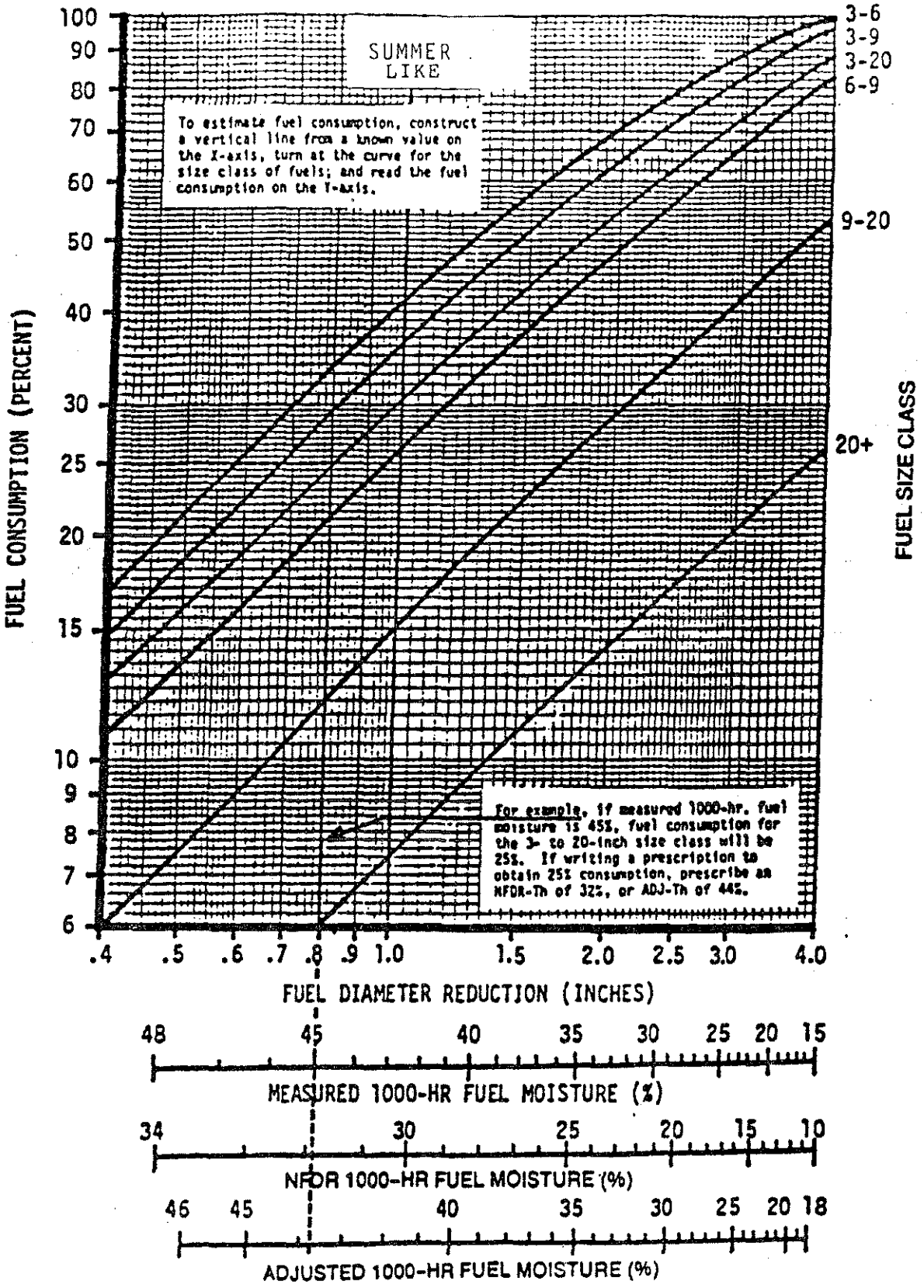
The total fuel consumption is the sum of the woody fuel consumption, both large and small fuel, and the duff consumption. The total, in tons/acre, should be multiplied by the number of acres that are burned (or are expected to be burned) when planning and accomplishing units. When accomplishing broadcast burned units only calculate tonnage for the actual acres which burned.

PILE BURNING

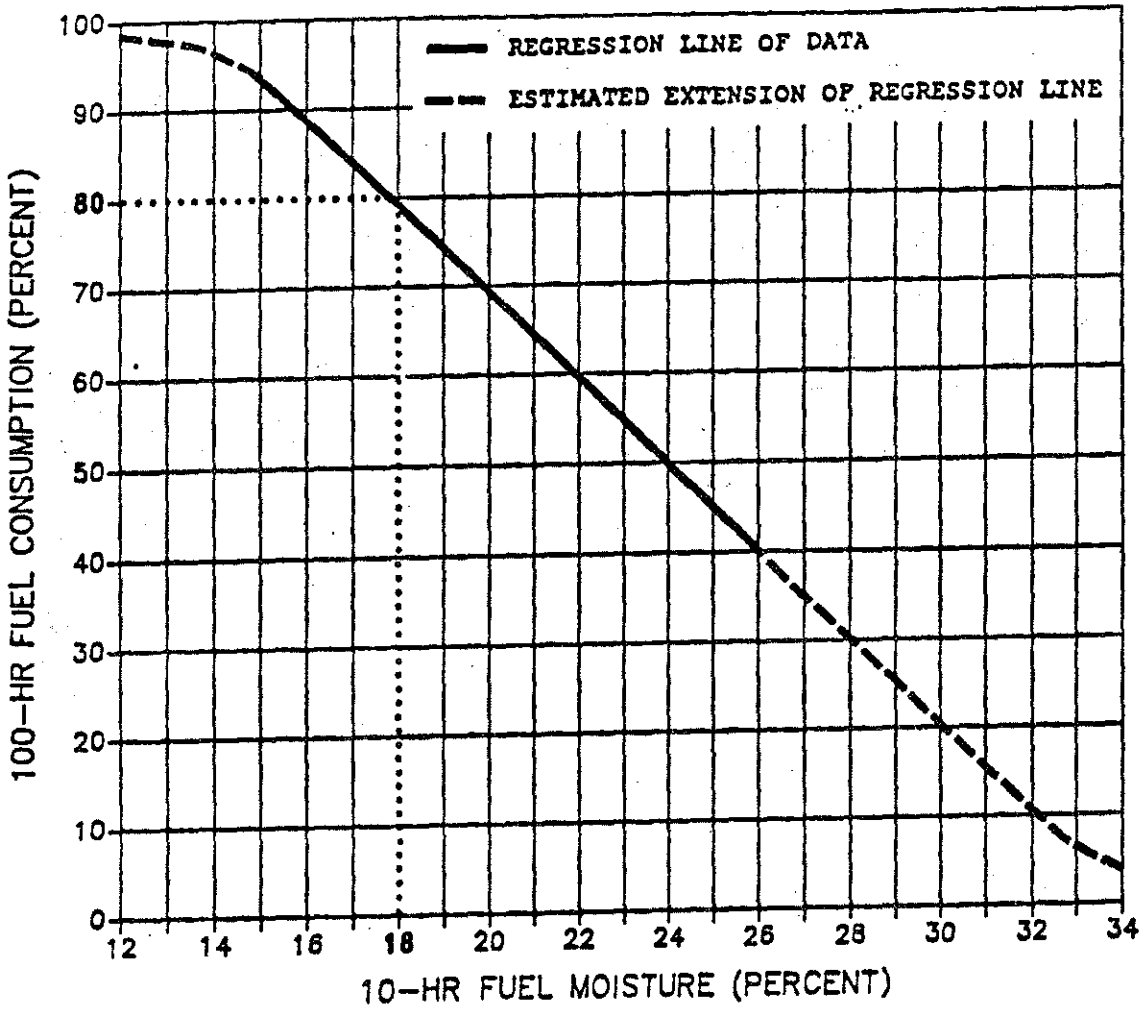
Woody Fuel In Piles:

For reporting purposes, assume total consumption of the piles when planning and accomplishing units. Even when piles are part of a broadcast burn and total consumption of fuels from the broadcast operation is not expected, total consumption of the piles burned should be reported.

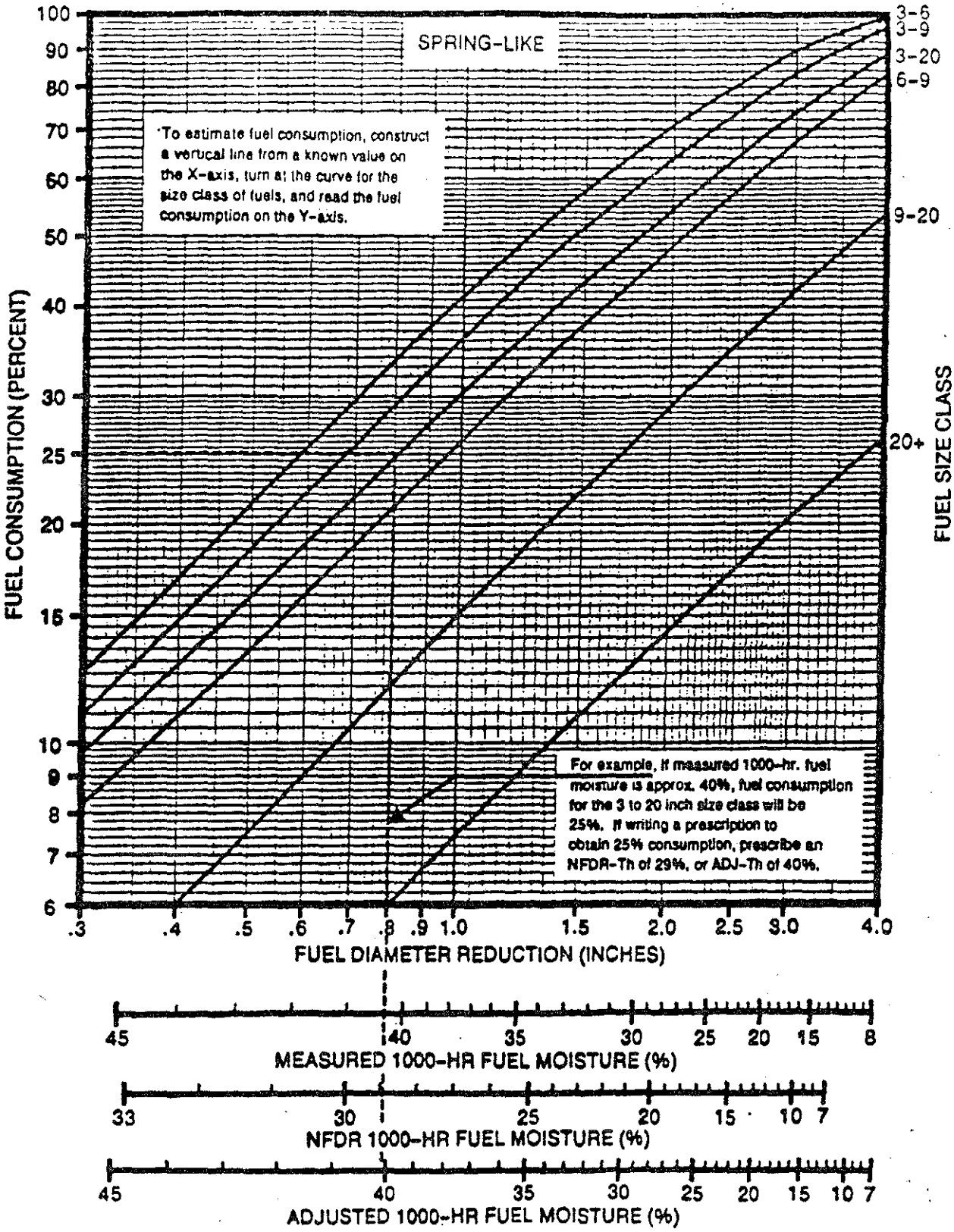
T:\BELL\SPRING1



Large woody fuels consumption nomograph for summer like burns.

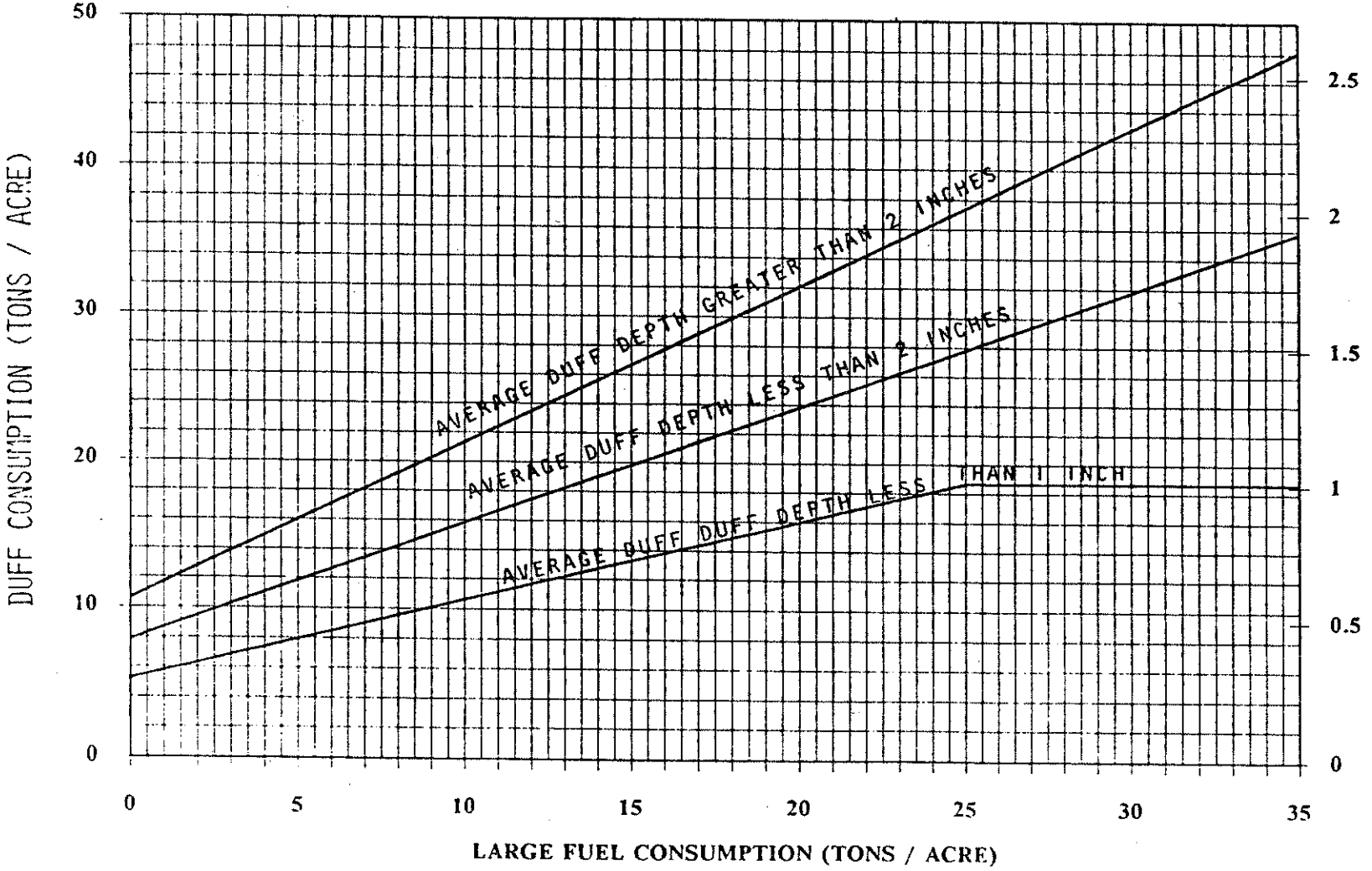


Woody fuel consumption nomograph for 100-hour fuels.

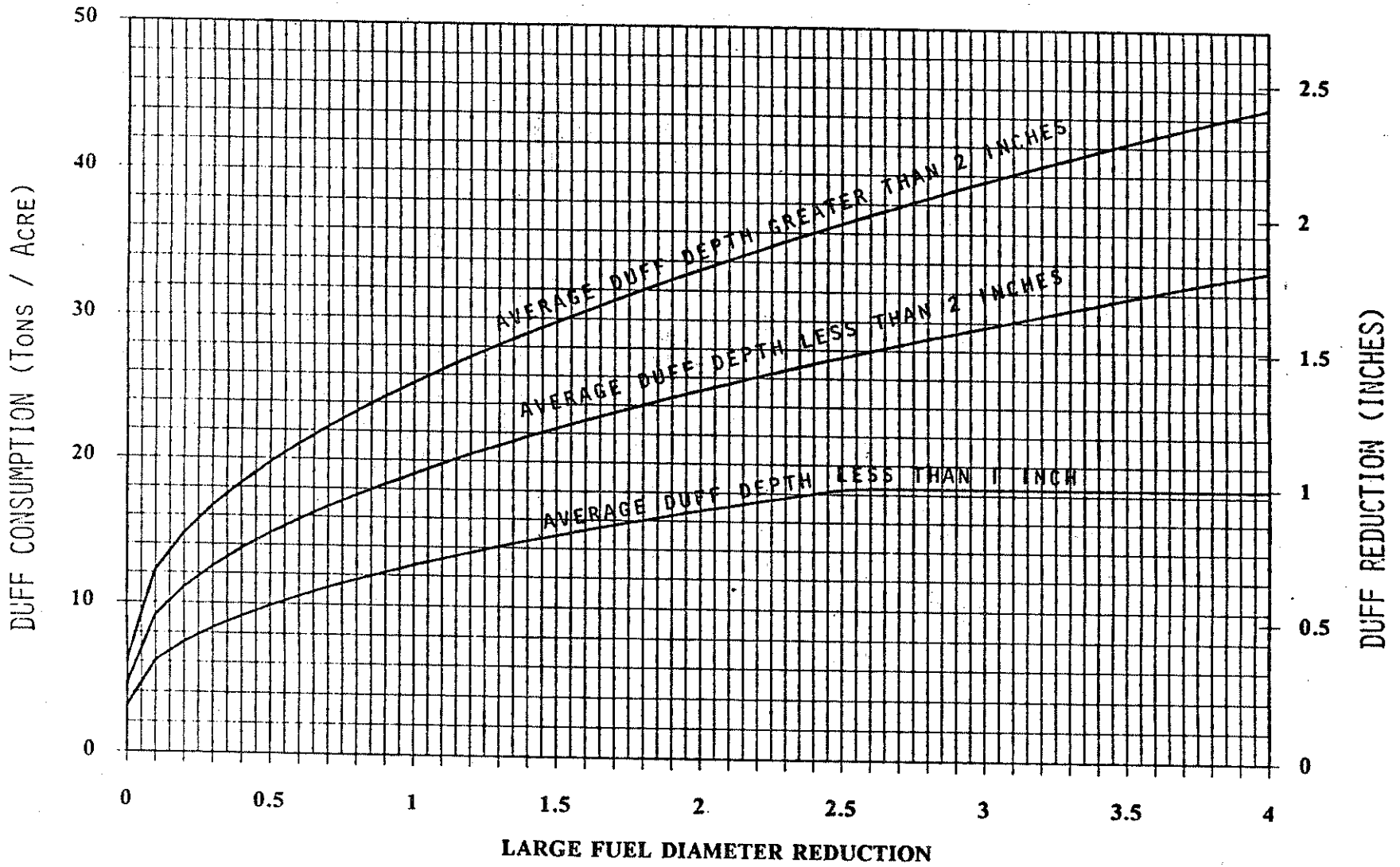


Large woody fuel consumption nomograph for spring-like burns.

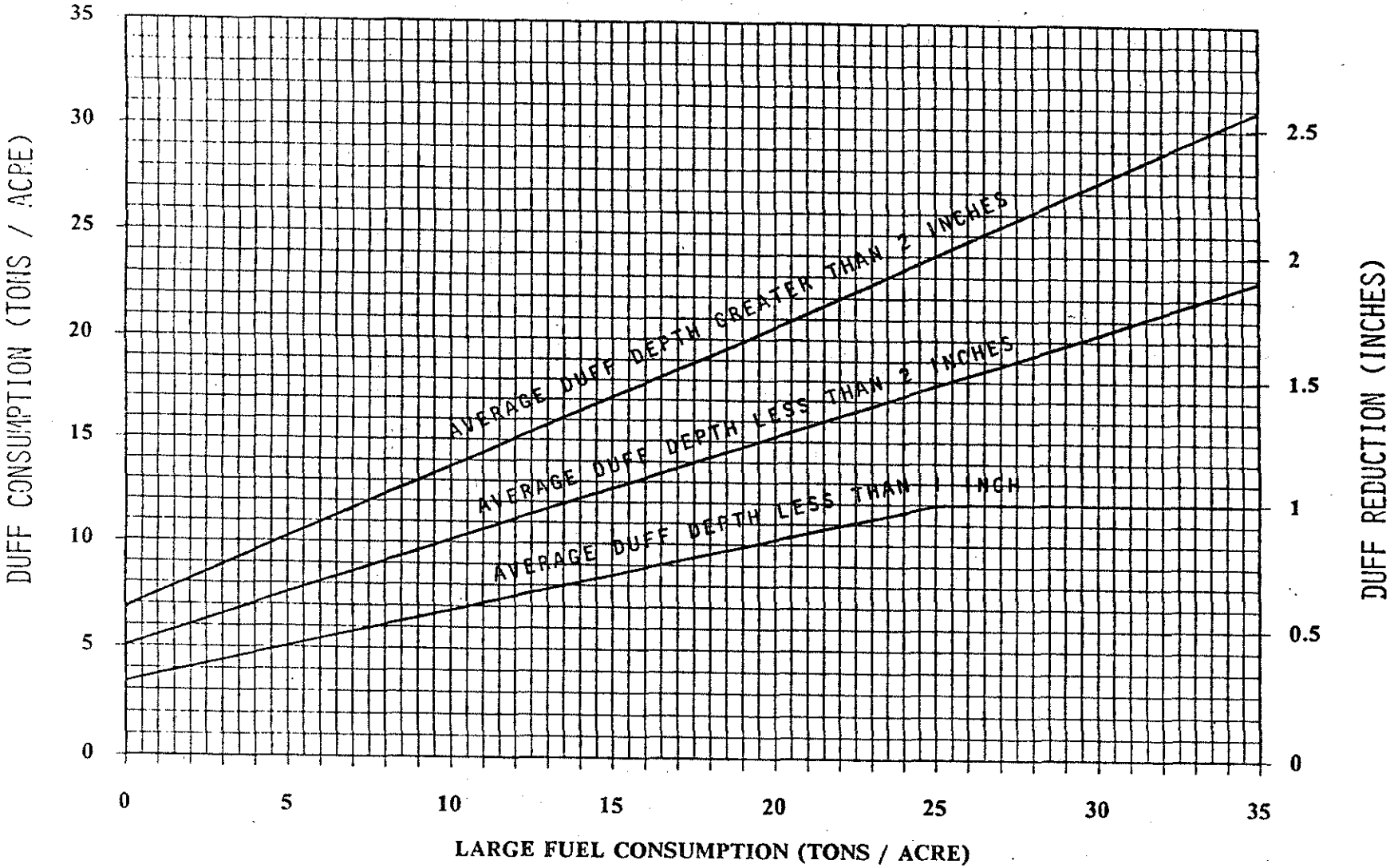
LESS THAN 25 DAYS SINCE
0.50 INCH OF RAIN
(Westside)



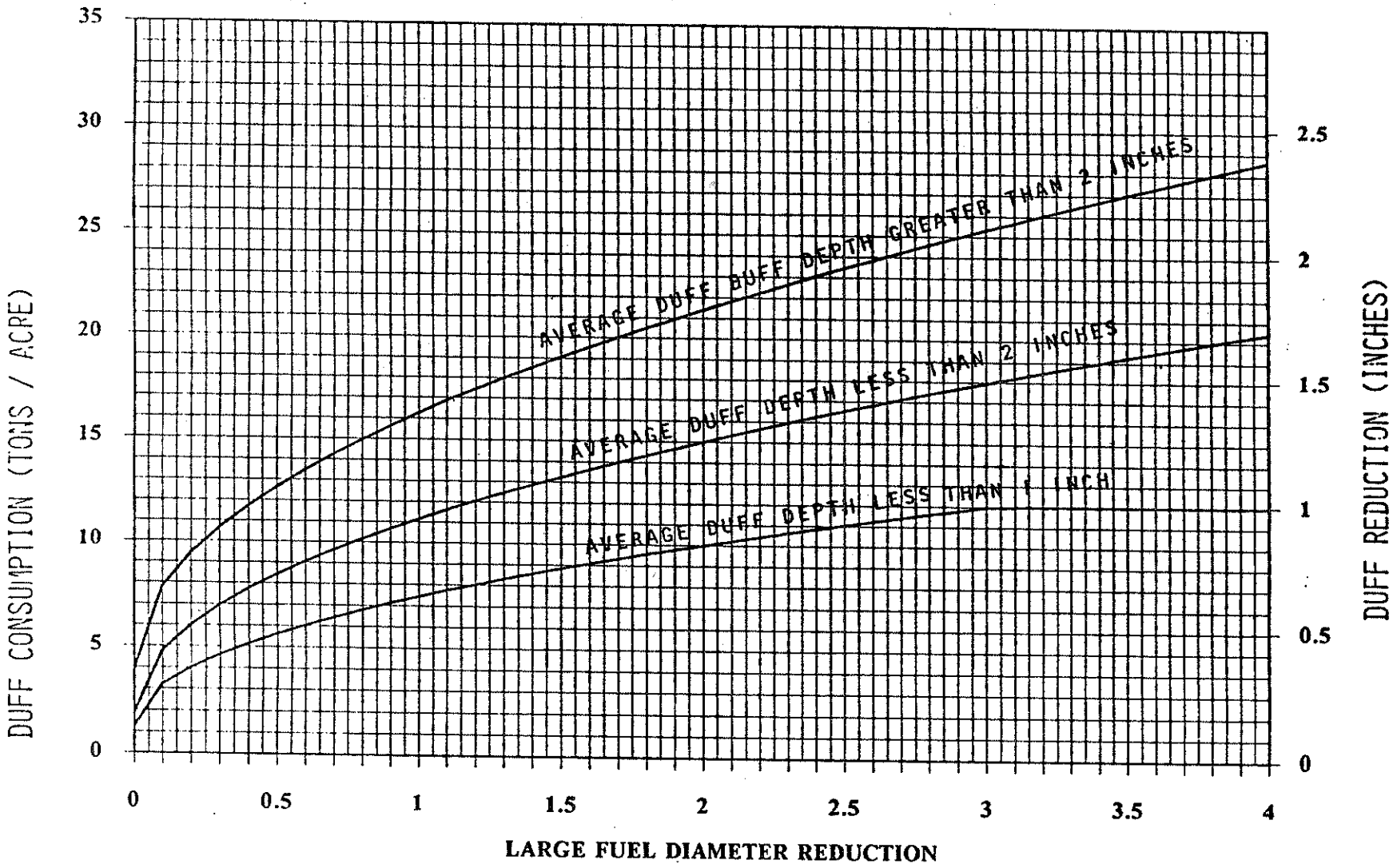
GREATER THAN 25 DAYS SINCE
0.50 INCHES OF RAIN
(Westside)



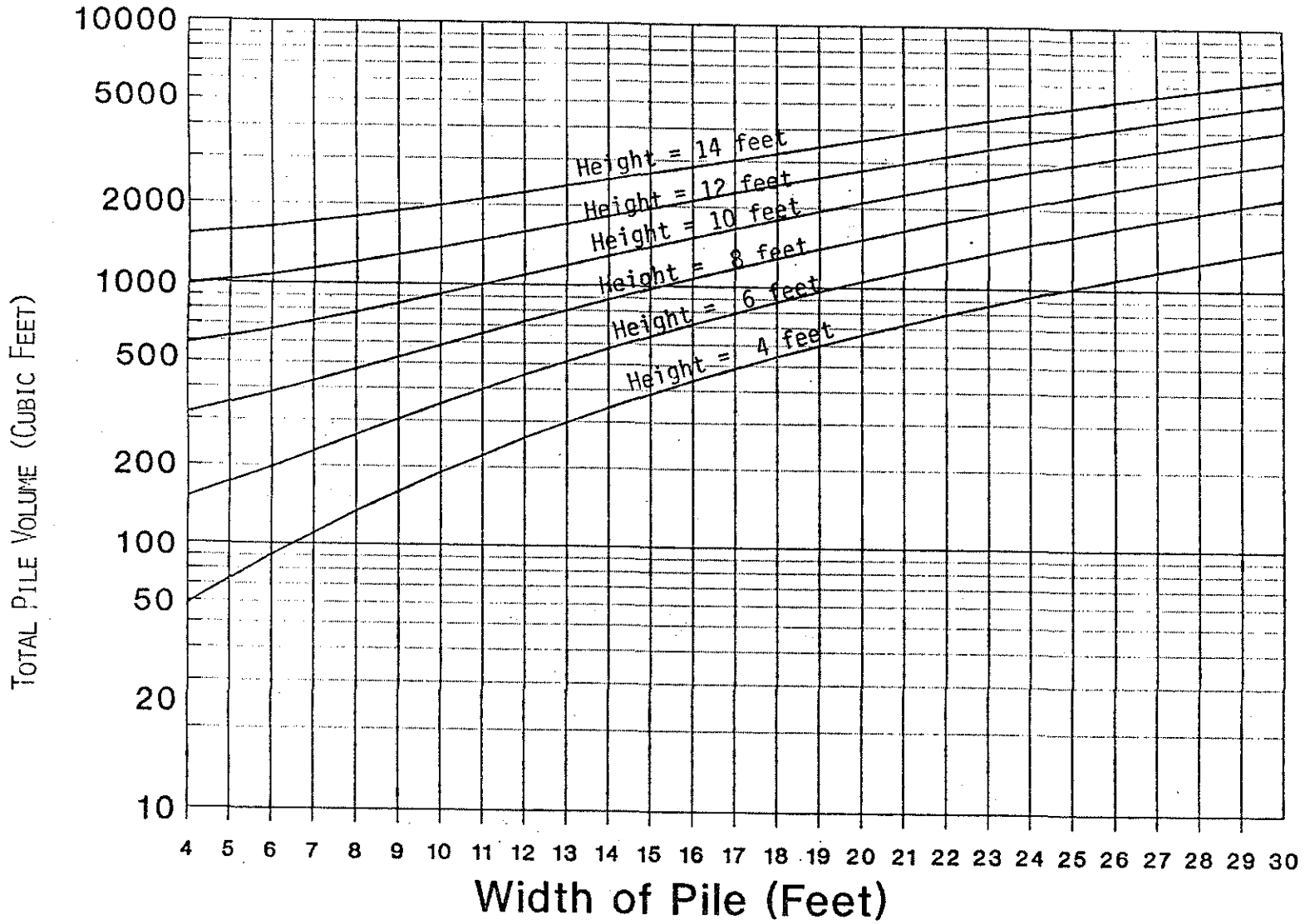
LESS THAN 25 DAYS SINCE
0.25 INCH OF RAIN
(Eastside)

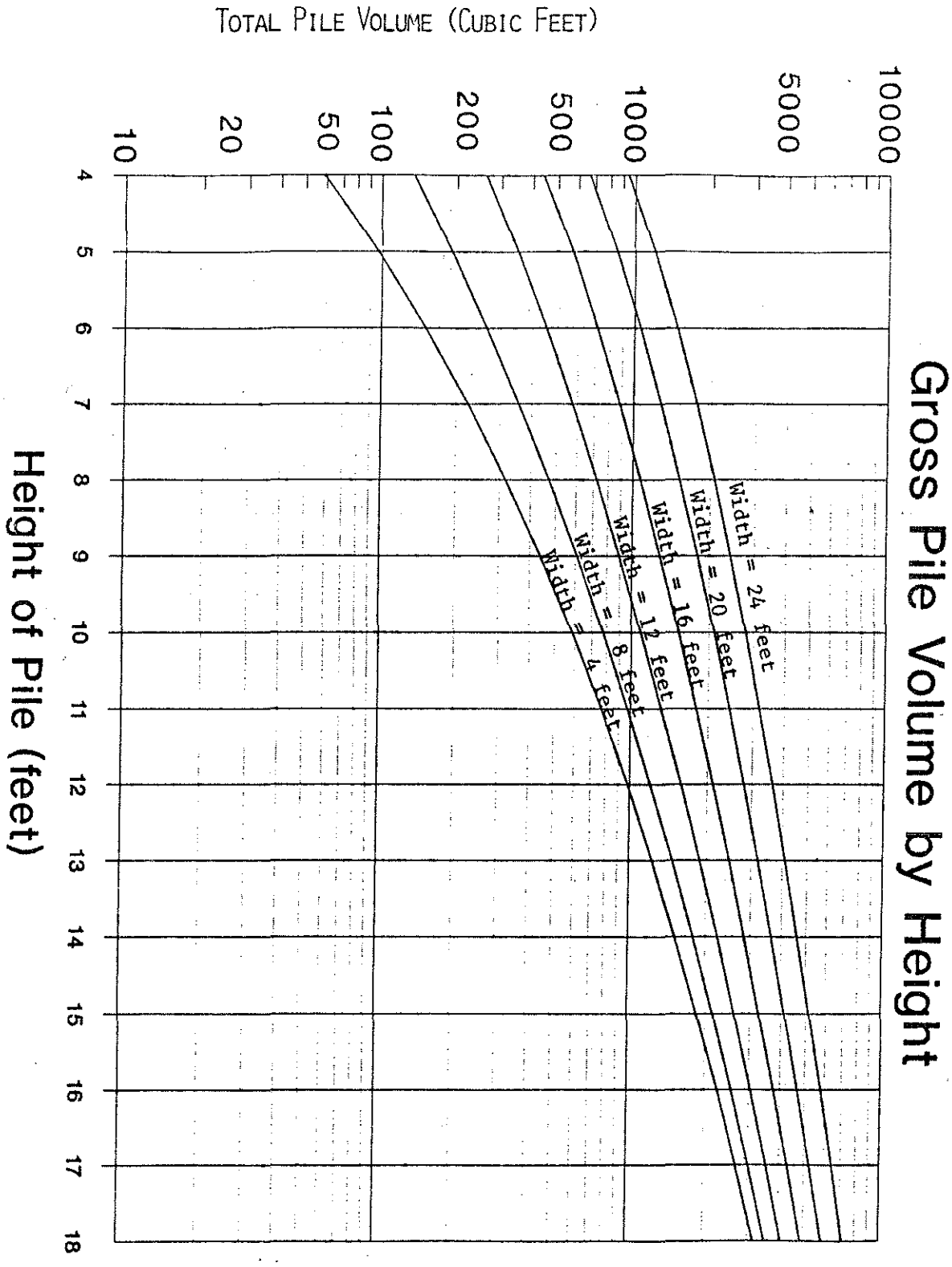


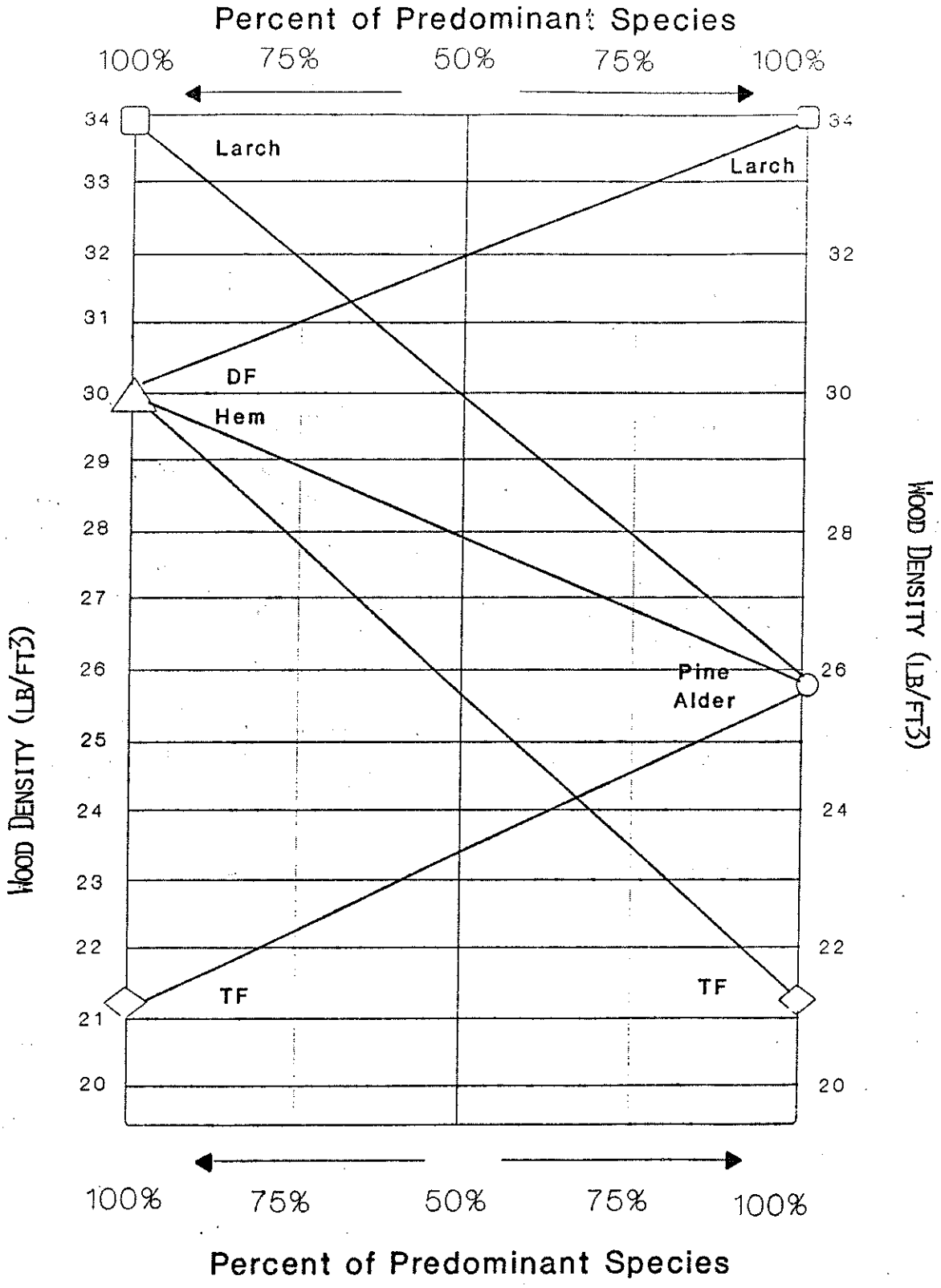
GREATER THAN 25 DAYS SINCE
0.25 INCHES OF RAIN
(Eastside)



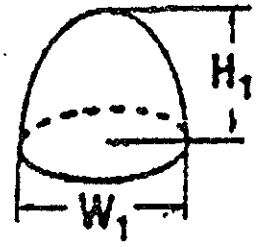
Gross Pile Volume by Width




Gross Pile Volume by Height
Total Pile Volume (Cubic Feet)
10
20
50
100
200
500
1000
5000
10000
Height of Pile (feet)
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
Width = 24 feet
Width = 20 feet
Width = 16 feet
Width = 12 feet
Width = 8 feet
Width = 4 feet

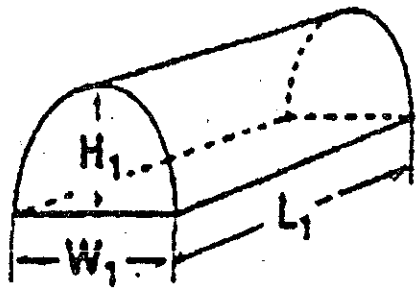

Percent of Predominant Species
100%
75%
50%
75%
100%
34
33
32
31
30
29
28
27
26
25
24
23
22
21
20
Larch
Larch
DF
Hem
Pine
Alder
TF
TF
Wood Density (LB/FT3)
Wood Density (LB/FT3)
100%
75%
50%
75%
100%
Percent of Predominant Species

SHAPE CODE 1



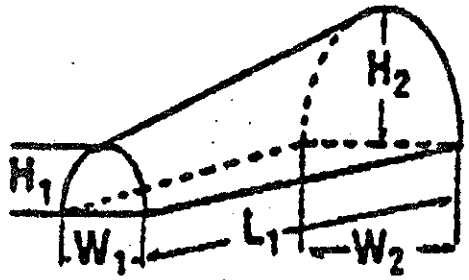
RECORD $W_1 H_1$

SHAPE CODE 2



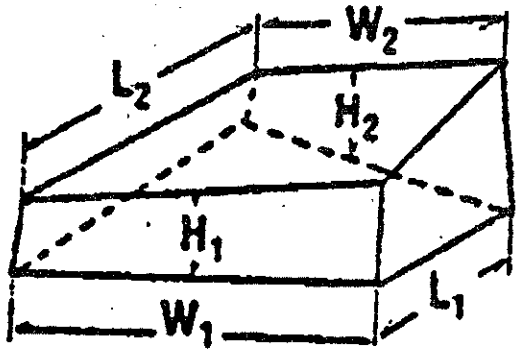
RECORD W_1 $H_1 L_1$

SHAPE CODE 3



RECORD W_1 H_1 W_2 H_2 L_1

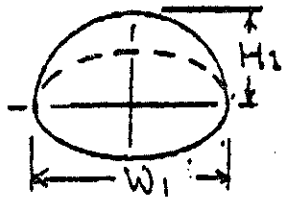
SHAPE CODE 4



RECORD W_1 H_1 W_2 H_2 L_1 L_2

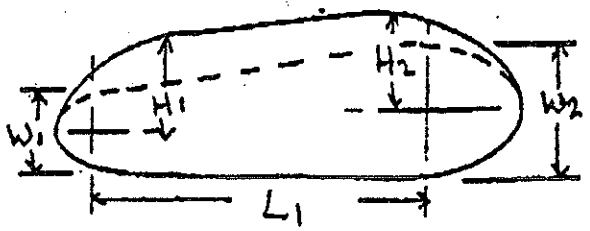
SHAPE CODE 5.
"squashed code 1"

Height (H_1) is less than ½ width (W_1)



Record H_1, W_1

SHAPE CODE 6
"Pear-shaped"



Record W_1 H_1 W_2 H_2 L_1

[APPENDIX 4

Special Protection Zone Requirements

Special Protection Zone (SPZ) boundaries are shown in the maps in this appendix.

These Special Protection Zones and these provisions shall be in effect from November 15 through February 15 each year. The zones shall initially be in effect for Klamath Falls, Medford and Oakridge as of [November 15], 1992. The zones shall initially be in effect for Grants Pass, Eugene and La Grande beginning November 15, 1993. The SPZ provisions will be implemented through the Smoke Management Plan provisions for Medford, Grants Pass, Oakridge and Eugene and will be implemented through voluntary landowner plans for Klamath Falls and La Grande.

Prescribed burning in the SPZ will be allowed only when the smoke management meteorologist believes there will be no measurable smoke impacts within the PM-10 nonattainment area.

Landowners are responsible for intermittent monitoring for at least 3 days to ensure the smoke is not causing an impact in the nonattainment city. ODF can provide a waiver to this provision if it believes that the monitoring is unnecessary on a specific burn unit. Landowners must provide a level of mopup, as directed by ODF, which will prevent or minimize smoke impacts upon the PM-10 nonattainment areas.

Between December 1, and February 15, no new ignitions will be allowed in the SPZ on a day that a "Red" day has been declared through the local woodstove curtailment program. No pile burning will be allowed if ODF believes that the piles will produce significant smoke after the third day.

The Zones and the provisions will apply as long as the city is in PM-10 nonattainment status. Zones will be developed by ODF and these provisions will apply for any newly declared PM-10 nonattainment area. The new Zones will go into effect on November 15 in the year the area is declared out of attainment, except if the area is declared out of attainment after June 1, in which case the new Zone will apply on November 15 of the following year and prescribed burning is demonstrated to be a significant source.]

Contingency Plan Requirements:

In the event that areas violate the PM-10 standards beyond statutory deadlines and prescribed burning is demonstrated to be a significant source, the following provisions will be implemented:

1. SPZ boundaries will be expanded to include the area from which burning could have a significant impact during the nonattainment period. The boundaries will be jointly agreed to by ODF and DEQ.

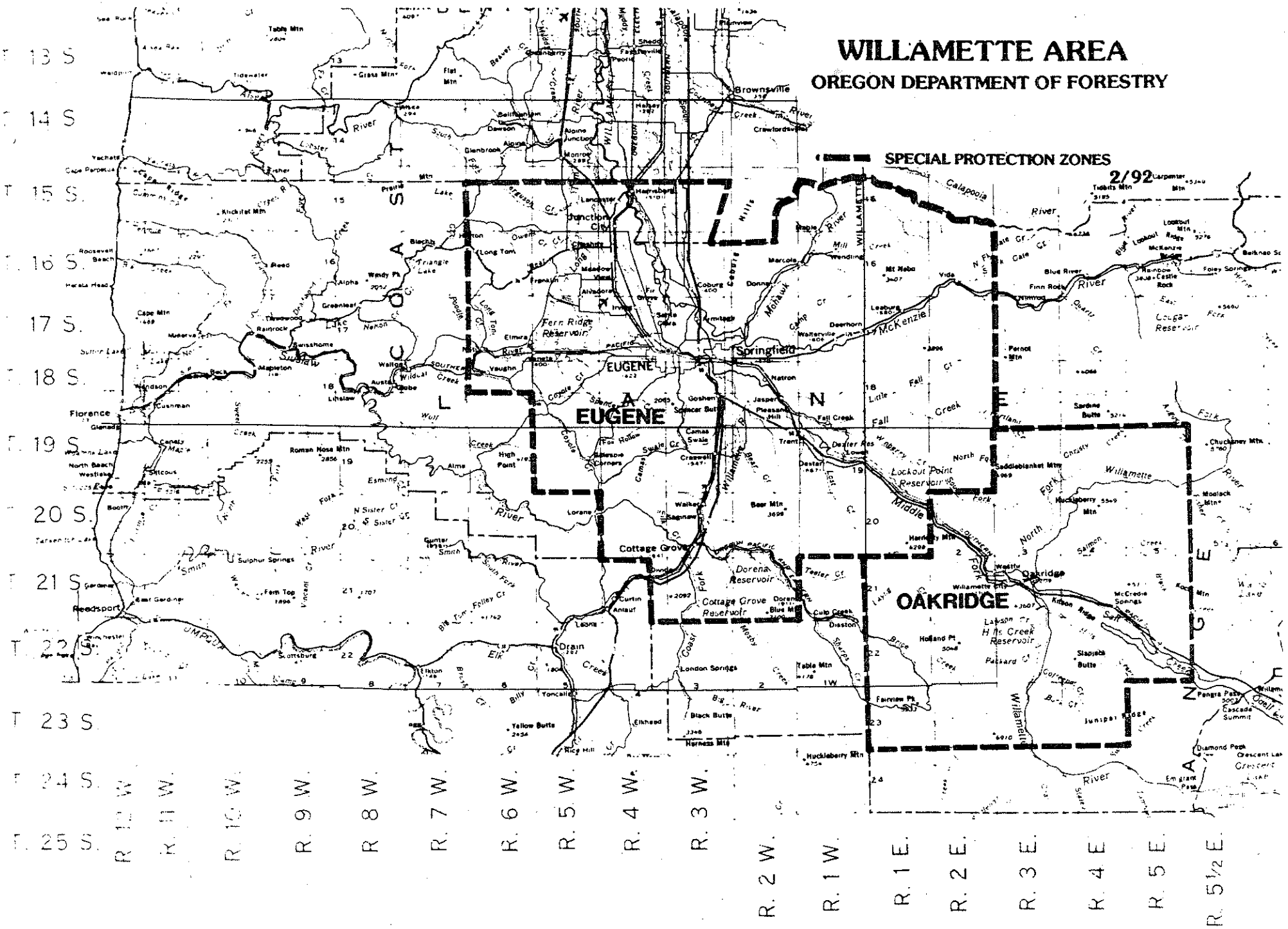
2. SPZ restrictions will apply November 1 to March 1, except in Klamath Falls. The Zones will be in effect November 1 to April 1 in Klamath Falls.

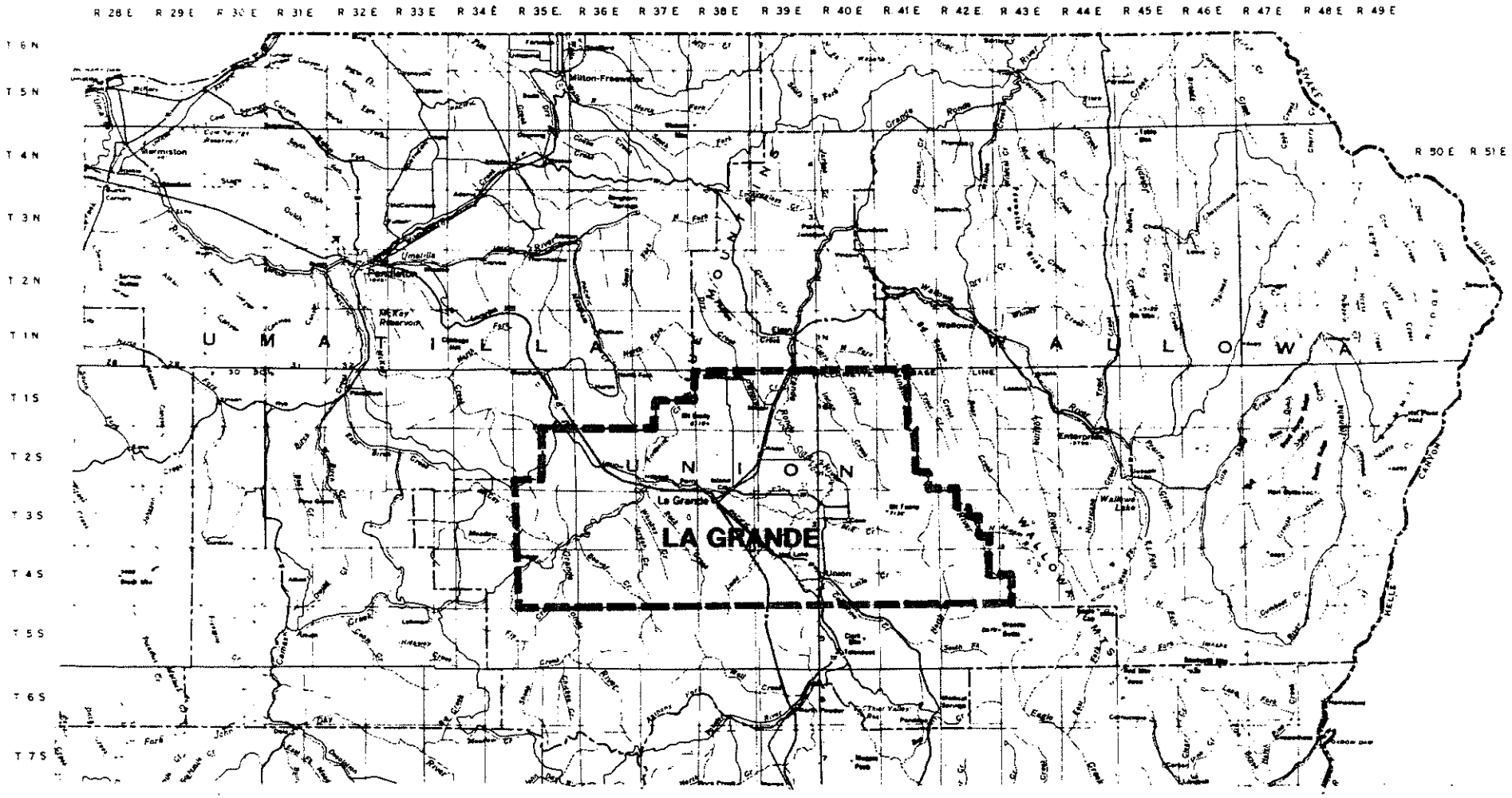
3. The Special Protection Zones around Klamath Falls and La Grande, as well as all future PM-10 nonattainment areas, will have mandatory smoke management programs during the time when the Zones are in effect. The nonattainment city shall be a Designated Area when the SPZ is in effect.

4. Prescribed burning will be prohibited within the Special Protection Zone during December and January if an impact of 5 to 10 micrograms per cubic meter, 24 hour average, is demonstrated by air quality monitoring, after the contingency provisions are in effect. Burning will be prohibited November 1 to March 1 if an impact of 10 micrograms per cubic meter, 24 hour average, as demonstrated by monitoring, after the contingency provisions go into effect. ODF and DEQ must jointly agree on the magnitude and duration of the impact, before these provisions are enacted, and apply only to burning from the SPZ during the SPZ protection period.

WILLAMETTE AREA

OREGON DEPARTMENT OF FORESTRY



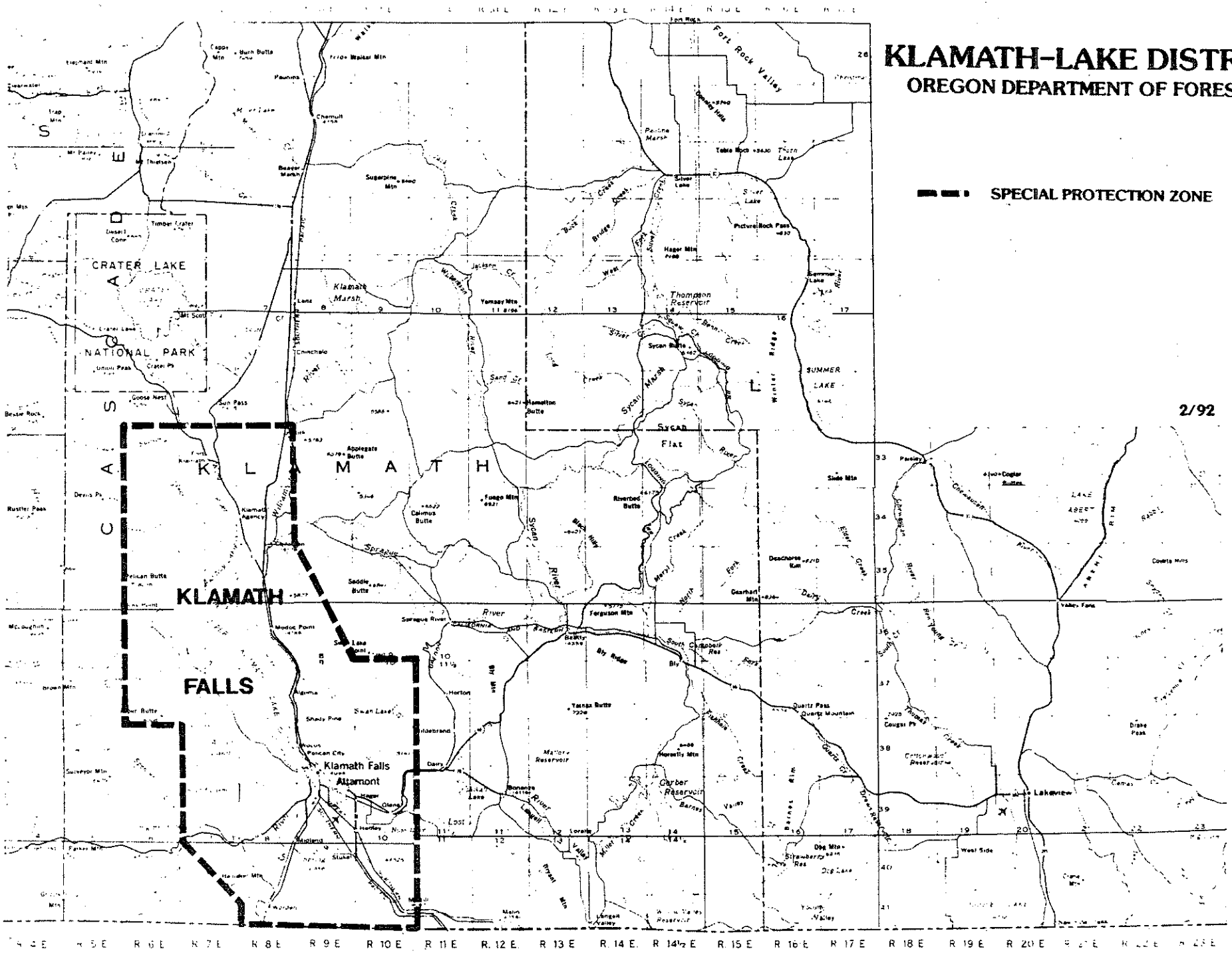


NORTHEAST OREGON

OREGON DEPARTMENT OF FORESTRY

SPECIAL PROTECTION ZONE

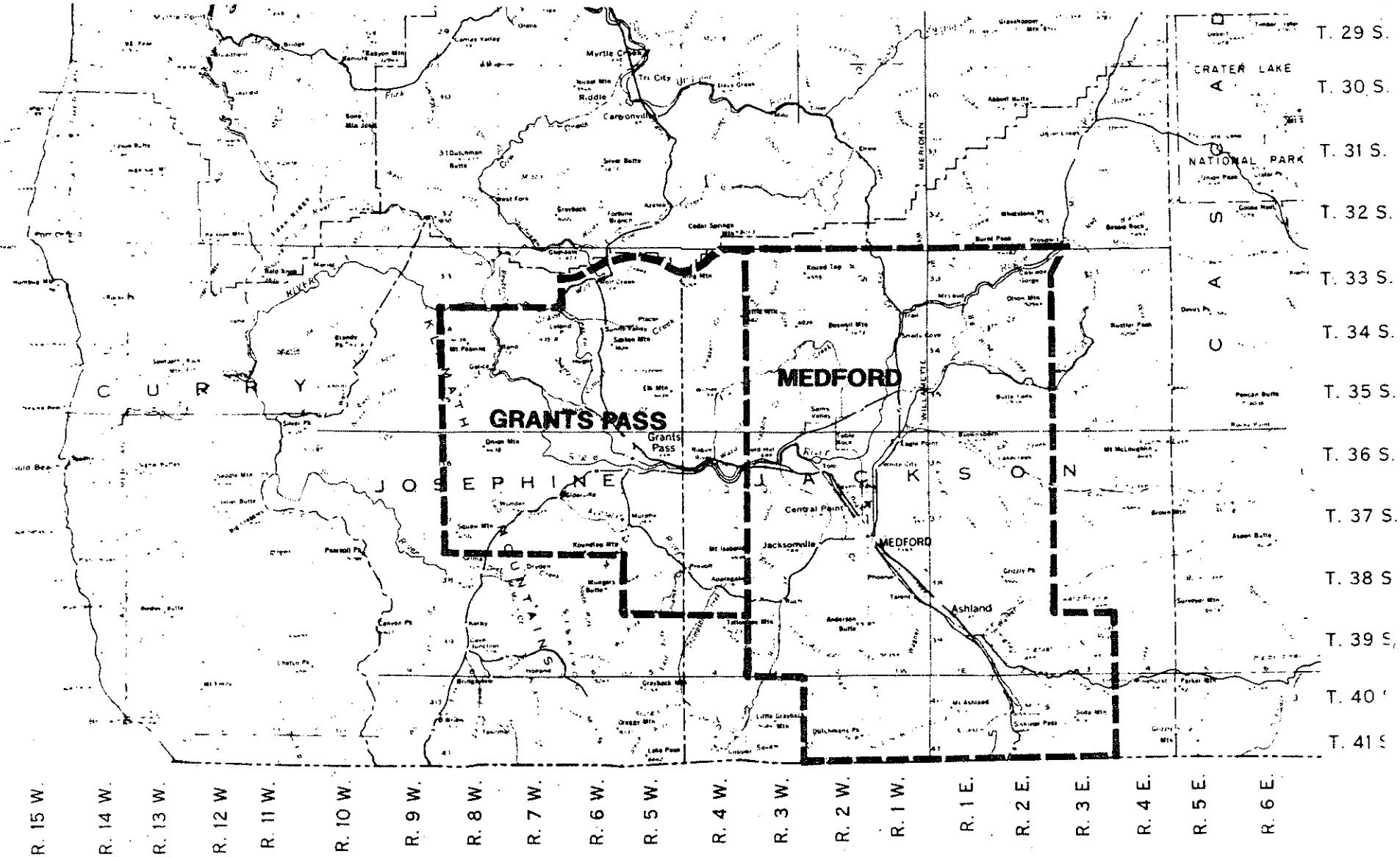
2/92


KLAMATH-LAKE DISTRICT
OREGON DEPARTMENT OF FORESTRY
SPECIAL PROTECTION ZONE
2/92
CRATER LAKE
NATIONAL PARK
KLAMATH
FALLS
Klamath Falls
Altamont
Lakeview
Fort Rock Valley
Klamath Marsh
Thompson Reservoir
Sycan Marsh
Sycan Flat
SUMMER LAKE
Gerber Reservoir
Malheur Reservoir
Upper Klamath Lake
Agency Lake
Sprague River
Williamson River
Sycan River
Wood River
Lost River
Link River
Klamath River
Applegate Butte
Fuego Mtn
Calimus Butte
Saddle Butte
Pelican Butte
Modoc Point
Ferguson Mtn
Bly Ridge
Tennas Butte
Horsefly Mtn
Quartz Pass
Quartz Mountain
Side Mtn
Coyote Buttes
Coyote Hills
Drake Peak
Deschutes Mtn
Gearhart Mtn
Hager Mtn
Picture Rock Pass
Table Rock
Yonna Mtn
Hamilton Butte
Sycan Butte
Riverbed Butte
Chemult
Crescent
Paisley
Valley Falls
Dairy
Bly
Merrill
Malin
Tulelake
Dog Mtn
Strawberry Mtn
Dog Lake
Yonna Valley
Langell Valley
Bonanza
Lorella
Midland
Shady Pine
Horton
Odessa
Olene
Henley
Stukel
Shiloh
Sheepy Ridge
Mt Scott
Timber Crater
Desert Cone
Chiloquin
Crater Pk
Sun Pass
Goose Nest
Rustler Peak
Devils Pk
Brown Mtn
Surveyor Mtn
Gerber Mtn
Collier Butte
Mt Thielsen
Diamond Peak
Mt Bailey
Trapper Mtn
Cappy Mtn
Bunch Butte
Pumice Butte
Pumice Mtn
Pauline Marsh
Beaver Marsh
Sugarpine Mtn
Jackson Cr
Yonna Mtn
Hamilton Butte
Sycan Butte
Picture Rock Pass
Hager Mtn
Table Rock
Thorn Lake
Silver Lake
Summer Lake
Winter Ridge
Abert Rim
Lake Abert
Coleta Mtns
Cougar Buttes
Cougar Pk
Quartz Mtn
Catchall Reservoir
Barnes Valley
Barnes Rim
Drews Reservoir
Drews Creek
Valley Falls
Dairy Creek
Bly Mtn
Bly Ridge
Ferguson Mtn
Riverbed Butte
Deschutes Mtn
Gearhart Mtn
Side Mtn
Paisley
Coyote Buttes
Lake Abert
Abert Rim
Coleta Mtns
Drake Peak
Cougar Pk
Quartz Mtn
Catchall Reservoir
Barnes Valley
Barnes Rim
Drews Reservoir
Drews Creek
Valley Falls
Dairy Creek
Bly Mtn
Strawberry Mtn
Dog Mtn
Dog Lake
Yonna Valley
Langell Valley
Bonanza
Lorella
Midland
Shady Pine
Horton
Odessa
Olene
Henley
Stukel
Shiloh
Sheepy Ridge
Mt Scott
Timber Crater
Desert Cone
Chiloquin
Crater Pk
Sun Pass
Goose Nest
Rustler Peak
Devils Pk
Brown Mtn
Surveyor Mtn
Gerber Mtn
Collier Butte
Mt Thielsen
Diamond Peak
Mt Bailey
Trapper Mtn
Cappy Mtn
Bunch Butte
Pumice Butte
Pumice Mtn
Pauline Marsh
Beaver Marsh
Sugarpine Mtn
Jackson Cr
R 5 E
R 6 E
R 7 E
R 8 E
R 9 E
R 10 E
R 11 E
R. 12 E.
R 13 E
R 14 E.
R 14½ E
R 15 E
R 16 E
R 17 E
R 18 E
R 19 E
R 20 E

SOUTHWEST OREGON DISTRICT

OREGON DEPARTMENT OF FORESTRY

SPECIAL PROTECTION ZONES 2/92



RULEMAKING STATEMENTS FOR INCORPORATION OF AMENDMENTS TO THE SLASH BURNING SMOKE MANAGEMENT PLAN AS A REVISION TO THE STATE IMPLEMENTATION PLAN

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-20-047, the Oregon Clean Air Act Implementation Plan. The amendments are proposed under authority of Oregon Revised Statutes (ORS) Chapters 468 and 477.

(2) Need for these Rules

Smoke from forest slash burning occassionally impacts PM_{10} nonattainment. During the public hearing process, significant public comments were made to the effect that greater protection of the nonattainment areas from forest slash burning smoke is needed.

The need for additonal protection of PM_{10} nonattainment areas and Clean Air Act requirement that states meet federal deadlines for attainment of the PM_{10} ambient air quality standard, requires that revisions in the Oregon Department of Forestry Smoke Management Plan be made. Oregon statutes require that the Oregon Department of Forestry and the Director of the Department of Environmental Quality jointly approve a plan for the purpose of managing smoke from forestry burning.

Proposed revisions to the Smoke Management Plan include establishment of 20 mile Special Protection Zones surrounding each nonattainment area. Forestry burning within the zones during November 15 through February 15th would be allowed only if there is no chance of smoke impact. No new ignitions within the surrounding zone would be allowed on "Red" woodburning curtailment days. Contingency plans to be implemented if the airshed fails to attain air standards by December 31, 1991, (coupled with a demonstration that slash burning smoke is a significant contributor to nonattainment) include expansion of the Protection Zone period to November 1 to March 1, a prohibition on zone burning between December 1 and February 1 as well as mandatory (rather than voluntary) smoke management programs on forestry lands surrounding the La Grande or Klamath Falls nonattainment areas.

(3) Principal Documents Relied Upon

The Clean Air Act Amendments of 1990, Title I. 42 U.S.C. 7401 et seq., as amended. November 15, 1990.

Operational Guidance for the Oregon Smoke Management Program, Directive 1-4-1-601. State of Oregon Department of Forestry.

Previous staff reports to the Environmental Quality Commission (EQC):

Agenda Items L through P, November 8, 1991 EQC Meeting, Adoption of PM_{10} Control Strategies for the LaGrande, Grants Pass, Klamath Falls, Medford-Ashland and Eugene/Springfield Nonattainment Areas.

Agenda Item E, December 12, 1986 EQC Meeting, Adoption of Slash Burning Smoke Management Plan Revisions as an Amendment to the State Implementation Plan (OAR 340-20-047).

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

JEC:a
RPT\AHxxx
(2/6/92)

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED REVISIONS TO THE OREGON FORESTRY SMOKE MANAGEMENT PROGRAM AS A REVISION TO THE STATE IMPLEMENTATION PLAN**

PROPOSAL SUMMARY

The proposed revisions to the Oregon Department of Forestry Smoke Management Plan affect private, state and federal forest land owners as well as contractors that provide prescribed burning services.

IMPACT ON FOREST LAND OWNERS

Emissions from pile burning will be reduced by the proposed requirement to monitor and, where needed, extinguish smoldering piles. Air quality impacts from prescribed burning will be reduced through the Special Protection Zone (SPZ) restrictions rescheduling zone burning to periods with more favorable smoke dispersion conditions.

The additional cost to forest land owners is estimated at $200,000 per year to reschedule burning, for additional monitoring and for fire mop-up costs. These costs are based on the following assumptions: (1) 20% of these acres are burned before or after the SPZ restrictions are in effect, adding an extra cost of $15 per acre and (2) that 20% of the acreage is not burned but is treated by alternative methods resulting in an additional cost of $76 per acres. The costs will be spread evenly between the SPZs.

If all new ignitions within the SPZs are prohibited on "Red" woodstove curtailment days, burning on a maximum of 66 days per year would need to be rescheduled. Forty of these 66 days are expected to occur within the Klamath Falls SPZ.

CONTINGENCY PLAN IMPACT ON FOREST LAND OWNERS

If any of Oregon's five nonattainment areas fail to attain the air quality standards by the Clean Air Act deadline of December 31, 1994 and if slash burning smoke is identified as a significant contributing source, the Smoke Management Program contingency plan will be triggered. As a worst case condition, if the contingency plans for all six PM_{10} nonattainment area are activated and if a total of 15,600 acres of burning is restricted each year, the estimated cost to landowners is estimated at $700,000 annually. This estimate assumes that 20% of the acreage is burned before or after the SPZ restrictions go into effect (at an added cost of $20 per acre) and that 50% of the acreage is not burned but treated by

alternative methods at $76 per acre.

IMPACT ON STATE AND LOCAL GOVERNMENT AGENCIES

If full implementation of all six Special Protection Zones restricts the burning of 7,800 acres, the total cost to the Oregon Department of Forestry (ODF) to administer the program is estimated at about $90,000 per year through the addition of 1.3 FTE to ODF and other agency's Smoke Management Programs. Additional costs associated with the contingency plan are estimated at addition of 5 FTE to the ODF and other agency's regulatory and administrative staff at an annual cost of $350,000 per year. These are additional costs that the Department of Forestry would have to seek through their budget process.

IMPACT ON SMALL BUSINESS OWNERS

There may be some adverse fiscal impact on small businesses (less than 50 employees). This would be small forest contractors who are hired to conduct prescribed burning, tree planting, and other work by state and federal agencies and private industry. The potential impact of the SPZ and contingency burning restrictions on small forest contractors is unknown. The number of contractors involved in this work in SPZ areas is also unknown. However, based on the above description of impact on forest land owners, it is not expected to be disproportionate to the above stated costs.

JEC:bf
RPT\AHxxx
3/30/92

ATTACHMENT D

NOTICE OF PUBLIC HEARING

Hearing Dates: May 18, 19, 20, 22, 1992

Comments Due: May 22, 1992

WHO IS AFFECTED:

Individuals who live in PM_{10} nonattainment areas, and private, state, and federal forest land managers who utilize prescribed fire as a management tool.

WHAT IS PROPOSED:

Revisions to the Oregon Slash Burning Smoke Management Plan, to provide additional protection to PM_{10} Nonattainment Areas.

WHAT ARE THE HIGHLIGHTS:

The proposed revisions to the Smoke Management Plan are as follows:

- Establish Special Protection Zones (SPZs) within 20 miles of PM_{10} Nonattainment areas in western Oregon between Nov. 15 and Feb. 15. Requirements within these SPZs would be:
  - prohibit zone burning if smoke intrusion into adjacent nonattainment area is likely;
  - require burns be monitored for at least 3 days and fires extinguished to prevent smoke impacts in adjacent nonattainment areas from smoldering fires;
  - prohibit new ignitions on "Red" woodburning curtailment days in adjacent nonattainment areas between December 1 and February 15th;
- Establish Contingency Measures in the event a PM_{10} nonattainment area fails to attain federal air quality standards by the Clean Air Act deadline, and slash smoke if found to be a significantly contributor to PM_{10} nonattainment. These contingency measures would:
  - expand SPZs to include more of the burning activity;

- o expand zone restrictions to November 1 to March 1;
- o prohibit burning within SPZs in December and January for slash impacts greater than 5 $\mu g/m^3$ (24-hour average), or prohibit burning Nov. 1 to March 1 for impacts greater than 10 $\mu g/m^3$ PM_{10};
- o establish mandatory smoke management programs near La Grande and Klamath Falls.

- o Revise the definition of slash to exclude brush generated by residential development landclearing, so that it is subject to the Department's open burning rules; and
- o Reschedule periodic reviews of the Plan from three to five year intervals.

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact Brian Finneran at (503) 229-6278.

A public hearing will be held before a hearings officer at:

7:00 pm
May 18, 1992
Sumner Hall, Rm 12
SW Oregon Comm. College
1988 Newmark
Coos Bay, Oregon

7:00 pm
May 19, 1992
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
May 20, 1992
Zabel Hall, Rm 110
Eastern Oregon State Coll.
La Grande, Oregon

3:00 pm
May 22, 1992
Conference Room 10A
DEQ Headquarters
811 SW Sixth
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received by no later than **5 pm, May 22, 1992.**

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U.S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The

Commission's deliberation should come on July 23, 1992, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

BRF:brf
RPT\AHxxx
(3/30/92)

Attachment E

DEQ LAND USE EVALUATION STATEMENT FOR RULEMAKING
AMENDMENTS TO THE SLASH BURNING SMOKE MANAGEMENT PLAN

(1) Explain the purpose of the proposed rules.

Amend the Slash Burning Smoke Management Plan to provide greater protection from slash smoke impacts in Visibility protection and PM_{10} control strategies.

(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: Not Applicable.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes ___ No ___

If no, explain: Not Applicable.

(c) If no, apply criteria 1. and 2. from the instructions for this form and from Section III Subsection 2 of the SAC program document 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 proposed rules do not affect programs which are:

(1) Specifically referenced in the statewide planning goals; or
(2) Reasonably expected to have significant effects on:
    (a) resources, objectives or areas identified in the statewide planning goals, or
    (b) present or future land uses identified in acknowledged comprehensive plans.

(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.

Not Applicable.

Sue Greenwood — Air Quality Division

Roberta Young — Intergovernmental Coord.

4-8-92 — Date

BRF:adg
RPT\AHxxxx
(3/3/92)

James E. Brown, State Forester
Oregon Department of Forestry
2600 State Street
Salem, Oregon 97310

June 28, 1991

Fred Hansen, Director
Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

Dear Jim and Fred,

In the summer of 1990, you appointed 10 members to serve on an advisory Committee to review the Oregon Smoke Management Plan (SMP). The Committee was to make recommendations jointly to ODF and DEQ, that you would take under advisement in your review of the Oregon Smoke Management Plan. The Committee was composed of a diverse mixture of the public, land managers, agencies and interest groups. The members of the Committee are listed in Attachment 1.

The Committee held 6 meetings, 3 in Salem and one each in Medford, Redmond and Newport. The committee heard from guest speakers, had public testimony at the first four meetings and ensured that all meetings were well advertised and were open to the public. The purpose of this letter is to advise you of the Smoke Management Plan Review Advisory Committee's recommendations.

ISSUES:
The individual Committee members brought a total of 25 issues to the table, in order to gather information and make recommendations. From that initial list of issues, the Committee prioritized the list down to the 4 issues which were believed to be the highest priority. The Committee decided to work to make recommendations on those issues first and with any time remaining, work on the other issues. The issues are listed as attachment 2.

In addition to the initial issues, John Core of the DEQ brought before the Committee the additional issue of what recommendations should be made in regard to the control strategies of the PM-10 nonattainment areas. The 1990 amendments to the Clean Air Act brought this need forward and the Committee decided to make recommendations for the control strategies at the last meeting.

COMMITTEE RECOMMENDATIONS:
The Committee reached agreement on the following recommendations for changes to the Oregon Smoke Management Plan:

1. Incorporate the nomographs contained in Improved Prediction of Fuel Consumption During Spring-Like Prescribed Burns into the 1991 Smoke Management Plan. Incorporate new emission consumption model input requirements into the ODF Directives.

2. Encourage further review and refining of fuel consumption nomographs.

3. Landowners should notify nearby residents of planned burning and do what is reasonably possible to offset potential discomfort of the residents while addressing the requirements of the Smoke Management Plan.

4. ODF should explore the development of a priority system for forest land burning, covering all landowners, to allocate burning opportunities to those units most needing treatment, with consideration for alternative practices.

5. The Department of Forestry should contract or arrange a benefit/cost analysis of the Smoke Management Plan on a regional and statewide basis. The study should analyze to what extent the Smoke Management Plan is affecting forest productivity and the long term economy of Oregon. The study should compare these calculations with hypothetical benefits and costs that would exist if the Plan were not in effect. The sensitivity of the analysis to discount rate and future market price assumptions should be illustrated.

6. ODF should provide a report of smoke intrusions into Designated Areas and other areas sensitive to smoke, at each 3 year review of the SMP. The report should analyze the causes of intrusions and recommend SMP improvements to prevent future intrusion events.

7. DEQ and LRAPA should lead in the formation of local air quality regulator coordination groups. The coordination groups would ensure that other air quality administrators be informed of air quality status and possible air quality deterioration episodes. The coordination group would establish procedures to answer public inquiries and complaints. The groups should also keep the local media informed of the general air quality, air quality issues and what the sources of pollution in the specific area are.

8. A Special Protection Zone (SPZ) concept should be established within the Smoke Management Plan. The Zone would be established around PM-10 nonattainment areas and would serve to further protect those areas from smoke impacts. The specific boundaries for each area would be finalized by ODF and DEQ, would be drawn topographically and would be set a minimum of 20 miles from the border of the nonattainment area. The zones should be in effect from November 1 to March 1 each year, until that area is declared "In attainment" with PM-10 standards. Prescribed burning should be strictly regulated within the zone, allowing no burning where any chance exists to get any smoke into the nonattainment area. Burning advisories and instructions will be prepared daily, when

needed, by the ODF smoke management staff. Mop-up should be utilized, when necessary, as an additional protective measure. The SPZ should be implemented through mandatory SMP procedures for Medford, Grants Pass, Eugene and Oakridge. The SPZ should be implemented through voluntary smoke management programs in Klamath Falls and La Grande.

9. The SMP should incorporate two special situation emission model procedures, as soon as the models are deemed reliable. The two special situations are; Burning uncured fuels soon after harvest and burning when conditions for "Mass Fire" exist. Mass Fire is when fuel, ignition methods and weather conditions lead to a flash fire through the unit. Both of these special situations result in lower than normal emissions.

The Committee also endorsed the concept of establishing a voluntary smoke management program on those forest lands around Bend which are not currently part of the Restricted Area.

The Committee also recommends the following protective measures be added as the prescribed burning control strategies for the PM-10 nonattainment area control plans for the SIP.

Klamath Falls Control Strategy:

Reasonably Available Control Measures:

1. Implement the Special Protection Zone through the Voluntary Smoke Management group already in place.

Contingency Measures:

1. Establish a year-around smoke management program, with Klamath Falls established as a SMP Designated Area. The forest lands within Klamath County and within the ODF Klamath-Lake District boundaries should be Restricted Areas.

2. Require 5 day mandatory unit monitoring, with mop-up as needed, to prevent smoke intrusions from the SPZ.

La Grande Control Strategy:

Reasonably Available Control Measures:

1. Implement the Special Protection Zone through a Voluntary Smoke Management group which is to be put in place.

Contingency Measures:

1. Establish a year-around smoke management program, with La Grande established as a SMP Designated Area. Forest Lands surrounding La Grande should be Restricted Areas.

Medford, Grants Pass and Eugene Control Strategy:

Reasonably Available Control Measures:

1. Along with the existing SMP control measures, implement Special Protection Zones through mandatory SMP procedures.

Contingency Measures:

1. Require 5 day mandatory unit monitoring, with mop-up as needed, to prevent smoke intrusions from the SPZ.

Oakridge Control Strategy:

Reasonably Available Control Measures:

1. Implement a Special Protection Zone through mandatory SMP procedures.

Contingency Measures:

1. Require 5 day mandatory unit monitoring, with mop-up as needed, to prevent smoke intrusions from the SPZ.

We believe that the Committee has diligently and faithfully worked toward recommendations which are intended to achieve progress toward public health protection, meeting environmental standards and maintaining the ability of the forest land manager to use prescribed fire as a forest management tool.

Sincerely,

John Core
Co-Chair, Smoke Management Plan Review Advisory Committee
DEQ, Air Quality Division

Don Matlick
Co-Chair, Smoke Management Plan Review Advisory Committee
ODF, Smoke Management and Fuels Program

DEM
Attachments (2)

ATTACHMENT G

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY INTEROFFICE MEMORANDUM

DATE: July 7, 1992

TO: Environmental Quality Commission

FROM: Brian Finneran, Hearings Officer

SUBJECT: Hearings Report for Smoke Management and Visibility Plan Amendments

Four hearings were held to accept testimony on amendments to the Oregon Slash Burning Smoke Management Plan, and amendments to the Oregon Visibility Protection Plan. These amendments were authorized for public hearing by the Director on April 10, 1992.

Although these amendments are separate rulemaking actions, they are interrelated by each being administered by the Oregon Department of Forestry and tied to the practice of prescribed (slash) burning. Therefore, these amendments were held concurrently, with a representative from the Oregon Department of Forestry (Don Matlick) also in attendance.

On May 18, 1992, a public hearing was held for both amendments at Sumner Hall, Room 12, S.W. Oregon Community College, Coos Bay, Oregon. There were 6 persons in attendance; no verbal testimony was given, one written comment was submitted.

On May 19, 1992, a public hearing was held for both amendments at the Smullen Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 10 persons in attendance, seven gave verbal testimony and 4 written comments were received.

On May 20, 1992, a public hearing was held for both amendments at Zabel Hall, Room 110, Eastern Oregon State College, La Grande, Oregon. 13 persons were in attendance; 2 gave verbal testimony and 2 written comments were received.

On May 22, 1992, a public hearing was held for both amendments at Conference Room 10A, DEQ Headquarters, 811 SW Sixth Avenue, Portland, Oregon. 7 persons attended; 3 gave verbal testimony and 3 written comments were received.

A total of 10 additional persons submitted written comments prior to the May 22, 1992 deadline.

Memo To: Environmental Quality Commission
July 7, 1992

The following is a summary of the issues raised during the public comment period, both oral and written, followed by the Department's response. A list of the names of those who provided public testimony appears at the end of this report.

I. Smoke Management Plan Issues/Department Response:

1. **The 20 mile SPZ boundaries should be larger to better protect the PM_{10} nonattainment area from slash smoke impact.**

   The Smoke Management Plan Review Advisory Committee agreed that in general a 20 mile boundary would be the optimum size for the SPZs, where any planned slash burning activity should be carefully evaluated so as to avoid impacting the PM_{10} nonattainment area. The boundary would be extended under the contingency plan provisions if significant impacts continue.

2. **Expansion of the SPZ boundary under the Smoke Management Plan Contingency Measures should only extend into those areas where the slash burning which directly impacted the nonattainment area originated.**

   The contingency plan calls for expanding the SPZ into the areas where slash burning could impact the PM_{10} nonattainment area. The Department expects the new SPZ boundary would take into account areas beyond 20 miles where slash burning originated - as well as areas where potential slash burning could pose a threat of smoke impact to the nonattainment area. This expansion of the SPZ boundary would be a joint decision between DEQ and ODF.

3. **The SPZ boundaries are arbitrary and will not significantly limit slash burning impacts.**

   Each SPZ boundary was determined based on a case-by-case evaluation of geography, topography, forested areas, and meteorology around each PM_{10} nonattainment area, where the close proximity of slash burning could result in significant smoke impact in that area.

4. **The period the SPZs will be in effect should be from Nov. 1 to March 1, rather than Nov. 15 to Feb. 15, in order to match the woodburning curtailment programs.**

   The Advisory Committee did recommend the longer time period; however, the Department decided to propose a slightly

shorter period after a review of historical data on PM_{10} levels, weather conditions, and slash burning activity showed that the majority of PM_{10} air quality violations are limited to December and January, and that the probability that slash smoke impacts would contribute to a PM_{10} violation during the Nov 1-15 period and the Feb.15 - Mar.1 period is very low. The Department believes the longer time period would be more appropriate as a contingency measure, should the PM_{10} area fail to demonstrate attainment.

5. **Expanding the period of the SPZs to Nov. 1 should not occur under any circumstances, due to the critical need to conduct some slash burning in late fall prior to winter.**

The Department recognizes that there are periods of good slash burning weather conditions during the Nov.1 - Nov.15 period, however should the PM_{10} area fail to attain standards, expanding to Nov.1 is considered necessary due to the need to take additional measures to ensure that no additional slash smoke contribution occurs in the nonattainment area during potential nonattainment conditions. There would still be opportunities to burn slash during this period, providing no slash impact is likely to occur and the additional contingency measures prohibiting slash burning do not go into effect.

6. **In addition to no slash burning on "red" woodstove curtailment days, there should be a SPZ requirement for no slash burning on "yellow" days.**

The Department believes no slash burning on poor air quality days or "red" days is important to avoid the possibility of air quality violations; restricting slash burning on moderate air quality days or "yellow" days would represent a significant increase in restricted days for slash burning, which the Department believes is unnecessary at this time.

7. **In addition to the PM_{10} nonattainment areas, slash burning protection needs to be extended to the Bend area.**

The Department of Forestry is developing a voluntary smoke management plan involving forest land owners for the area around Bend, in addition to the current restricted area established around this community. Further application of a SMP to the area needs to be studied as part of an entire central and eastern Oregon issue regarding forest health and the need for increased slash burning.

8. **Slash burning protection needs to be extended to the Pendleton area.**

It is not known how frequently slash smoke impacts occur in Pendleton. At this time there is no special protective measures planned for this area until further evaluation is made as part of the forest health issue referred to above.

9. **The SPZ restrictions for La Grande and Klamath Falls should be mandatory, not voluntary.**

Currently the Department of Forestry operates a voluntary smoke management program IN portions of central and eastern Oregon, and for that reason the slash burning restrictions in La Grande and Klamath Falls are proposed as voluntary. Also, slash burning impacts in these areas are a very small percent of total PM_{10} levels. Should these areas fail to demonstrate attainment with the national ambient air quality standard (NAAQS) by the federal deadline, and slash burning smoke is a significant contributor to the nonattainment, mandatory restrictions would automatically go into effect in that area.

10. **A definition of "significant contributor" is needed for slash burning, in order to know when the proposed contingency measures would go into effect in the PM_{10} nonattainment area.**

Current federal guidance for slash burning control measures does not define this level, and instead leaves it to states to make this determination. The Department has used EPA's significant impact level for point sources, which is 5 micrograms per cubic meter for a 24-hour period, as the basis for evaluating significant source contributions in PM_{10} nonattainment areas, and for developing control strategies to bring the area into attainment with the NAAQS.

For the record, the Oregon Department of Forestry supports a slightly higher significant impact level of 8-10 micrograms per cubic meter (24-hour period) for the following reasons: 1) 5 micrograms would represent only a 3% contribution to the 24-hour standard of 150 micrograms; 2) impacts less than 5% are difficult to accurately measure; and 3) EPA's 5 microgram significant impact level applies to point sources, and area sources such as slash burning are not equivalent.

However, given that (1) there is little difference between 5

and 10 micrograms from an air quality standpoint, (2) the 5 microgram level has been used by both DEQ and EPA to prohibit new or expanding major industry, and (3) PM_{10} emissions from industrial boilers are chemically very similar to slash burning emissions, the Department believes that from an equity standpoint the 5 microgram level should be a uniform standard applied to all PM_{10} significant contributors.

11. **The contingency measures calling for a complete ban from November 1 to March 1 should occur without the need for determining the magnitude or duration of the slash impact.**

The Department believes this would restrict slash burning unnecessarily. A complete ban during this time period shall be based on a measured impact over 10 micrograms per cubic meter.

12. **The contingency measures calling for a slash burning ban based on one impact of 5-10 micrograms or >10 micrograms per cubic meter is much too restrictive.**

The Department believes (and ODF concurs) that more restrictive measures are necessary if the PM_{10} area fails to attain the NAAQS. Since EPA rules would not allow construction or modification of a major industrial source if it resulted in smoke impacts greater than 5 micrograms, it is therefore equitable to apply a similar strategy to slash burning.

13. **Do not extend the period of periodic review of the Plan from 3 to 5 years.**

Although this was not a Committee recommendation, DEQ and ODF believe a 5 year period of review is more practical from the standpoint of 1) length of time involved in developing, reviewing, and adopting amendments to the Plan, and 2) the need to have more than 1 or 2 years of monitoring data between plan reviews to evaluate trends.

14. **Slash burning should be a last resort; the Department should be promoting alternatives to slash burning.**

The Department has been working with the Department of Forestry in advocating alternatives to slash burning. ODF has added new language to the Smoke Management Plan which promotes alternatives and minimizing emissions from slash

burning.

15. **The original language recommended by the Advisory Committee for restricting slash burning in the SPZ was replaced by weaker language which gives Department of Forestry more discretion.**

The change in the language from "...allowing no burning where any chance exists to get any smoke into the nonattainment area" was changed to "when the smoke management meteorologist believes there will be no measurable smoke impacts..." The Department viewed the original language as too vague in terms of the meaning of "where any chance exists" and "any smoke", and proposed new language which is more practical from an operational standpoint.

16. **The Smoke Management Plan fails to address the problem of global warming, and the recommendations of the Oregon Task Force on Global Warming.**

Monitoring data over the last 10 years shows a 22% reduction in prescribed burning in western Oregon. Existing language and new language added to the Smoke Management Plan addresses the need to develop alternatives to slash burning, as well as to employ techniques to minimize emissions. While reducing particulate emissions, this also reduces carbon dioxide emissions - the major contributor to global warming.

17. **Additional minor changes are needed to the SMP which involve 1) delegating authority for approving burns to BLM district managers, 2) defining the meaning of "monitoring" related to units that continue to burn for three days; and 3) changing the word "adjacent" to "adjoining" related to notification of residents of planned burning activity.**

The Department of Forestry has made revisions to the SMP which address these issues, on which the Department concurs. In terms of issue 2), ODF has inserted language stating that monitoring shall require periods of intermittent observations by the landowner.

II. Visibility Protection Plan Issues/Department Response:

1. **The Visibility Protection Plan is too limited and does not attempt to protect all Class I areas in the state.**

The strategies identified in the Visibility Protection Plan are based on visibility monitoring data from primarily Class I areas in the Oregon Cascades. Given the choice between focusing efforts on 1) only those Class I areas where the extent of visibility impairment was known, or 2) all Class I areas, including those where impairment is not known, the Visibility Advisory Committee chose the former. The Department supports this approach, as well as the Committee's additional recommendation to identify visibility impairment problems within other Class I areas. The long-term strategy outlined on page A-17 of the Plan does include numerous provisions for making reasonable further progress for all Class I areas over the next 10-15 years.

2. **The Department should not delete the existing provision which recommends firewood removal from forest lands as a method of enhancing visibility protection, since this does not contribute to woodstove smoke problems in PM_{10} nonattainment areas.**

The goal of this provision was to lessen fuel loadings and lower emissions from prescribed burning. However, if firewood removal were to transfer the burning of this wood into PM_{10} nonattainment areas, this could add to smoke problems there. Given this possibility, the Department agrees with the Visibility Advisory Committee that it should not continue to encourage firewood removal, as this would be contrary to the State Implementation Plan (SIP) control strategy to reduce woodstove smoke in PM_{10} nonattainment areas. (It should be pointed out that the net affect of this deletion neither encourages nor discourages firewood removal.) The Department also would not want to support a tradeoff in which visibility improvement, which is an aesthetic issue, is placed over PM_{10} attainment, which is a health issue. The Department still strongly supports slash utilization for purposes such as power generation, where the use pollution control equipment can significantly minimize PM_{10} emissions.

3. **The expanded visibility protection period for Class I areas in the Plan is still too limited, and should be extended to a 90 day period the first year, and then to a 120 day period the next year.**

The Minority Report of the Visibility Advisory Committee recommended this extension of the protection period. However, given the recent success in visibility improvement,

the Department believes the July 1 - September 15 extension contained in these amendments is more appropriate at this time, but would consider further expansion of the protection period at the next plan review period if an increase in visibility impairment occurs.

4. **The expansion of the visibility protection period by 19 days as stated in the Plan amendments is inaccurate, and should be stated as 8 to 17 days.**

The number of days in the expanded protection period will vary from year to year based on which days the 4th of July and Labor Day weekends would fall. The Department used an estimate of the maximum days in any one year in order to estimate the maximum impact of burning costs on forest land owners/managers and agricultural land owners resulting from the inability to burn during this expanded protection period.

5. **The visibility protection period should include Willamette Valley field burning seven days a week, not just on weekends.**

The Visibility Advisory Committee acknowledged in their recommendations that since 1986 visibility impairment in Class I areas in the Cascades been significantly reduced through the curtailment of Willamette Valley field burning on summer weekends. Neither the Committee in their recommendations, nor the Department thought it was appropriate to additionally curtail field burning on weekdays, given the success of this effort. This would also severely restrict the practice of open field burning, since it only can occur in during the summer. Extension of the visibility protection period to July 1 - September 15 as proposed in these amendments will include curtailment on approximately 2 additional weekends for Willamette Valley field burning. The phase down of open field burning as mandated by the 1991 Oregon Legislature will provide additional visibility improvement.

6. **In addition to protecting the Eagle Cap Wilderness Area from field burning smoke impacts, the Plan amendments should address protection from slash burning impacts as well.**

The Department found through monitoring in the Eagle Cap Wilderness Area that field burning smoke impacts occurred during the summer months. No demonstrated impacts were found from slash burning during this same time period. In

fact, nearly all slash burning in this area has been shifted to the spring and fall, due in part to the fire hazard conditions which exist during the summer months.

7. **The Visibility Protection Plan fails to address the problem of global warming, and the recommendations of the Oregon Task Force on Global Warming.**

See the response outlined in I.12 above. The Visibility Protection Plan, which is part of the Slash Burning Smoke Management Program, is designed to reduce visibility impairment through methods which include an overall reduction in slash burning emissions of approximately 22% in Western Oregon from 1982-84 levels, as part of the long-term strategy identified in the Visibility Protection Plan (see Attachment A, page 18). While reducing particulate emissions, this also reduces carbon dioxide emissions - the major contributor to global warming.

8. **Do not extend the period of periodic review of the Plan from 3 to 5 years.**

Although this was not a recommendation made by the Visibility Committee, DEQ and ODF believe a 5 year period of review is more practical from the standpoint of 1) length of time involved in developing, reviewing, and adopting amendments to the Plan, and 2) the need to have more than 1 or 2 years of monitoring data between plan reviews to evaluate trends.

Memo To: Environmental Quality Commission
July 7, 1992

Public Testimony on Amendments to Smoke Management and Visibility Protection Plans

Testimony		Name and Affiliation
I. Coos Bay Hearing, May 18, 1992:		
1.	W	Jim Carr, Menasha Corporation
II. Medford Hearing, May 19, 1992:		
2.	V	Gary Stevens, Jackson County Air Quality
3.	B	Paul Wyntergreen, Oregon Environmental Council
4.	B	Mike Kohn, Oregon Chimney Sweeps Association
5.	B	Greg Miller, SOTIA
6	V	Vera Morrell, Coalition to Improve Air Quality
7.	B	Ron McKenna, citizen
8.	V	Hank Snow, citizen
III. La Grande Hearing, May 20, 1992:		
9.	B	Grant Darrow, Oregon Chimney Sweeps Association
10.	B	Dorothy Fleshman, Air Improvement Resolve
IV. Portland Hearing, May 22,1992:		
11.	V	Larry Tuttle, The Wilderness Society
12.	B	Dr. Robert J. Palzer, Sierra Club
13.	B	Ann Kloka, Sierra Club
14.	W	Jim Britton, Oregon Department of Agriculture
V. Miscellaneous Letters Received:		
15.	W	Thomas R. Holt, Willamette Industries
16.	W	D. Dean Bibles, BLM
17.	W	R. M. Richmond, Wallowa-Whitman National Forest
18.	W	Don Johnson, Rough and Ready Lumber
19.	W	David R. Jessup, Oregon Forest Industries Council
20.	W	Stephen L. Cafferata, Weyerhaeuser
21.	W	Jon Schweiss, EPA Region X
22.	W	Blair A. Holman, Georgia-Pacific Corporation
23.	W	Mike Hyde, City of Pendleton
24.	W	James H. Gilliam, Oregon Chimney Sweeps Association

KEY: V = Verbal Testimony W = Written Testimony B = Both

brf 7/7/92

Environmental Quality Commission

☐ Rule Adoption Item
☑ Action Item
☐ Information Item

Agenda Item H
July 23-24, 1992 Meeting

Title:

Approval of Tax Credit Applications

Summary:

Attachment A of the staff report presents the Department's evaluation and recommendation for certification of 30 tax credit applications with a total facility cost of $10,528,890 as follows:

- 3 Air Quality facilities with a total facility cost of $649,787
- 14 Auto air conditioner coolant recycling machines with a total facility cost of $41,875
- 4 Field burning related applications recommended by the Department of Agriculture with a total facility cost of $ 127,297
- 2 Recycling facilities with a total facility cost of $16,119
- 1 Water Quality facility with a total facility cost of $6,043
- 3 Underground storage tank related facilities with a total cost of $216,419
- 3 Solid Waste Landfill related facilities with a total cost of $9,411,350

Four of the applications have facility costs exceeding $250,000 (1 Air Quality and 3 Solid Waste Landfill) and have been reviewed by Contractors selected by the Department. Contractor review statements are provided with the application review reports.

Two existing tax credit certificates are proposed for transfer from Gregory Affilfiates, Inc. to Klamath Veneer, Inc.

Department Recommendation:

1) Approve issuance of tax credit certificates for 30 applications as presented in Attachment A of the staff report.

2) Approve transfer of certificates 1978 and 2431 from Gregory Affiliates, Inc. to Klamath Veneer, Inc.

Report Author	Division Administrator	Director
	Michael Downs	Stephanie Hallock, acting

July 8, 1992

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

REQUEST FOR EQC ACTION

Meeting Date: July 23 & 24, 1992
Agenda Item: H
Division: MSD
Section: Administration

SUBJECT:

Approval of Tax Credit Applications; approve transfer of Tax Credit Certificates.

ACTION REQUESTED:

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

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

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

_X_ Approve Department Recommendation
- ___ Variance Request — Attachment ___
- ___ Exception to Rule — Attachment ___
- ___ Informational Report — Attachment ___
- _X_ Other: (specify) — Attachment _A_

Request for transfer of tax credit certificates from Gregory Affiliates, Inc. to Klamath Veneer, Inc.

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

Tax Credit Application Review Reports:

TC-2502 Loren's Sanitation Service, Inc.	Pole-type building, overhead doors and hoists for recycling.
TC-2923 Newberg Garbage Service	One-ton truck; shipping area and collection equipment.
TC-2927 A.E. Staley Manufacturing, Inc.	Air filter equipment for dust control.
TC-3514 Robert D. MacPherson	80-acre drainage tile installation.
TC-3643 Thomas Lundberg	Wastewater pretreatment system.
TC-3691 Innovation Auto	Auto air conditioner coolant recycling machine.
TC-3698 A.C.P. Ent.	Auto air conditioner coolant recycling machine.
TC-3755 Precision Motor Car, Ltd.	Auto air conditioner coolant recycling machine.
TC-3756 Ryder Truck Rental	Auto air conditioner coolant recycling machine.
TC-3760 Oak Park Automotive, Inc.	Auto air conditioner coolant recycling machine.
TC-3765 Leavy Farms, Inc.	23-acre and 18-acre drainage tile installation.
TC-3767 Thomas Motors, Inc.	Installation of an underground storage tank with fiberglass piping, spill containment system, overflow protection and leak detection.
TC-3768 Texaco Refining & Marketing, Inc.	Installation of four fiberglass underground storage tanks with fiberglass piping, line leak detectors, spill containment basins, monitoring wells, in tank gauges and Stage I and Stage II vapor recovery equipment.

TC-3774 Gary Smerdon Automotive	Auto air conditioner coolant recycling machine.
TC-3776 Willamette Industries, Inc.	Auto air conditioner coolant recycling machine.
TC-3777 Davidson Farms, Inc.	Underground drain tiling of 62.2 acres.
TC-3779 MJC Enterprises	Auto air conditioning recycling machine.
TC-3781 B&G Quality Auto & Electric, Inc.	Auto air conditioning recycling machine.
TC-3783 David Doerfler	Auto air conditioning recycling machine.
TC-3785 Allen's Automotive & Towing, Inc.	Auto air conditioning recycling machine.
TC-3789 Texaco Refining & Marketing, Inc.	Installation of five double wall fiberglass underground storage tanks with fiberglass piping, line leak detectors, spill containment basins, ball float valves, monitoring wells, in tank gauges and Stage I and Stage II vapor recovery equipment.
TC-3791 Oregon Metallurgical Corp.	Duall scrubber and associated support equipment.
TC-3795 Sheppard Motors, Ltd.	Auto air conditioning recycling machine.
TC-3797 Robert A. & Gregg Ditchen	Straw storage shed.
TC-3798 DeLon Motor Co.	Auto air conditioner coolant recycling machine.
TC-3800 Shropes Chevron, Inc.	Auto air conditioner coolant recycling machine.

Tax Credit Application Review Reports with Facility Costs at or above $250,000:

TC-2884 Oregon Waste Systems, Inc.	Landfill liner and leachate collection system.
TC-3750 Willamette Ind., Inc.	EFB Electrostatic precipitator.
TC-3788 Oregon Waste Systems, Inc.	Landfill liner and leachate collection system.
TC-3802 Oregon Waste Systems, Inc.	Landfill liner and leachate collection system.

DESCRIPTION OF REQUESTED ACTION:

Issue Tax Credit Certificates for Pollution Control Facilities; approve transfer of tax credit certificates 1978 and 2431.

AUTHORITY/NEED FOR ACTION:

X	Required by Statute: ORS 468.150-468.190 Enactment Date:	Attachment ___
___	Statutory Authority:	Attachment ___
X	Pursuant to Rule: OAR 340 Division 16	Attachment ___
___	Pursuant to Federal Law/Rule:	Attachment ___
___	Other:	Attachment ___
___	Time Constraints:	

DEVELOPMENTAL BACKGROUND:

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

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

None.

PROGRAM CONSIDERATIONS:

None.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

None.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the Environmental Quality Commission approve certification for the above identified tax credit applications which includes fieldburning related applications processed and recommended by the Department of Agriculture. Approval is also recommended for the transfer of tax credit certificates 1978 and 2431.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Yes.

Note - Pollution Tax Credit Totals:

Proposed July 23-24, 1992 Totals

	Certified Costs*	# of Certificates
Air Quality	$ 649,787	3
CFC	41,875	14
Field Burning	127,297	4
Hazardous Waste	0	0
Noise	0	0
Plastics	0	0
Solid Waste, Recycling	76,119	2
Water Quality	6,043	1
Underground Storage Tanks	216,419	3
Solid Waste Landfills	9,411,350	3
TOTAL	$10,528,890	30

1992 Calendar Year Totals through June 1, 1992

	Certified Costs*	# of Certificates
Air Quality	$ 217,292	1
CFC	102,764	40
Field Burning	539,114	12
Hazardous Waste	10,119,299	1
Noise	0	0
Plastics	24,648	2
Solid Waste, Recycling	18,922	2
Water Quality	252,144**	8
Underground Storage Tanks	393,775	11
Solid Waste Landfills	0	0
TOTAL	$11,667,958	77

*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.

**This total includes $73,480 facility costs for T-3724, approved by the EQC June 1, 1992, but was not added in the June 1, 1992 certificate totals.

INTENDED FOLLOWUP ACTIONS:

Notify applicants of Environmental Quality Commission actions.

Approved:

Section: Roberta Young

Division: Michael Downs

Director: Stephanie Hallock, Acting

Report Prepared By: Roberta Young
Phone: 229-6408
Date Prepared: July 7, 1992

RY:y
MY103805
July 7, 1992

State of Oregon
Department of Environmental Quality

Transfer of Pollution Control Facility Certificates

1. Certificates to be transferred from:

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

   Certificates to be transferred to:

   Klamath Veneer, Inc.
   P.O. Box 910
   Canyonville, OR 97417

2. Transfer Request

   Gregory Affiliates, Inc. requests that the Environmental Quality Commission approve the transfer of the certificates identified below from Gregory Affiliates, Inc. to Klamath Veneer, Inc. The transfer is necessary because Klamath Veneer, Inc. purchased Gregory Affiliates, Inc., Klamath Falls facility on May 15, 1992.

3. Description of Certificates

Certificates	Issuance Date	Actual Cost
1978	3-11-88	$ 160,714.40
2431	4-26-91	1,415,606.00

4. Summation

   Due to the sale of its Klamath Falls facility, Gregory Affiliates, Inc. requests that the Environmental Quality Commission transfer of tax credit Certificates 1978 and 2431 to Klamath Veneer, Inc.

5. Director's Recommendation

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

Roberta Young
MY103806
(503) 229-6408

GREGORY AFFILIATES, INC.

May 18, 1992

Mr. Brian Fagot
Department of Environmental Quality
811 S. W. Sixth
Portland, OR 97204

Dear Mr. Fagot:

This is to inform you that on May 15, 1992, Gregory Affiliates, Inc. sold its Gregory Forest Products, Inc.--Klamath Falls operation to Klamath Veneer, Inc.

Accordingly, would you please transfer the existing Pollution Control Facility Certificates (Nos. 2431 and 1978) to Klamath Veneer. Copies of Certificates are enclosed for your information. Verification that the sale did take place can be made by contacting Mr. David Miller of Stoel Rives (294-9202) or Glenda Sibbald of Umpqua Title (1-800-847-0844).

Your contact at Klamath Veneer, Inc. should be Greg Gaston (839-4251). His address is P. O. Box 910, Canyonville, Oregon 97417.

Please let me know if I need to provide you with any additional information. My phone number is 526-5610.

Sincerely,

Richard Snyder

Richard D. Snyder

RDS/ns
Enclosures

cc: Mr. Greg Gaston
with enclosures

4800 S.W. GRIFFITH DRIVE BEAVERTON, OREGON 97005-2987 (503) 526-5619

KLAMATH VENEER, INC.
P. O. BOX 910
CANYONVILLE, OREGON 97417
(503) 839-4251

May 27, 1992

Roberta Young, Management Services Division
Department of Environmental Quality
811 S. W. Sixth
Portland, Oregon 97204

Dear Roberta:

This is to inform you that on May 15, 1992, Klamath Veneer, Inc. purchased from Gregory Forest Products, Inc. its facility at 4605 Lakeport Blvd, Klamath Falls, Oregon.

Accordingly, we would like to have the existing Pollution Control Facility Certificates (Nos. 2431 and 1978) transferred to Klamath Veneer, Inc. Copies of Certificates are enclosed for your information.

Please give me a call if additional information is required.

Sincerely,

Gregory A. Gaston

Gregory A. Gaston
Controller
Klamath Veneer, Inc.

GG/gw
Enclosures

Certificate No. 1978

Date of Issue March 11, 1988

Application No. T-2392

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Gregory Affiliates, Inc. Gregory Forest Products, Inc. 4800 SW Griffith Drive Beaverton, OR 97005	Location of Pollution Control Facility: Klamath Falls, Oregon
As: ☐ Lessee ☒ Owner	
Description of Pollution Control Facility: Keeler Boiler s/n 14356 Bigelow-Liptak dutch oven Particulate collector	
Type of Pollution Control Facility: ☐ Air ☐ Noise ☐ Water ☒ Solid Waste ☐ Hazardous Waste ☐ Used Oil	
Date Pollution Control Facility was completed: December 31, 1986	Placed into operation: December 31, 1986
Actual Cost of Pollution Control Facility: $ 160,717.40	
Percent of actual cost properly allocable to pollution control: 100%	

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 ORS 468.175 and subsection (1) of ORS 468.165, 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 statutes 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 James E. Petersen

Title James E. Petersen, Chairman

Approved by the Environmental Quality Commission on the 11th day of March, 1988.

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 2431
Date of Issue 4/26/91
Application No. T-2395

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Gregory Affiliates, Inc. Gregory Forest Products, Inc. 4800 S.W. Griffith Drive Beaverton, OR 97005	Location of Pollution Control Facility: Klamath Falls, Oregon
As: ( )Lessee (x)Owner	
Description of Pollution Control Facility: Log chest with a closed recirculation block heating system. The closed recirculation system includes pumps, heat exchangers, nozzles, track conveyor and associated plumbing and electrical controls.	
Type of Pollution Control Facility: ( )Air ( )Noise (x)Water ( )Solid Waste ( )Hazardous Waste ( )Used Oil	
Date Facility was Completed: 2/7/86	Placed into Operation: 2/7/86
Actual Cost of Pollution Control Facility: $ 1,415,606.00	
Percent of Actual Cost Properly Allocable to Pollution Control: 78%	

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 468.165, 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 statutes 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: _____

Title: William P. Hutchison, Jr., Chairman

Approved by the Environmental Quality Commission on the 26th day of April, 1991.

IGC\MY101417(2) (PCFCERT.MSD 3/91)

Application No. T-2502

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Loren's Sanitation Service, Inc.
1141 Chemawa Road N.
Keizer, OR 97303

The applicant owns and operates a franchised garbage collection and recycling facility in Keizer, Oregon.

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

2. Description of Facility

The claimed facility is a 40 x 120' pole-type building with overhead doors and hoists. Fifty-six percent of the building, or 2,666 square feet, is used solely to store and sort recyclable materials collected from the residential curbside program, and industrial and commercial sources.

The term "facility" refers to the portion of the building used solely for recycling.

Claimed Facility Cost: $23,902.48 (56% of the total building cost of $45,749) (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:

> The facility was substantially completed on November 1, 1989 and placed into operation November 1, 1989. The application for certification was submitted to the Department on October 31, 1991, within two years of the completion date. The application was determined complete and filed on June 15, 1992.

4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of solid waste through recycling. This reduction is accomplished by the use of a material recovery process.

Prior to constructing the building, the recyclable materials were sorted out-of-doors. Paper products and cardboard were especially susceptible to rain and wind. The building provides protection from the weather for

sorting, the recyclable materials can be collected in larger quantities before being hauled to market, resulting in fewer trips, and provides security against theft and vandalism. The applicant estimates 1,280 tons of material is recycled annually.

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:

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

1) This factor is applicable because the entire purpose of the facility is to sort and store recyclable materials collected from residential, commercial and industrial customers. Once enough material is collected, it is transported to markets: high-grade paper and milk jugs are taken to Garten Foundation, newspaper to Smurfit, scrap metal to Schnitzer, bottles to Owens Brockway, etc.

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

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

The applicant states that for the first 5 years of operation, there will be a negative cash flow. This results because the facility's operating and maintenance expenses exceed estimated annual income from the sale of the recycled materials. The applicant is able to absorb the cost because his franchised garbage route in Keizer currently subsidizes the recycling operation.

Using Table 1 of OAR 340-60-030, for a life of 30 years, the percent return on investment is zero. As a result, the percent allocable would be 100%.

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

The applicant states no other alternative method was considered, and a building of the type constructed was the only available method of achieving his 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 from the facility. The costs of maintaining and operating the facility is $87,568 annually. The income from the facility is approximately $47,750 annually and has been included in the ROI 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, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

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

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

5. Summation

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

b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of solid waste through recycling.

This reduction is accomplished by the use of a material recovery process.

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 $23,902.48 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2502.

JM:b
U:\RECY\RPT\YB11709.51
(503) 229-5479
6/15/92

Application No. T-2923

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Marvin Schneider
Newberg Garbage Service
PO Box 990
Newberg, OR 97132

The applicant owns and operates a franchised garbage collection and recycling facility in Newberg, Oregon.

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

2. Description of Facility

The claimed equipment and devices are utilized for expansion of commercial, residential and school recycling activities. The equipment and devices described in the application are:

o	One ton truck with electric tailgate	$17,136.51
o	Site preparation and concrete work for shipping area	6,615.76
o	Bags and stands, buckets, drop boxes, and material identification signs	28,464.97
		$52,217.24

Claimed Facility Cost: $52,217.24
(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 July 1, 1991, and placed into operation on July 1, 1991. The application for certification was submitted to the Department on August 13, 1991, and the application for final certification was found to be complete on June 11, 1992, within 2 years of substantial completion of the facility.

4. Evaluation of Application

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

This reduction is accomplished by the use of a material recovery process.

The applicant states that the larger truck, recycling containers and expanded shipping area were necessary because of increased recycling participation rates, and the public's demand for more recycling opportunities. Door-to-door surveys in Newberg indicate 85% of the citizens participate to varying degrees in the recycling program.

b. Eligible Cost Findings

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

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

This factor is applicable because the entire purpose of the truck, shipping area and recycling containers/signs is to collect and sort recyclable materials such as glass, tin, newspapers and office paper.

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

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

The applicant states that for the first 5 years of operation, there will be a negative cash flow. This results because the facilities' operating cost exceeds estimated annual income from the sale of the recycled materials. The applicant is able to absorb the cost because his franchised garbage route in Newberg currently subsidizes the recycling operation.

Using Table 1 of OAR 340-60-030, for a life of 8 years, the percent return on investment is zero. As a result, the percent allocable would be 100%.

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

The applicant listed no other alternatives for providing the same pollution control objective. The applicant said the method they chose was the most efficient and cost effective method for collecting the material.

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 operating the facility. The cost of maintaining and operating the facilities are $66,500 annually. The income from this facility is approximately $53,836 annually and has been included in the ROI 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, 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 population.

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

5. Summation

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

b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of solid waste through recycling.

This reduction is accomplished by the use of a material recovery process.

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 $52,217.24 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2923.

JM:b
RECY\RPT\YB11703.51
(503) 229-5479
April 22, 1992

Application No. TC-2927

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

A.E. Staley Manufacturing Company
Stanfield Plant
2200 East Eldorado Street
Decatur, Illinois 62525

The applicant owns and operates a potato starch production plant in Stanfield, Oregon.

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

2. Description of Facility

The facility consists of three different equipment units which control three separate points of emission. The packer dust system bag filter controls emissions of starch dust from the packaging of starch dust. The lime slurry tank bag dump filter prevents lime dust from escaping into the work place atmosphere when lime dust is loaded. The acid storage tank vent scrubber neutralizes gaseous emission from the acid storage tank.

Expenses were attributed to the following categories:

Bin vent bag filter	$3,228.00
Lime slurry tank bag dump	$5,500.00
Acid storage tank vent scrubber	$1,000.00

Claimed facility cost: $9,728.00

It is the Departments position the following expenses are ineligible.

Lime slurry tank bag dump	$5,500.00
Acid storage tank vent scrubber	$1,000.00

The explanation for this determination is discussed in section 4 of this report.

Adjusted claimed facility costs: $3,228.00

Accountant's Certification was provided for the bin vent bag filter. The applicant concurs with the adjusted costs.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

a. The request for preliminary certification was filed May 12, 1989, more than 30 days before construction commenced June 15,1989.

b. The request for preliminary certification was approved before the application for final certification was made.

c. Installation of the facility was substantially completed on January 29, 1990. The facility was placed into operation on January 29, 1990. The application for final certification was submitted to the Department on January 29, 1992, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1992.

4. Evaluation of Application

a. Rationale For Eligibility

The bag filter for the packer dust system is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control fugitive emissions. This is in accordance with OAR Chapter 340, sections 21-050-through 21-60. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

Only a portion of the claimed facility costs are eligible for pollution control facility certification. The bag filter for the packer dust system is eligible because it controls emissions of fugitive starch dust. The limestone rock scrubber for the acid storage tank is not eligible because the applicant is unable to document it's costs. The filter for the lime slurry tank bag dump is not eligible because it controls fugitive emissions in an indoor environment.

The starch dust is delivered to the bag dump tank by a forced air system. The packer dust bag filter sits above the tank. The exhaust air passes through the filter which removes starch dust from the air stream. The filter is emptied as necessary by agitation causing the starch dust to fall into the packer tank.

The filter for the lime slurry tank bag dump is not eligible because it is not an air cleaning device as

defined in ORS 468A.005. The filter does not meet this definition because it filters lime dust from an indoor environment and emits the filtered air into an indoor environment.

The acid storage tank vent scrubber is not eligible because the applicant chose not to document the costs. The applicant fabricated this unit on site. They could not provide invoices for it's associated costs. The applicant was given the opportunity to suggest an alternate means of documenting costs but felt it would not be worth the time it would take.

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 starch dust.

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

   The average annual cash flow is $400.00 which results from the value of the starch dust recovered. Dividing the average annual cash flow into the cost of the facility gives a return on investment factor of 7. Using Table 1 of OAR 340-16-30 for a useful life of five years gives an annual return on investment of 0%. As a result, the percent allocable of the cost associated with the starch dust packer filter is 100%.

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

   The applicant presented no alternative. The emission control measures the applicant used are low cost measures.

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 pollution.

The lime slurry bag dump filter and the limestone rock scrubber for the acid storage tank costs are not eligible. The reasons were discussed in section 4. a: Rational for eligibility. The eligible portion of the $9,778.00 facility is $3,228.00.

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

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 of the facility is to comply with a requirement imposed by to control 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 33%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $3,228.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2927.

Brian Fagot:AQ
RPTAH50988
(503) 229-5365

Application No. TC-3514

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Robert D. Macpherson
31580 Oakville Road
Shedd, OR 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 an 80-acre drainage tile installation, located north of Highway 228 and west of Bond Lane, Linn County, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: $33,307.75
(Accountant's Certification was provided.)

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

The applicant has 1,700 acres of perennial grass-seed and 300 acres of annual grass-seed under cultivation. Within a comprehensive plan to reduce acreage open field burned, the applicant's registration for open field burning has declined from 825 acres registered in 1990 to 715 acres registered in 1991 to 170 acres registered in 1992.

The conversion of this 80-acre field to an alternative crop effected by the drainage tile installation was instrumental in the reduction of acres registered for open field burning from 1990 to 1991 because it is no longer in grass seed production. The applicant states that the drainage tile installation allows him to discontinue open field burning on the field. The applicant is alternating a wheat grain crop and considering clover as an additional alternative. The applicant provided a Division of State Lands wetland determination allowing the drainage tile installation.

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 September 20, 1990, and the application for final certification was found to be complete on May 13, 1992. 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. The facility allows production of an alternative crop to grass-seed.

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. The alternative crop wheat produces a net income comparable to the net income produced by the grass-seed crop it replaces according to Oregon State University Enterprise Budgets updated March 1992.

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 $800 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. Director's Recommendation

   Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $33,307.75, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3514.

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

jb:kcTC3514
June 12, 1992

Application No.T-3643

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Thomas Lundberg
dba Shadetree Landscape
2440 S. Hill
Albany, OR 97321

The applicant owns and operates a landscape maintenance and construction company in Albany, Oregon.

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

2. Description of Facility

Wastewater pretreatment system consisting of a covered concrete wash slab, oil/water separator and associated plumbing system.

Claimed Facility Cost: $6,043
Cost documentation 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 December 31, 1990 and operational January 1, 1991. The application for certification was submitted September 28, 1991 and found to be complete on February 18, 1992, within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce water pollution. This reduction is accomplished by the use of treatment works for industrial waste as defined in ORS 468B.005.

The Department issued a National Pollutant Discharge Elimination System (NPDES) Permit No. 100790 to the City of Albany to treat and discharge domestic sewage to the Willamette River. One of the conditions of the permit is for the City of Albany to implement an industrial waste pretreatment program for all industrial and commercial discharger to its sewer system.

Shadetree Landscape is a new discharger to the Albany sewer system. Prior to the construction of the claimed facility, the City of Albany reviewed the plans and issued a permit to Shadetree Landscape to connect to the sewer.

The claimed facility is in compliance with the requirements of the City of Albany industrial waste pretreatment program.

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 sludge collected by the facility is disposed in a landfill.

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

There is return on investment for the claimed facility. There is no income generated by the facility.

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

There are no known alternatives. The claimed facility was required by the City of Albany.

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.

The applicant built a storage building which included an equipment washing facility. The whole building has a total area of 2,800 square feet. The claimed facility has an area of 280 square feet. The total cost of the building is

$60,427.75. The exact cost of the claimed facility cannot be readily itemized because the project was built as a whole. The applicant prorated the cost associated to the claimed facility by ratio of floor areas. The cost of the facility is calculated as follows:

Cost of the claimed facility

$$= \$60,427.75 \times \frac{\text{area of claimed facility}}{\text{area of the building}}$$

$$= \$60,427.74 \times \frac{280 \text{ ft.}^2}{2,800 \text{ ft.}^2}$$

Cost of claimed facility = $6,043

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 water pollution and accomplishes this purpose by the use of treatment works for industrial waste as defined in ORS 468B.005.

c. The facility complies with DEQ statutes and rules and permit conditions.

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $6,043 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3643.

RCD:crw
IW\WC10\WC10272
(503) 229-5876
6-4-92

Application No. TC-3691

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Innovation Auto
7207 SE Johnson Creek Blvd.
Portland, OR 97206

The applicant owns and operates an automotive body repair and painting in Portland, Oregon. Applicant does its own vehicle maintenance.

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: $2190.00
(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 October 25, 1991. The facility was placed into operation on October 28, 1991. The application for certification was submitted to the Department on December 19, 1991, within two years of substantial completion of the facility. The application was found to be complete on May 29, 1992.

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 $4.50/pound. The applicant estimated an annual coolant recovery rate of 100 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are 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 certifica-

tion 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 $2,190.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3691.

Brian Fagot:a
MISC\AH50814
(503) 229-5365
June 12, 1992

Application No. 3698

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

A.C.P. Ent.
17843 SE McLoughlin Blvd. #3
Milwaukee, OR 97267

The applicant owns and operates an automobile repair shop in Milwaukee, Oregon. Applicant does its own vehicle maintenance.

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 three years.

Claimed Facility Cost: $3095.00
(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 February 15, 1992. The facility was placed into operation on February 15, 1992. The applciation for certification was submitted to the Department on December 31, 1991, within two years of substantial completion of the facility. The application was found to be complete on May 20, 1992.

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 $4.60/pound. The applicant estimated an annual coolant recovery rate of 300 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 has identified no alternatives.

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

There are 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 certifica-

tion 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 $3095.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 3698.

Brian Fagot:a
MISC\AH50820
(503) 229-5365
May 20, 1992

Application No. 3755

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Precision Motor Car Ltd.
132 NE Grand Ave.
Portland, OR 97232

The applicant owns and operates an automobile repair shop in Portland, Oregon. Applicant does its own vehicle maintenance.

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 three years.

Claimed Facility Cost: $3095.00
(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 September 21, 1991. The facility was placed into operation on September 21, 1991. The applciation for certification was submitted to the Department on March 16, 1992, within two years of substantial completion of the facility. The application was found to be complete on June 11, 1992.

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 virgin coolant at $4.10/pound. The applicant estimated an annual coolant recovery rate of eight 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are 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 certifica-

tion 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 $3095.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3755.

Brian Fagot:a
MISC\AH50821
(503) 229-5365
April 10, 1992

Application No. TC-3756

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Ryder Truck Rental
310 N. Columbia Blvd.
Portland, OR 97217

The applicant owns and operates a Truck Rental 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

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: $2,500.00
(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 July 26, 1991. The facility was placed into operation on August 12, 1991. The applciation for certification was submitted to the Department on March 16, 1992, within two years of substantial completion of the facility. The application was found to be complete on May 12,1992.

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 virgin coolant at $3.70/pound. The applicant estimated an annual coolant recovery rate of 245 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in ins own vehicles. In this case the savings are tied to the displaced cost of virgin 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 $2,500.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3756.

Brian Fagot:a
MISC\AH50822
(503) 229-5365
May 12, 1992

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Oak Park Automotive Inc.
4335 Silverton Rd. NE
Salem, OR 97305

The applicant owns and operates a general automotive repair garage in Salem, 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 three years.

Claimed Facility Cost: $2,306.32
(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 February 20, 1992. The facility was placed into operation on February 27, 1992. The applciation for certification was submitted to the Department on March 23, 1992, within two years of substantial completion of the facility. The application was found to be complete on May 13,1992.

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 $4.26/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 has identified no alternatives.

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

There are 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.

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 $2306.32 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3760.

Brian Fagot:a
LTR\AH50823
(503) 229-5365
May 13, 1992

Application No. TC-3765

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Leavy Farm, Inc.
22675 Butteville Road NE
Aurora, OR 97002

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 drainage tile installation on one 23-acre field and one 18-acre field, located on Butteville Road south of Champoeg Road, Aurora, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: $28,409.30
(Accountant's Certification was provided.)

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

The applicant has 135 acres of perennial grass-seed under cultivation. Records indicate that the applicant last open field burned in 1988; baling off the fields and propane flaming the last three years. However, the applicant feels that if he continues to grow perennial grass-seed he will need to open field burn periodically as propane flaming does not control weeds or volunteer grass seeds sufficiently.

The drainage tile installation has allowed the conversion of the 41 tiled acres to production of hops obviating the need to ever open field burn this acreage again. The drainage tile installation is acceptable according to the Soil Conservation Service wetland determination.

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 8, 1990, and the application for final certification was found to be

complete on May 12, 1992. 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. The facility allows for an alternative crop to perennial grass-seed.

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. Oregon State Extension publications project estimated net income for hops to be ten times less than for perennial ryegrass seed.

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 $410 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. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $28,409, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3765.

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

jb:kcTC3765
June 12, 1992

Application No. TC-3767

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Thomas Motors, Inc.
523 E. Third Street
The Dalles, OR 97058

The applicant owns and operates an automobile dealership at 523 E. Third Street, The Dalles OR, facility no. 3678.

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 the installation of an underground storage tank with fiberglass piping, spill containment system, overflow protection and leak detection.

Claimed facility cost (Accountant's certification was provided)	$ 21,754
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 April 12, 1990 and placed into operation on May 1, 1990. The application for certification was submitted to the Department on April 1, 1992, within two years of the completion date. The application was determined complete and filed on June 17, 1992.

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 underground storage tanks that were removed.

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

1) For corrosion protection - STIP-3 steel tank with anodes.

2) For spill and overfill prevention - Spill containment basins.

3) For leak detection - Tank monitoring system and monitoring wells.

The applicant reported that soil testing was performed at the time of tank removal and no 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 all of the costs claimed by the applicant ($21,754) 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:			
STIP-3 tank & 25' of fiberglass piping	$ 2,518	23%(1)	$ 588
Anodes	94	100	94
Spill & Overfill Prevention:			
Spill containment basins	415	100	415
Leak Detection:			
Tank monitor system	3,442	90 (2)	3,098
Monitoring wells	197	100	197
Labor & Equipment	15,088	100	15,088
Total	$21,754	90%	$19,480

(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 $2,518 and the bare steel system is $1,930, the resulting portion of the eligible tank and piping cost allocable to pollution control is 23%.

(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 90%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $21,754 with 90% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3767.

Mary Lou Perry:ew
(503) 229-5731
June 17, 1992

Application No. TC-3768

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Texaco Refining and Marketing, Inc.
1800 SW 1st Suite 200
Portland, OR 97201

The applicant owns and operates a gasoline dispensing station at 5524 SE 82nd, Portland OR, facility no. 9855.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four fiberglass underground storage tanks with fiberglass piping, line leak detectors, spill containment basins, monitoring wells, in tank gauges and Stage I and Stage II vapor recovery equipment.

Claimed facility cost (Accountant's certification was provided)	$ 55,030
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 March 27, 1990 and placed into operation on March 27, 1990. The application for certification was submitted to the Department on March 16, 1992, within two years of the completion date. The application was determined complete and filed on June 7, 1992.

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 did not exist. This is a new installation at a clean site.

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

1) For corrosion protection - Fiberglass tanks and piping.

2) For spill and overfill prevention - Spill containment basins and ball floats for vent lines.

3) For leak detection - In tank gauges and monitoring wells.

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

The applicant did not indicate if any soil assessment or tank tightness testing was accomplished before undertaking the project. The Department would not expect any indication of leaking would have been detected during this project since it was not used for commercial purposes prior to the tank installation.

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 ($55,030) 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.

The applicant estimated that 66% of the claimed facility cost of $55,030 is allocable to pollution control. The applicant arrived at this estimate by calculating the difference between the fiberglass systems and bare steel systems, reducing the amount of concrete work and calculating the reduction for the in tank gauge. (The Department routinely makes those calculations, see page 4.)

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 and 620' of fiberglass piping	$26,041	38%(1)	$ 9,992
Spill & Overfill Prevention:			
Spill containment basins	765	100	765
Ball float valves	816	100	816
Leak Detection:			
Tank monitor system	4,986	90 (2)	4,487
Line leak detectors	560	100	560
Monitoring wells	412	100	412
Labor & materials	21,450	100	21,450
Total	$55,030	70%	$38,482

(1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is $26,041 and the bare steel system is $16,049, the resulting portion of the eligible tank and piping cost allocable to pollution control is 38%.

(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 70%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $55,030 with 70% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3768.

Mary Lou Perry:ew
(503) 229-5731
June 17, 1992

Application No. TC-3774

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Gary Smerdon Automotive
3545 Demaray Drive
Grants Pass, OR 97527

The applicant owns and operates a Automotive Repair Garage in Grants Pass, 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 three years.

Claimed Facility Cost: $2,655.61
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on December 12, 1991. The facility was placed into operation on December 29, 1991. The applciation for certification was submitted to the Department on April 10, 1992, within two years of substantial completion of the facility. The application was found to be complete on April 21, 1992.

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 $6.00/pound. The applicant estimated an annual coolant recovery rate of 200 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are 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.

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 $2,655.61 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3774.

Brian Fagot:a
MISC\AH50824
(503) 229-5365
May 12, 1992

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Willamette Industries, Inc.
Beaverton Corrugated
5500 SW Western Avenue
Beaverton, OR 97005

The applicant owns and operates a corrugated box manufacturing plant in Beaverton, Oregon. Applicant does its own vehicle maintenance.

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 ten years.

Claimed Facility Cost: $2,800.00
(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 March 12, 1992. The facility was placed into operation on March 16, 1992. The applciation for certification was submitted to the Department on April 13, 1992, within two years of substantial completion of the facility. The application was found to be complete on May 12, 1992.

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 virgin coolant at $5.33/pound. The applicant estimated an annual coolant recovery rate of 120 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in its own vehicles. In this case the savings are tied to the displaced cost of virgin 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 $2,800.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3776.

Brian Fagot:a
MISC\AH50825
(503) 229-5365
May 12, 1992

Application No. TC-3777

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Davidson Farms, Inc.
18361 River Road NE
St. Paul, Oregon 97137

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 1,929' of 8" tile, 4,597' of 6" tile, 75' of 5" tile, and 50,845' of 4" tile with three outlet pipes installed underground on 62.2 acres, located at about 18891 River Road NE, St. Paul, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: $38,916.40
(Accountant's Certification was provided and the applicant provided a copy of the invoice.)

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

The applicant has 700 acres of perennial grass seed varieties under cultivation. Acres registered for open field burning have been reduced over the period of 1989 to 1991 from 720 acres to 491 acres. The applicant states that a limited amount of straw can be given away each year; even though the straw is given away free; and it is apparent that alternative crops will be needed as a means to reduce grass seed production and permanently eliminate the need for grass seed straw open field burning.

Tiling extends the season because the land can be prepared earlier for standard row crop plantings. The tiling drains the land making it available for staggered plantings of cannery crops and occasional wheat production.

The Soil Conservation Service has determined this 62.2 acres to be prior converted wetlands and not subject to the Food Security Act unless the area reverts to wetland as a result of abandonment.

4. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on October 10, 1991. The application for final certification was found to be complete on June 1, 1992. 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. The drainage tile installation facilitates the reduction in acreage planted to grass seed production.

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 $500 to annually maintain and operate the facility. These costs were considered in the return on investment calculation.

The savings of $10/acre from not registering this acreage for open field burning is offset by the incurred costs of plowing at $12/acre and (3) disk/cultipacker land preparations at $9/acre.

The applicant states that farm use value of land is usually determined by the rental value of area farmland. Tiled and non-tiled land rents are comparative in the applicants area, thus tiling does not increase appraised farm deferred value or market value.

The applicant has shown little, if any, net return advantage of row crops or wheat compared to perennial grass seed. The net return ranges from $110/acre to $250/acre for perennial ryegrass, $50/acre to $100/acre for wheat, and $180/acre to $250/acre for green beans grown for cannery processing.

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. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $38,916.40, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3777.

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

jb:bmTC3777
June 1, 1992

Application No. TC-3779

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

MJC Enterprises
185 W. Main Street
Vale, OR 97918

The applicant owns and operates a automotive repair shop in Vale, 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: $5,200.00
(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 October 28, 1991. The facility was placed into operation on October 28, 1991. The applciation for certification was submitted to the Department on April 16, 1992, within two years of substantial completion of the facility. The application was found to be complete on April 21, 1992.

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 generated to from the sale of recycled coolant at $2.00/pound. The applicant estimated an annual coolant recovery rate of 90 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are 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.

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 $5,200.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3779.

Brian Fagot:a
MISC\AH50826
(503) 229-5365
May 12, 1992

Application No. TC-3781

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

B & G Quality Automotive & Electric Inc.
1330 B West Sixth Ave.
Eugene, OR 97402

The applicant owns and operates an automotive repair garage in Eugene, 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 three years.

Claimed Facility Cost: $2,025.00
(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 July 18, 1991. The facility was placed into operation on July 20, 1991. The applciation for certification was submitted to the Department on April 17, 1992, within two years of substantial completion of the facility. The application was found to be complete on May 12, 1992.

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 $3.66/pound. The applicant estimated an annual coolant recovery rate of 120 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 has identified no alternatives.

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

There are 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.

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.

The claimed cost of the facility included the cost for an additional thirty pound cylinder. The use of this cylinder makes the operation of the recovery unit more efficient. However it is not necessary for the use of the equipment. In the past the Department has not allowed the cost of an extra cylinder in the facility cost. Therefore, only $1950.00 or 96% is allocable to pollution control.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 96%.

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 96%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $2,025.00 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3781.

Brian Fagot:a
MISC\AH50827
(503) 229-5365
May 12, 1992

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

David Doerfler
13883 Doerfler Rd. SE
Silverton, OR 97381

The applicant owns and operates a farming operation in Silverton, Oregon. Applicant does its own vehicle maintenance.

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 ten years.

Claimed Facility Cost: $3,726.08
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on December 31, 1991. The facility was placed into operation on February 1, 1992. The applciation for certification was submitted to the Department on April 24,1992, within two years of substantial completion of the facility. The application was found to be complete on May 13, 1992.

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 $5.20/pound. The applicant estimated an annual coolant recovery rate of 200 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in its own vehicles. In this case the savings are tied to the displaced cost of virgin 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 $3,726.08 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3783.

Brian Fagot:a
MISC\AH50828
(503) 229-5365
May 13, 1992

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Allen's Automotive & Towing, Inc.
4120 SE Gladstone
Portland, OR 97202

The applicant owns and operates a automotive towing and repair business 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

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: $3,196.00
(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 April 21, 1992. The facility was placed into operation on April 21, 1992. The applciation for certification was submitted to the Department on April 27, 1992, within two years of substantial completion of the facility. The application was found to be complete on May 13, 1992.

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 $5.50/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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are 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.

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 $3,196.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3785.

Brian Fagot:a
MISC\AH50829
(503) 229-5365
May 13, 1992

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Texaco Refining and Marketing, Inc.
1800 SW 1st Suite 200
Portland, OR 97201

The applicant owns and operates a gasoline dispensing station at 13018 SE Stark, Portland OR, facility no. 861.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of five double wall fiberglass underground storage tanks with fiberglass piping, line leak detectors, spill containment basins, ball float valves, monitoring wells, in tank gauges and Stage I and Stage II vapor recovery equipment.

Claimed facility cost (Accountant's certification was provided)	$139,635
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 May 26, 1990 and placed into operation on May 26, 1990. The application for certification was submitted to the Department on April 29, 1992, within two years of the completion date. The application was determined complete and filed on June 10, 1992.

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 bare steel underground storage tanks which were removed.

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 overfill prevention - Spill containment basins and ball floats valves.

3) For leak detection - In tank gauges, line leak detectors and monitoring wells.

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

The applicant reported that soil testing was performed at the time of tank removal and no 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 all of the costs claimed by the applicant ($139,635) 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.

   The applicant estimated that 99% of the claimed facility cost of $139,635 is allocable to pollution control. The applicant arrived at this estimate by deducting 10% of the in tank gauge cost. (The Department routinely makes this calculations, see page 4.)

   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 and 756' of fiberglass piping	$ 49,240	35%(1)	$ 17,200
Spill & Overfill Prevention:			
Spill containment basins	1,006	100	1,006
Ball float valves	907	100	907
Overfill alarm	175	100	175
Leak Detection:			
In tank gauge	4,803	90 (2)	4,323
Line leak detectors	5,606	100	5,606
Turbine leak detectors	588	100	588
Monitoring wells	593	100	593
Labor & materials	76,717	100	76,717
Total	$139,635	77%	$106,940

(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 $49,240 and the bare steel system is $32,040, the resulting portion of the eligible tank and piping cost allocable to pollution control is 35%.

(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 $139,635 with 77% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3789.

Mary Lou Perry:ew
(503) 229-5731
June 17, 1992

Application No. TC-3791

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Oregon Metallurgical Corporation
P.O. Box 580
Albany, OR 97321

The applicant owns and operates a Titanium manufacturing plant in Albany, Oregon.

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

2. Description of Facility

The claimed facility is a Duall scrubber and associated support equipment. The facility controls particulate emissions from a Titanium reduction furnace. The exhaust from the furnace is drawn into a duct system and delivered to the scrubber. The duall scrubber reduces particulate levels in the air stream to levels required by Air Contaminant Discharge Permit #22-0328.

Expenses were attributed to the following categories:

Duall scrubber	$21,623.00
Blower	$13,348.00
Foundation and structure	$10,624.00
Ducting and hood	$25,752.00
Claimed Facility Cost:	$71,347.00

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:

a. The request for preliminary certification was filed March 11, 1988, more than 30 days before construction commenced on February 1, 1989.

b. The request for preliminary certification was approved before the application for final certification was made.

c. Construction, of the facility was substantially completed on August 15, 1990 and placed into

operation on September 30, 1990. The application for certification was submitted to the Department on May 8, 1992, within two years of substantial completion of the facility. The application was found to be complete on June 10, 1992.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because its principal purpose is to comply with a requirement imposed by the Department to control air pollution. This is in accordance with OAR chapter 340, sections 21-35 through 21-45. The air contaminant discharge permit for this source, 22-0328, item 4(a) requires the permittee to limit particulate emissions from the Titanium sponge plant. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

Duall scrubbers have been effective in controlling emissions of the sponge reduction furnaces prior to the addition of furnace #8. The Duall scrubber claimed in this application provides additional pollution control for increased production. The plant is considered to be in compliance.

The Duall scrubber controls particulate emissions from sponge reduction furnace #8. The exhaust air stream from the furnace is drawn into a duct system through three hoods located over the furnace. The duct system routes the exhaust to the scrubber. The front section of the scrubber sprays a water mist into the exhaust stream which wets and cools the gas stream while dissolving some of the particulates. The gas stream continues into the next section of the scrubber which is filled with packing material. composed of spherical polypropolene. The spheres are hollow with an irregular surface inside. This configuration presents a large surface area for the exhaust air to pass over. The surface of this section is kept moist with the water spray. Particlulates in the gas stream encounter this large moist surface area which they collide with and adhere to. In the next section the exhaust air stream passes through a louvre type barrier. The water in the exhaust stream impacts with this barrier. The decreased momentum releases the water from the exhaust stream. The dry exhaust is drawn through the fan and vented through the stack on the scrubber.

The air contaminants processed by the scrubber are

transferred from air to water. The waste water from the scrubber is treated in Oregon Metallurgical Corporation's waste water treatment facility.

b. Eligible Cost Findings

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

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

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

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

   The applicant indicates in the application 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.

   Several control measures are available. The Duall scrubber represented the most efficient low cost alternative to higher efficiency control. The success rate with previous scrubbers justifies this selection further.

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 approximately $22,000 annually.

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

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

of the facility is to control a substantial quantity of air pollution.

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

5. Summation

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

b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.

c. The facility complies with DEQ statutes and rules and permit conditions.

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $71,347.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3791.

Brian Fagot:AQ
RPTAH50990
(503) 229-5365

Application No. TC-3795

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Sheppard Motors Ltd.
2300 W. 7th. Avenue
Eugene, OR 97402

The applicant owns and operates a new car sales and service establishment in Eugene, Oregon. Applicant does its own vehicle maintenance.

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 ten years.

Claimed Facility Cost: $3,789.00
(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 June21, 1990. The facility was placed into operation on June 21, 1990. The applciation for certification was submitted to the Department on May 15, 1992, within two years of substantial completion of the facility. The application was found to be complete on June 1, 1992.

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 $2.88/pound. The applicant estimated an annual coolant recovery rate of 200 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are 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 $3,789.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3795.

Brian Fagot:a
MISC\AH50830
(503) 229-5365
June 12, 1992

Application No. TC-3797

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Robert A. & Gregg Ditchen
9712 Nusom Road NE
Silverton OR 97381

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 94' x 52' x 22' stick on stud, metal wall, grass seed straw storage building, located at 6688 Juniper Street NE, Salem, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: $26,664
(Accountant's Certification was provided.)

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

The applicant has 257 acres of perennial grass seed under cultivation. For the past several years the applicant has relied on custom balers to remove the bulk residue from his fields in exchange for the straw and following that up with either propane flaming or chopping the stubble and plowing it under.

The applicant states that "to retain baling services and keep baling expenses economical, the shed became a necessity. Without this straw storage facility, baling would become too expensive and we would have to resort to the more economical practice of field burning again." This statement represents a consistency throughout the Willamette Valley -- to retain custom balers, growers must provide storage facilities.

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 September 1, 1990 and the application for final certification was found to be complete on June 2, 1992. 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): "Facility, 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 elements. The straw storage building promotes the reliability of the custom baler services.

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 $701 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. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $26,664, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3797.

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

jb:bmTC3797
June 3, 1992

Application No. TC-3798

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

DeLon Motor Company.
4403 Commercial Street SE
Salem, OR 97302

The applicant owns and operates an automobile sales and service establishment in Salem, Oregon. Applicant does its own vehicle maintenance.

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: $3,295.00
(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 April 29, 1991. The facility was placed into operation on April 29, 1991. The application for certification was submitted to the Department on June 1, 1992, within two years of substantial completion of the facility. The application was found to be complete on June 12, 1992.

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 $4.95/pound. The applicant estimated an annual coolant recovery rate of 120 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:

- Electricity consumption of machine
- Additional labor to operate machine
- Machine maintenance costs
- 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 has identified no alternatives.

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

There are 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 certifica-

tion 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 $3,295 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3798.

Brian Fagot:a
MISC\AH50831
(503) 229-5365
June 12, 1992

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Shrope's Chevron, Inc.
7085 SW Nyberg Rd.
Tualatin, OR 97062

The applicant owns and operates a gasoline and service station in Tualatin, Oregon. Applicant does its own vehicle maintenance.

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 three years.

Claimed Facility Cost: $2,003
(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 February 13, 1991. The facility was placed into operation on February 13, 1991. The application for certification was submitted to the Department on June 1, 1992, within two years of substantial completion of the facility. The application was found to be complete on June 12, 1992.

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 $5.50/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 has identified no alternatives.

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

There are 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 $2,003 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3800.

Brian Fagot:a
MISC\AH50832
(503) 229-5365
June 12, 1992

Application No.T-2884

STATE OF OREGON
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. **Applicant**

Oregon Waste Systems, Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Road
Arlington, OR 97812

The applicant owns and operates a municipal solid waste landfill in Arlington, Oregon.
Application was made for tax credit for a water pollution control facility.

2. **Description of Facility**

The facility is the module one cell liner consisting of three feet of compacted soil, an 8 oz. geotextile layer, one foot of drainage material with piping, a 16 oz. geotextile cushion, 60-mil thick high density polyethylene liner, secondary collection and leak detection system, leachate evaporation basin with liner, a sedimentation basin without a liner and a groundwater monitoring system with seven wells.

Claimed Facility Cost: $3,093,687 consisting of:

Leachate Pond Design	$ 68,909.84
Ground Water Monitoring System	$ 300,206.37
Ground Water Monitoring Pumps	$ 27,171.20
Liner Installation	$1,814,816.35
Liner Material	$ 598,004.85
Liner QA/QC	$ 284,578.32

(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 deadlines in that construction of the facility was begun in March 1989, substantially completed on December 28, 1989 and placed into operation January 2, 1990. The application was submitted to the Department December 20, 1991, for certification and was found to be technically

complete on February 10, 1992, within 2 years of substantial completion of the facility. Preliminary Certification for Pollution Control Tax Credit was approved on May 17, 1989.

4. **Evaluation of Application**

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department (DEQ) and the federal Environmental Protection Agency (EPA), to prevent water pollution. The requirement is to comply with OAR 340-61.

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 (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, leachate pond, or leachate collection system.

3) The alternative methods, equipment and costs for achieving the same pollution control objective.
There are no known alternatives, the liner, leachate pond, and leachate collection system are specified requirements of DEQ Solid Waste Permit number 391.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facilities.
There are no savings realized from the installation of the facilities.

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.
In accordance with the Commissions direction, the Department has contracted with a private accounting service to evaluate the facility

costs of the pollution control facilities with costs at or exceeding $250,000. This evaluation has been provided on TC 2884 by Symonds, Evans & Larson certified public accountants (see attached report).
Through this evaluation, the contractor has identified the following issues.

1. It appears unclear as to whether the company may have return on facility costs if the fees to use the facilities are in part determined as the costs to construct the required pollution control facilities.
   Department response: Craig Lewis, Senior Management Analyst at METRO, informed staff that Oregon Waste Systems based its bid on a unit price per ton disposal cost and fixed costs. Oregon Waste Systems is not a regulated utility and its rates are set competitively. The company may be able to recover its capital costs by passing these costs on to customers, however this is not dissimilar to other tax credit applications which are approved where the applicant is able to pass pollution control costs on to its customers.

2. Although the company did exclude the costs of excavation related to module 1, it is not clear as to whether such costs are allowable.
   Department response: It was the Department's and Commissions' previous determination that excavation costs necessary to construct a landfill are not eligible costs.

The contractor has concluded that through its review, with the exception of #1 above, no irregularities were identified that indicates further adjustment of costs.

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 the federal Environmental Protection Agency to prevent groundwater pollution.

c. The facility complies with DEQ statutes and rules and permit conditions.

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

6. **Director's Recommendation**

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $3,093,687 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2884.

BRD:ks
SW\RPT\SK4053 7-9-92

Application No. TC-3750

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Willamette Industries, Inc.
Dallas
3800 First Interstate Tower
Portland, OR 97201

The applicant owns and operates a sawmill and plywood mill in Dallas, Oregon.

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

2. Description of Facility

The facility controls emissions of vaporized hydrocarbons from three veneer dryers. The vented air from the dryers is drawn through a duct system. An EFB electrostatic precipitator, model HFC 60, receives the air vented by the veneer dryers. The HFC 60 reduces the emitted hydrocarbons in the exhaust air stream to levels allowed by permit.

Expenses were attributed to the following categories:

EFB HFC 60.	$416,000.00
Engineering services.	$22,748.00
Ductwork #3 veneer dryer.	$60,931.00
Connect dryer 1&2 ductwork.	$10,920.00
Concrete foundation.	$14,001.00
Electrical installation & supplies.	$22,029.00
Miscellaneous	$21,906.00
Claimed facility cost:	$568,712.00

Accountant's Certification was provided.

The claimed facility replaced a previously certified pollution control facility. On December 12, 1976 certificate 640R was issued for $190,724.87. The applicant installed the claimed facility to comply with the Department's air pollution standards. In accordance with ORS 468.155 the applicant is eligible for the difference between the like for like replacement costs of the original facility and the claimed facility. The applicant indicated it would cost $218,000.00 to replace the original facility.

Adjusted facility costs	$350,712.00

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

The facility was substantially completed on July 23, 1991 and placed into operation on July 8, 1991. Due to a period of start up adjustments, the facility was placed into operation prior to the substantial completion. The application for certification was submitted to the Department on March 2, 1992, within two years of the completion date.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution. The requirement is to comply with OAR 340-25-305 through 340-25-315 and the requirements of the applicants air contaminant discharge permit, # 27-0177, items 6 & 9. The emissions reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005

Prior to the installation of the HFC 60, the hydrocarbons were vented through a duct system into a Becker sand filter. The duct system and Becker sand filter were inadequate to process the volume of exhaust. This resulted in fugitive emissions escaping the veneer dryers which exceeded opacity limits as required in the applicants air contaminant discharge permit. The installation of the HFC 60 and modifications of the duct system returned the permittee to compliance within the conditions of the permit.

The facility consists of the electrostatic precipitator, duct work, electrical, pneumatic, and mechanical support equipment. The exhaust from the veneer dryers is drawn through the duct system by a 125 horsepower fan located at the end of the system just before the stack. It then passes into the evaporative cooler of the HFC 60. The evaporative cooler has a mist of uniform sized water droplets sprayed into it. The water in the mist acts to cool and condense the hydrocarbons in the exhaust gas stream. The hydrocarbons in the gas stream are cooled to just above the dew point of water. The dew point is the temperature cut off so water does not condense onto the filter bed. The hydrocarbons

are then ionized by electrodes with a negative charge just before passing into the filter bed. This filter bed consists of a cylindrical bed of pea sized gravel held between slats of metal. The bed has a positive electrode in the center which polarizes the stones in the filter bed. This polarization results in the stones having areas of positive and negative charge. The negatively charged mist is then drawn through the stones. It is attracted to the positively charged areas of the stones where it agglomerates and drops out of the gas stream. The exhaust gas stream is then drawn into the stack and vented to the atmosphere.

Prior to the installation of the facility the plywood mill at the Willamette Industries Dallas plant had a history of exceeding opacity limits. As stated in the April 12, 1990 source permit 27-0177 addendum: "Inspections in 1988 and 1989 showed violations of opacity standards for fugitive emissions from the veneer dryers. A Notice of Noncompliance was issued August 8, 1989 on the opacity violations observed July 18, 1989." The permit addendum outlined a schedule for Willamette Industries to evolve a control strategy for the emissions from their veneer dryers. The electrostatic filter bed system is the result of that requirement. The Dallas plant is now considered to be in compliance.

The applicant indicated a five year useful life of the facility upon submittal of the application. Upon inquiry the applicant indicated that the decision was based on factors other than the actual operating life of the equipment. When asked to resubmit an estimate of useful life based on the operating life of the claimed facility, the applicant estimated 10 to 12 years. The applicant claimed an estimate of five years was valid based on the uncertain future of many timber industry operations and the upcoming Maximum Achievable Control Technology, (MACT), standards. It is the Department's position that these issues are not relevant to the definition of "useful life" in OAR 340-16-010. This definition refers to the estimated number of years the facility is capable of operating. It is the Departments position that there is no valid estimate of the MACT standards implementation for this industry. In addition, if the facility was not adequate to meet the MACT standards it could be used at another site. The applicant concurs that the operating life of the equipment is ten years but feels the issues they addressed should be used to determine the useful

life. It is the Departments position that the useful life of the facility is ten years.

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

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

The applicant indicates in the application that there is no income or savings from the facility. However in reviewing the application and permit file it became apparent that the previous pollution control facility, a Becker sand filter, was quite expensive to operate. Once the operating cost of the Becker sand filter is considered, it is clear there is a $27,045 a year reduction in operating costs due to the installation of the EFB HFC 60. Using Table 1 of OAR 340-16-030 for a life of ten years, the annual percent return on investment is 0%. Using the annual percent return of 0% and the reference annual percent return of 18.1%, 100% of the eligible costs are allocable to pollution control.

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

An alternative to the EFB system is a wet electrostatic precipitator. The bid price for a wet electrostatic precipitator was obtained from Geoenergy for an E Tube. The bid was approximately $60,000 more than the bid price for the EFB. The wet electrostatic precipitator produces waste water. The choice of the EFB HFC 60 enabled Willamette Industries to eliminate the generation of potentially hazardous waste water. In addition, Willamette Industries has had success operating an EFB at their Foster mill.

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

There is a savings in operating cost from the facility. The cost of maintaining and operating the facility is $52,149 annually. The cost of operating the Becker sand filter was $79,194. The applicant has realized a $27,045 savings in operating cost per year. Assuming a discount of 18.1%, (the 1991 reference annual percent return on investment), the savings over a five year life of the facility has a present value of $121,112. The savings from this facility have been included in the ROI 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, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

a) The adjusted facility costs are 62% of the claimed facility costs. This is because the claimed facility replaces a previously certified facility as discussed in section two of this report.

b) The Environmental Quality Commission has directed that tax credit applications at or above $250,000.00 to 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 Coopers & Lybrand.

The cost allocation review of this application has identified no issues to be resolved and confirms the cost allocation as submitted in the application, (see attached letter).

The actual cost of the facility properly allocable to pollution control as determined by using this or these factors is 62%.

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 prevent, control, and reduce air pollution.

c. The facility complies with Oregon statutes, Department rules, and permit conditions.

d. A Department Contracted accounting firm has concluded that no further review procedures be performed on TC-3750, (see attachment).

e. 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 $568,712.00 with 62% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3750.

Brian Fagot:AQ
RPTAH50989
(503) 229-5365

Coopers &Lybrand

certified public accountants

2700 First Interstate Tower
Portland, Oregon 97201

telephone (503) 227-8600

in principal areas of the world

July 7, 1992

Mr. John Fink
Project Coordinator
Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

Re: Application For Final Certification of A Pollution Control Facility for Tax Relief Purposes - Willamette Industries, Inc., Application No. 3750

Dear Mr. Fink:

In accordance with our contract no. 85-92 with the Department of Environmental Quality, you have provided us with the Application For Final Certification of a Pollution Control Facility for Tax Relief Purposes Pursuant to ORS 468.155 ET. SEQ for Willamette Industries, Inc. together with certain other documentation provided by the Company. We have read the documentation made available to us.

The purpose of our review of this documentation was to determine if further review procedures would be necessary to determine the extent of cost allocations included in the total claimed facility cost in the tax credit application and how such allocations were made.

Based on our review of the available documentation, construction of the EFB electrostatic precipitator, costs totalling $568,712, was performed by outside vendors. There do not appear to be any indirect costs which were subject to allocation by the Company.

Accordingly, we do not recommend that any further review procedures be performed relating to the Willamette Industries tax relief application.

Coopers & Lybrand

Application No. T-3788

STATE OF OREGON
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. **Applicant**

Oregon Waste Systems, Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, OR 97812

The applicant owns and operates a municipal solid waste landfill in Arlington, Oregon.
Application was made for tax credit for a water pollution control facility.

2. **Description of Facility**

The facility is the module two cell liner consisting of two feet of compacted soil, an 8 oz. geotextile layer, one foot of drainage material with piping, a 16 oz. geotextile cushion, 60 millimeter thick high density polyethylene (HDPE) liner, one foot of protective soil, and a secondary collection and leak detection system including: an 8 oz. geotextile filter; a 60 mil HDPE geomembrane; a granular drainage layer; and a compacted subgrade.

Claimed Facility Cost: $2,896,418 consisting of:

Clay Liner & Leachate Collection System	$1,682,773.48
Synthetic Liner	$ 915,558.66
Liner QA/QC	$ 298,085.95

(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 deadlines in that construction of the facility was begun on August 2, 1990, substantially completed by May 3, 1991, and placed into operation June 5, 1991. The application was submitted to the Department April 28, 1992, for certification and was found to be technically complete on May 4, 1992, within 2 years of substantial completion of the facility. Preliminary Certification for Tax Credit of a Pollution Control Facility was approved for module 1, TC-2884, but was not applied for module 2.

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 and DEQ Solid Waste permit number 391.

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 (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 requirement of DEQ Solid Waste Permit number 391.

4) Any related savings or decrease in costs which occur or may occur as a result of the installation of the facilities.
There are no savings realized from the installation of the facilities.

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.
In accordance with the Commissions direction, the Department has contracted with a private accounting service to evaluate the facility costs of the pollution control facilities with costs at or exceeding $250,000. This evaluation has been provided on TC 3788 by Symonds, Evans & Larson certified public accountants (see attached report).
Through this evaluation, the contractor has identified the following issues.

1. It appears unclear as to whether the company may have return on facility costs if the fees to use the facilities are in part determined as the costs to construct the required pollution control facilities. **Department response:** Craig Lewis, Senior Management Analyst at METRO, informed staff that Oregon Waste Systems based its bid on a unit price per ton disposal cost and fixed costs. Oregon Waste Systems is not a regulated utility and its rates are set competitively. The company may be able to recover its capital costs by passing these costs on to customers, however this is not dissimilar to other tax credit applications which are approved where the applicant is able to pass pollution control costs on to its customers.

2. Although the company did exclude the costs of excavation related to module 2, it is not clear as to whether such costs are allowable. **Department response:** It was the Department's and Commissions' previous determination that excavation costs necessary to construct a landfill are not eligible costs.

The contractor has concluded that through its review, with the exception of #1 above, no irregularities were identified that indicates further adjustment of costs.

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 the federal Environmental Protection Agency to prevent ground water pollution.

c. The facility complies with DEQ statutes and rules and permit conditions.

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

6. **Director's Recommendation**

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $2,896,418 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3788.

BRD:ks
7-9-92

Application No.T-3802

STATE OF OREGON
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. **Applicant**

Oregon Waste Systems, Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, OR 97812

The applicant owns and operates a municipal solid waste landfill in Arlington, Oregon.
Application was made for tax credit for a water pollution control facility.

2. **Description of Facility**

The facility is the module three cell liner consisting of two feet of compacted soil, an 8 oz. geotextile layer, one foot of drainage material with piping, a 16 oz. geotextile cushion, 60 millimeter thick high density polyethylene (HDPE) liner, one foot of protective soil, and a secondary collection and leak detection system including: an 8 oz. geotextile filter; a 60 mil HDPE geomembrane; a granular drainage layer; and a compacted subgrade.

Claimed Facility Cost: $3,421,245 consisting of:

Clay Liner & Leachate Collection System	$1,109,581.22
Synthetic Liner	$2,040,196.71
Liner QA/QC	$ 271,466.67

(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 deadlines in that construction of the facility was begun on July 8, 1991, substantially completed by March 24, 1992, and placed into operation on March 25, 1992. The application was submitted to the Department on June 5, 1992, for certification and was found to be technically complete on June 9, 1992, within 2 years of substantial completion of the facility. Preliminary Certification for Tax Credit of a Pollution Control Facility was approved for module 1, TC-2884, but was not applied for module 3.

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 391.

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 (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 requirement of DEQ Solid Waste Permit number 391.

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 facilities.

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.
In accordance with the Commissions direction, the Department has contracted with a private accounting service to evaluate the facility costs of the pollution control facilities with costs at or exceeding $250,000. This evaluation has been provided on TC 3802 by Symonds, Evans & Larson certified public accountants (see attached report).
Through this evaluation, the contractor has identified the following issues.

1. It appears unclear as to whether the company may have return on facility costs if the fees to use the facilities are in part determined as the costs to construct the required pollution control facilities. **Department response:** Craig Lewis, Senior Management Analyst at METRO, informed staff that Oregon Waste Systems based its bid on a unit price per ton disposal cost and fixed costs. Oregon Waste Systems is not a regulated utility and its rates are set competitively. The company may be able to recover its capital costs by passing these costs on to customers, however this is not dissimilar to other tax credit applications which are approved where the applicant is able to pass pollution control costs on to its customers.

2. Although the company did exclude the costs of excavation related to module 3, it is not clear as to whether such costs are allowable. **Department response:** It was the Department's and Commissions' previous determination that excavation costs necessary to construct a landfill are not eligible costs.

The contractor has concluded that through its review, with the exception of #1 above, no irregularities were identified that indicates further adjustment of costs.

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 the federal Environmental Protection Agency to prevent ground water pollution.

c. The facility complies with DEQ statutes and rules and permit conditions.

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

6. **Director's Recommendation**

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $3,421,245 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3802.

BRD:ks
7-9-92

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 Oregon Waste Systems, Inc.'s (the Company's) Pollution Control Tax Credit Applications (the Applications) filed with the State of Oregon, Department of Environmental Quality (DEQ) for Modules 1, 2 and 3 of the Columbia Ridge Landfill and Recycling Center (the Landfill). Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Applications, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-005 through 340-16-050 (OAR's).

2. We discussed the Applications, Statutes and OAR's with certain DEQ personnel, including Noam Stampfer, Roberta Young, Charles Donaldson and Bruce Dessellier.

3. We also discussed the Applications with Doug Coenen and Will Spears of Oregon Waste Systems, Inc.

4. We asked representatives of the Company to confirm in writing that all costs related to the excavation of the Landfill were excluded from the Applications.

5. We asked representatives of the Company to provide a listing of all related parties or affiliates of the Company which had billings which were included in the Applications.

6. We asked representatives of the Company to confirm in writing that there were no internal costs of the Company included in the Applications and that all costs included in the Applications related to subcontractors.

9600 S.W. Oak Street, Suite 380
Portland, Oregon 97223

Phone: (503) 244-7350
Fax: (503) 244-7331

7. We asked representatives of the Company to provide invoices to support the allocation of costs from the following vendors:

	Module 1	Module 2	Module 3
L & H Grading	$ 1,814,816		
National Seal Company		$ 915,559	$ 1,109,581
Elting Inc.			1,859,727
WMI Corporate Environmental Engineering		59,310	68,028
Environmental Construction Services		298,086	

Findings:

1. & 2. We noted that Section V (1) (i) of the Applications stated that there was no return on investment related to the costs of pollution control and therefore 100% of the costs were allocated to pollution control. However, based on our review of the Applications, Statutes, and OAR's, and discussion with certain DEQ personnel, it is unclear whether the Company could potentially be receiving a return on its pollution control costs by charging customers a fee to use the facility, with such fees being determined based on the costs to construct the pollution control facilities.

   In addition, although it appears that the Company excluded the costs of excavation related to Modules 1, 2 and 3, it is unclear whether such costs are generally allowed or disallowed in Pollution Control Tax Credit Applications for landfills.

3. Refer to the following findings.

4. Will Spears confirmed in writing that all costs related to the excavation of the Landfill were excluded from the Applications.

5. Will Spears informed us that both WMI Corporate Environmental Engineering and National Seal Company were related parties of the Company. Waste Management, Inc. (parent company of Oregon Waste Systems, Inc.), owns 100% of WMI Corporate Environmental Engineering and 51% of National Seal Company.

6. Will Spears confirmed in writing that there were no internal costs of the Company included in the Applications and that all costs included in the Applications related to subcontractors.

7. Based on our review of invoice copies provided by the Company, such costs did appear to be properly allocated to the Company's pollution control facility. However, we make no comment as to the reasonableness of the costs billed by WMI Corporate Environmental and National Seal Company. The aggregate (per unit) costs billed by National Seal Company on Modules 2 and 3 for the material and installation of the liner did, however, appear to be less than those billed by the unrelated subcontractor on Module 1.

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 for the potential reduction in allowable costs which would result if it were determined that there was a return on investment as discussed in Findings 1 & 2. 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 Modules 1, 2 and 3 Pollution Control Tax Credit Applications, and should not be used for any other purpose.

Symonds, Evans & Larson

June 15, 1992

Environmental Quality Commission

☐ Rule Adoption Item
☐ Action Item
☐ Information Item

Agenda Item M
July 24, 1992 Meeting

Title:

Proposed rules for implementation of Oil Spill Prevention and Emergency Response Planning required by SB 242 - The Oil Spill Prevention Act.

Summary:

These rules will establish standards for development of oil spill prevention and emergency response plans for certain facilities and vessels that handle oil in or near navigable waters of the state. The rules provide requirements for plan contents, plan submittal schedules, and criteria for Department review and approval of plans.

Covered facilities include oil transport barges, cargo vessels and oil tankers 300 gross tons or larger, and oil processing or storage facilities handling over 10,000 gallons that receive oil by pipeline or vessel and are located on or near navigable waters of the state. For these rules, navigable waters includes the Columbia River, the Willamette River up to Willamette Falls, and the Coast.

The Department is proposing to defer adoption of spill prevention strategies for vessels and requirements for spill prevention during oil transfer operations. The delay is intended to allow the Department to adopt rules consistent with rules being developed by the State of Washington, provide more time for research into acceptable technologies for preventing releases during oil transfer operations, and provide for continuing discussion with industry on how foreign vessels can reasonably be included in prevention requirements. The Department is also recommending an additional six months be provided for plan submittal on the coast.

Department Recommendation:

Adoption of amendments to OAR Chapter 340, Division 47 relating to oil spills into public waters.

Report Author	Division Administrator	Director acting
Rebecca DeMaso	Michael Downs	Stephanie Hallock

July 9, 1992

REQUEST FOR EQC ACTION

Meeting Date: July 24, 1992
Agenda Item: M
Division: Water Quality
Section: Surface Water

SUBJECT:

Proposed rules for implementation of Oil Spill Prevention and Emergency Response Planning required by SB 242 - The Oil Spill Prevention Act.

PURPOSE:

The rules will set the standards by which covered vessels and facilities will develop oil spill prevention and emergency response plans.

ACTION REQUESTED:

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

___ Authorize Rulemaking Hearing
_X_ Adopt Rules
- Proposed Rules — Attachment A
- Rulemaking Statements — Attachment B
- Fiscal and Economic Impact Statement — Attachment C
- Public Notice — Attachment D

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

___ Approve Department Recommendation
- ___ Variance Request — Attachment ___
- ___ Exception to Rule — Attachment ___
- ___ Informational Report — Attachment ___
- ___ Other: (specify) — Attachment ___

DESCRIPTION OF REQUESTED ACTION:

The Department requests that the Commission adopt the proposed rules which will create a program to promote the prevention of oil spills into the navigable waters of the state, which for these rules includes the Columbia River, the Willamette River up to Willamette Falls, and the coast.

The rules detail content standards for the preparation of Oil Spill Prevention and Emergency Response Plans, submittal schedules, and criteria for Department review and approval. To be approved, a plan must demonstrate that the best achievable protection against spills has been incorporated. To accomplish this the plan must identify and describe such elements as maintenance and inspection programs, prevention and response equipment, personnel training and certification, past spill history, risk analysis, prevention procedures currently in place, and measures to be taken for protecting sensitive environments in the region of operation.

Owners and operators of oil transport barges, cargo vessels, and oil tankers, 300 gross tons or larger, and oil processing or storage facilities handling over 10,000 gallons, that receive oil by pipeline or vessel and are located on or near navigable waters will be required to prepare and submit plans.

The 1991 legislature authorized the Department to develop oil spill prevention and response rules that would be consistent with rules in the state of Washington. To assure consistency, the Department has incorporated language taken directly from rules already adopted in the state of Washington. Unlike Washington where separate rules have been written for prevention plans, Oregon rules combine prevention and contingency planning requirements for vessels and facilities into one rule package.

AUTHORITY/NEED FOR ACTION:

X Required by Statute: ORS 468B.345 to 468B.390 Attachment E
Enactment Date: June 1991
___ Statutory Authority: _____ Attachment ___
___ Pursuant to Rule: _____ Attachment ___
___ Pursuant to Federal Law/Rule: _____ Attachment ___

___ Other: Attachment ___

X Time Constraints: The proposed rules need to be adopted in order to meet the statutory compliance date for availability of standards by July 1992.

DEVELOPMENTAL BACKGROUND:

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

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The proposed rules will directly impact four sectors of the regulated community: 1) oil barges, 2) self-propelled tank vessels, 3) cargo vessels, 4) oil storage facilities with capacities of 10,000 gallons or more, receiving oil by vessel or pipeline, located on or near navigable waters of the state.

As presented in the Hearing Officer's Report (Attachment F) many comments and objections were raised to the initial draft rules by the maritime industry. Significant issues included the incorporation of prevention requirements for all covered vessels, cost and liability associated with preventative booming during oil transfer operations, potential rule inconsistencies between Washington, Oregon, and the USCG, the compliance schedule for plan submittal on the coast, and whether it is reasonable to be required to submit multiple copies of a plan to accommodate the state review process. The Response to Testimony can be found in Attachment F.

Continuing consideration will be given to the issues of prevention requirements for vessels and fuel transfer operations spill prevention measures. The Department believes that oil spill prevention planning strategies are an essential element of a comprehensive vessel or facility contingency plan. Postponing the adoption of vessel prevention strategies and preventative booming requirements for fuel transfer operations was based on technical, logistical and economic issues raised during the public comment period. Each of these factors will be evaluated during the next several months.

Washington and California are currently developing rules for booming and vessel spill prevention strategies. The Department suggests that rule adoption on these elements be postponed so the states can continue working together to develop a consistent and workable approach to these issues.

Concerns about the compliance schedule on the coast are warranted. The Department recognizes that because the coast has fewer resources to draw from, and is served by charter not liner service, it will be difficult for Coos Bay and Yaquina Bay to provide umbrella coverage for spill response and contingency planning. A recommended extension of six months has been made for plan submittal on the coast. Department staff will be available to provide assistance to the coastal communities working to meet these rule requirements.

The maritime industry has responded favorably to the Department's consideration for continuing examination of prevention standards for vessels, and investigation of alternative technology or methods for preventing discharges during transfer operations. Industry has indicated their willingness to continue working with the Department to develop effective prevention requirements for Oregon.

PROGRAM CONSIDERATIONS:

The proposed rules require owners and operators of bulk oil facilities, pipelines, cargo vessels and tank vessels to prepare oil spill prevention and emergency response contingency plans and submit the plan to the Department for review and approval. Costs to manage this program are part of the legislatively adopted 1991-93 budget. Program administration fees adopted by rule in November of 1991, established a schedule of fees for self-propelled tank vessels and oil storage facilities. The rule established a cap of $153,600 for that portion of the program budget. The remainder of the program fees are generated by statutorily set trip fees on cargo vessels and oil transport barges.

The fees will be used to cover mandated Department actions that include the review and approval of contingency plans, annual compliance certification of the plans, inspections of the vessels and facilities, and oversight of oil spill response drills and exercising of plans.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

The sections of the rules detailing content standards for preparing, submitting and reviewing contingency plans were acceptable. These sections of the rules were taken directly from rules already adopted in the state of Washington and will permit one plan to be submitted to meet the requirements of both states. Incorporating vessel prevention and transfer operation prevention requirements did not meet the mandate of developing consistent rules with the state of Washington.

Vessel prevention rules and transfer operation requirements are currently being developed in Washington and California.

Alternatives to vessel prevention strategies and preventative booming during fuel transfers were considered as follows:

1. The Department considered modifying the vessel prevention strategy requirements to apply only to tank vessels. Cargo and passenger vessels would be required to demonstrate evidence of prevention planning through the use of a checklist to be completed and returned to the Department by the vessel shipping agent or other owner representative.

   This action would simplify the submittal requirement for foreign vessel operators, yet provide the Department with information on the adequacy of foreign vessel prevention programs. Tank vessel operators would be required to include vessel specific prevention information in their contingency plan or, if they are a member of a maritime association, a separate prevention plan would need to be submitted to the Department.

2. The Department considered postponing the adoption of vessel prevention and preventative booming requirements during this rule writing process, and continue working with a technical subcommittee and the state of Washington to develop consistent, useful, and cost effective prevention rules. The sections on Transfer Operations (OAR 340-47-040) and Vessel Prevention Strategies (OAR 340-47-170) will remain in the rule with general statements reflecting federal requirements already in place for preventing discharges of oil to the water.

   This action would allow the Department to adopt consistent rules with the state of Washington, provide more time for research into preventative booming options, and provide for continued discussion with industry on how foreign vessels can reasonably be included in prevention requirements.

3. The Department considered adding language to further clarify the Department's intentions for the use of boom as a prevention device during transfer operations. This action would offer some consolation to bunkering operators who see the requirement as unspecified and open to interpretation.

4. The Department considered making only facilities responsible for the deployment of boom during fuel transfer operations.

   This action would eliminate concerns industry has about open

river booming, and narrow the requirement to booming of transfers at facilities where equipment and personnel are readily available and conditions more compatible.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the proposed rules be adopted as presented in Alternative 2 and shown in Attachment A.

Alternative 2: Postpone rule adoption for vessel prevention and preventative booming requirements during this rule writing process, and continue working with a technical subcommittee and the state of Washington to develop consistent, useful, and cost effective prevention rules. The sections on Transfer Operations (OAR 340-47-040) and Vessel Prevention Strategies (OAR 340-47-170) will remain in the rules with general statements reflecting federal requirements already in place for preventing discharges of oil into water.

The recommendation will provide the Department with rules necessary to initiate the development of an oil spill prevention and response contingency planning program. The postponement of rule adoption for transfer operation booming and vessel prevention provides time for continuing work with industry and the state of Washington in the development of consistent West Coast requirements. This alternative will also allow the Department to return to the Commission with prevention requirements having approval by consensus of the Rules Committee.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Oregon has participated on the States/BC Oil Spill Task Force. A report issued by the Task force in October 1990 contained 43 recommendations for preventing spills and improving response capabilities on the West Coast. SB 242 contained many of the Task Force recommendations, and is consistent with the Department and legislative policy of protecting and preserving the water quality of the state.

The Department and the SB 242 Rules Committee have worked closely with the state of Washington to ensure that consistent rules and programs are implemented on the Columbia River where we share a common border. The language in these rules are consistent with oil spill contingency planning rules already adopted in the state of Washington.

ISSUES FOR COMMISSION TO RESOLVE:

1. Will postponing adoption of vessel prevention strategies and fuel transfer operation requirements adversely impact the general intent of the rules?

INTENDED FOLLOWUP ACTIONS:

Once the rules are adopted establishing the standards for the preparation of oil spill contingency plans, the Department will organize a technical subcommittee and begin drafting prevention strategy rules for vessels, and prevention requirements for fuel transfer operations. The subcommittee will have its first scheduled meeting in October 1992, with a goal of having draft rules ready for EQC approval in March 1993.

Approved:

Section: Andrew L Schaedel

Division: Lydia Taylor

Director: Stephanie Hallock, Acting

Report Prepared By: Rebecca J. DeMoss

Phone: 229-5046

Date Prepared: June 24, 1992

RDM\WP51\EQCRQST

June 1992

Oregon Administrative Rules
Chapter 340, Division 47 - Department of Environmental Quality

PROPOSED CHANGES TO 340-47

OREGON ADMINISTRATIVE RULES

DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAPTER 340

DIVISION 47

REGULATIONS PERTAINING TO OIL SPILLS INTO PUBLIC WATERS

PURPOSE

340-47-005

The purpose of these rules is to [prescribe procedures] establish requirements for:

(1) Reporting and controlling oil spills into public waters;
(2) Use of chemical dispersants;
(3) Removal and disposal of spilled oil;
(4) Program administration and fees;
(5) General pollution prevention; and
(6) Rehabilitating and restoring any public resource damaged thereby pursuant to ORS 449.155 to 449.175.

DEFINITIONS

340-47-010

As used in these regulations unless otherwise required by context:
OAR 340-47-010 Definitions. (1) "Average efficiency factor" means a factor used to estimate limitations of equipment efficiency from variables such as sea state, current velocity, or visibility.
(2) "Best achievable protection" means the highest level of protection that can be achieved through the use of the best achievable technology and those staffing levels, training procedures, and operational methods that provide the greatest degree of protection available. The director's determination of best achievable protection shall be guided by the critical need to protect the state's natural resources and waters, while considering:
(a) The additional protection provided by the measures;
(b) The technological achievability of the measures; and
(c) The cost of the measures.
(3) "Best achievable technology" means the technology that provides the greatest degree of protection, taking into consideration processes that are developed, or could feasibly be developed given

overall reasonable expenditures on research and development, and processes that are currently in use. In determining what is best achievable technology, the director shall consider the effectiveness, engineering feasibility, and commercial availability of the technology.

(4) "Bulk" means material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

(5) "Columbia River" means the length of the Columbia River from where it leaves the state at the mouth of the Pacific Ocean to the point where it enters the State of Oregon from the State of Washington.

(6) "Commercial fish harvesting" means taking food fish with any gear unlawful for angling under ORS 506.006, or taking food fish in excess of the limits permitted for personal use, or taking food fish with the intent of disposing of such food fish or parts thereof for profit, or by sale, barter or trade, in commercial channels.

(7) "Covered vessel" means a tank vessel, cargo vessel, or passenger vessel of three hundred gross tons or more. For purposes of this chapter; (a) "Cargo vessel" means a self-propelled ship in commerce, other than a tank vessel or a passenger vessel. "Cargo vessel" does not include a vessel used solely for commercial fish harvesting;

(b) "Passenger vessel" means a ship carrying passengers for compensation; and

(c) "Tank vessel" means a ship that is constructed or adapted to carry, or that carries, oil in bulk as cargo or cargo residue "Tank vessel" does not include:

(i) A vessel carrying oil in drums, barrels, or other packages;

(ii) A vessel carrying or storing oil as fuel for that vessel; or

(iii) An oil spill response barge or vessel.

(d) "Self-propelled tank vessel" means a tank vessel that is capable of moving under its own power.

(8) "Department" means the State of Oregon Department of Environmental Quality.

(9) "Director" means the Director of the State of Oregon Department of Environmental Quality.

(10) "Discharge" means any emission other than natural seepage of oil, whether intentional or unintentional. "Discharge" includes but is not limited to spilling, leaking, pumping, pouring, emitting, emptying or dumping oil.

(11) "Field Document" means a simplified response plan for on-site use in the event of a spill, summarizing key notification and action elements.

(12) "Facility" means any structure, group of structures, equipment, pipeline, or device, other than a vessel, located on or near the navigable waters of the state that is used for producing, storing, handling, transferring, processing, or transporting oil in bulk and that is capable of storing or transporting 10,000 or more gallons of oil.

A facility does not include:
(i) Railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state;
(ii) Underground storage tank regulated by the department or a local government under ORS 466.705 to 466.835 and 466.895,
(iii) Any structure, group of structures, equipment, pipeline or device, other than a vessel located on or near navigable waters of a state, that is used for producing, storing, handling, transferring, processing or transporting oil in bulk and that is capable of storing or transporting 10,000 or more gallons of oil but does not receive oil from tank vessels, barges or pipelines.
(13) "Having control over oil" shall include, but shall not be limited to, any person using, storing, or transporting oil immediately prior to entry of such oil to the waters of the State and shall specifically include carriers and bailees of such oil.
(14) "Heavy oil" for these rules means fuel oil numbers 4, 5, 6 and crude oil.
(15) "Interim storage site" means a site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles used to store recovered oil or oily waste until transport begins.
(16) "Maritime association" means an association or cooperative of marine terminals, facilities, vessel owners, vessel operators, vessel agents or other maritime industry groups that provides oil spill response planning and spill related communications services within the state.
(17) "Maximum extent practicable" means the highest level of effectiveness that can be achieved through staffing levels, training procedures, and best achievable technology. In determining what is the maximum extent practicable, the director shall consider the effectiveness, engineering feasibility, commercial availability, safety, and the cost of the measures.
(18) "Maximum probable spill" means the maximum probable spill for vessels and facilities operating on or near the navigable waters of the state considering the history of spills from similar facilities or vessels of the same class operating on the west coast of the United States.
(19) "Navigable waters of the state" for these rules means the Columbia River, the Willamette River up to Willamette Falls, the Pacific Ocean and estuaries to the head of tide water.
(20) "Offshore facility" means any facility, as defined in subsection (9) of this section, located in, on, or under any of the navigable waters of the state, but does not include a facility any part of which is located in, on, or under any land of the state, other than submerged land.
(21) "Oil" or "oils" means oil including, but not limited to, crude oil, petroleum, gasoline, fuel oil, diesel oil, lubricating oil, oil sludge, oil refuse, and any other petroleum related product. Oil does not include any substance listed in Table 302.4 of 40 C.F.R. Part 302 adopted August 14, 1989, under section 101(14) of

the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by P.L. 99-499.

(22) "Oily waste" means oil contaminated waste resulting from an oil spill or oil spill response operations.

(23) "Onshore facility" means any facility, as defined in subsection (1) of this section, any part of which is located in, on, or under any land of the state, other than submerged land, that because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters of the state or the adjoining shorelines.

(24) (a) "Owner or operator" means:

(i) in the case of an onshore or offshore facility, any person owning or operating the facility; and

(ii) in the case of a vessel, any person owning, operating, or chartering by demise, the vessel; and

(iii) in the case of an abandoned onshore or offshore facility, or vessel, the person who owned or operated the facility or vessel immediately before its abandonment.

(b) "Operator" does not include any person who owns the land underlying a facility if the person is not involved in the operations of the facility.

(25) "Person" shall mean the United States, and agencies thereof, any state, any individual, public or private corporation, political subdivision, governmental agency, municipality, industry, copartnership, association, firm, trust, estate or any other legal entity whatsoever.

(26) "Person having control over oil" includes but is not limited to any person using, storing or transporting oil immediately prior to entry of such oil into the navigable waters of the state, and shall specifically include carriers and bailees of such oil.

(27) "Pipeline" means, an onshore facility, including piping, compressors, pump stations, and storage tanks, used to transport oil between facilities or between facilities and tank vessels.

(28) "Plan" means oil spill prevention, and emergency response plan.

(29) "Primary response contractor" means a response contractor that is directly responsible to a contingency plan holder, either by a contract or written agreement.

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

(31) "Region of operation" with respect to the holder of a contingency plan means the area where the holder of a contingency plan operates.

(32) "Response contractor" means an individual, organization,

association, or cooperative that provides or intends to provide equipment and/or personnel for oil spill containment, cleanup, and/or removal activities.

(33) "Ship" means any boat, ship, vessel, barge, or other floating craft of any kind.

(34) "Spill" shall mean any unlawful discharge or entry of oil into public waters or waters of the state including, but not limited to, quantities of spilled oils that would produce a visible oily sleek, oily solids or coat aquatic life, habitat or property with oil, but excluding normal discharges from properly operating marine engines.

(35) "Trip" means travel to the appointed destination and return travel to the point of origin within the navigable waters of the State of Oregon.

(36) "Worst case spill" means:

(a) for an offshore facility, the largest possible spill of product with the highest hazard ranking of toxicity and persistence, considering storage, production, and transfer capacity complicated by adverse weather conditions (during which wind, reduced visibility, and sea state hinder but do not preclude normal response operations); or

(b) for an onshore facility, the entire volume of product with the highest hazard ranking of toxicity and persistence, from the largest above ground storage tank on the facility site complicated by adverse weather conditions (during which wind, reduced visibility, and sea state hinder but do not preclude normal response operations), unless the department determines that a larger volume is more appropriate given a particular facility's site characteristics and storage, production, and transfer capacity.

(c) for a vessel, the vessels entire cargo and fuel complicated by adverse conditions (during which wind, reduced visibility, and sea state hinders but do not preclude normal response operations).

NEW SECTION

GENERAL POLLUTION PREVENTION REQUIREMENTS

TRANSFER REQUIREMENTS.

340-47-040

(1) The owner or operator of an oil terminal facility, or covered vessel shall take all appropriate measures to prevent spills or overfilling during transfer of petroleum products. An operators manual and/or oil transfer procedures shall be available containing procedures for safe transfer operations, ~~[as well as procedures for]~~ and response ~~[ding]~~ to spills, overfills and discharges from vents and fill pipes.
(2) The owner or operator shall ensure that each person involved in a transfer is capable of clearly communicating orders to stop a transfer anytime during the transfer process.
~~[(3) On or before July 1, 1993, owners or operators of facilities and covered vessels must effectively deploy containment boom around the vessel during heavy oil transfers, unless conditions exist that would make boom deployment dangerous.~~
~~(4) Provisions for implementing this requirement are to be described in 340-47-160 and 340-47-170.]~~

NEW SECTIONS

VESSELS AND FACILITY CONTINGENCY PLAN STANDARDS

OAR 340-47-100 Purpose. The purpose of this chapter is to establish onshore and offshore facility and vessel oil spill prevention and emergency response contingency plan requirements which, when followed, will:
(1) Promote the prevention of oil spills;
(2) Promote a consistent west coast approach to oil spill prevention and response;
(3) Maximize the effectiveness and timeliness of oil spill response by responsible parties and response contractors;
(4) Ensure readiness of equipment and personnel;
(5) Support coordination with state, federal, and other contingency plans in particular the state plan required under ORS 468B.495-500; and
(6) Provide improved protection of Oregon waters and natural resources from the impacts of oil spills.

OAR 340-47-110 Authority. ORS 468B.300-468B.420

OAR 340-47-120 **Applicability.** (1) Oil spill prevention, and emergency response plans must be prepared, submitted, and used, pursuant to requirements in this chapter, for onshore and offshore facilities and covered vessels.
(2) Federal plans required under 33 CFR 154, 40 CFR 109, 40 CFR 110, or the federal Oil Pollution Act of 1990 or plans required by other states may be submitted to satisfy plan requirements under this chapter if the department deems that such federal or state requirements equal or exceed those of the department.

OAR 340-47-130 **Plan preparation.** (1) The owner or operator of each onshore and offshore facility and covered vessel shall prepare a contingency plan for the prevention, containment and cleanup of oil spills from the facility or vessel into the navigable waters of the state, and for the protection of fisheries and wildlife, other natural resources, and public or private property from such spills.
(2) Plans shall be in a form usable for oil spill prevention, control, containment, cleanup, and disposal operations and shall be capable of being located according to requirements in OAR 340-47-210(1)(2) ~~[130(1)(2)]~~.
(3) Plans shall be thorough and contain enough information, analyses, supporting data, and documentation to demonstrate the plan holder's ability to meet the requirements of this chapter.
(4) Plans shall be designed to be capable, to the maximum extent practicable, when implemented, of promptly and properly removing oil and minimizing environmental damage from a variety of spill sizes, including small spills, maximum probable spills, and worst case spills. At a minimum, plans shall meet the criteria specified in sections OAR 340-47-140 ~~[120]~~ and 340-47-150 ~~[125]~~; criteria are presented in suggested but not requisite order.

OAR 340-47-140 **Plan format requirements.** (1) Plans shall be prepared using a combined narrative and graphic format which facilitates both the study of detailed spill response information and quick access to general information given emergency information needs and time constraints.
(2) Plans shall be divided into a system of chapters and appendices. Chapters and sections shall be numbered. Chapters should be reserved primarily for information on emergency response and cleanup operations, such as notification procedures or description of the spill response organization structure. Appendices should be used primarily for supplemental background and documentation information, such as response scenarios or description of drills and exercises. The spill prevention strategies may be part of the appendices.
(3) A system of index tabs shall be used to provide easy reference to particular chapters or appendices.
(4) Plans shall be formatted to allow replacement of chapter or appendix pages with revisions without requiring replacement of the

entire plan.
(5) A simplified field document suitable for on-site use in the event of a spill and summarizing key notification and action elements of the plan shall also be prepared and submitted as part of the plan.
(6) Computerized plans formatted in Word Perfect 4.2 or 5.1 may be submitted to the department in addition to a hard copy. Computerized plans, accompanied by a hard copy, may be used to meet the requirements of OAR 340-47-210.

OAR 340-47-150 **Plan content requirements.** (1) Submittal Agreement: Each plan shall contain a submittal agreement which:
(a) Includes the name, address, and phone number of submitting party;
(b) Verifies acceptance of the plan, including any incorporated contingency plans, by the owner or operator of the facility or covered vessel by either signature of the owner or operator or signature by a person with authority to bind the corporation which owns such facility or covered vessel;
(c) Commits execution of the plan, including any incorporated contingency plans, by the owner or operator of the facility or covered vessel, and verifies authority for the plan holder to make appropriate expenditures in order to execute plan provisions; and
(d) Includes (i) in the case of a facility, the name, location including latitude, longitude and river mile, and address of the facility, type of facility, starting date of operations, types of oil(s) (see definition of "oil") handled, volume of oil stored, and maximum volume of oil capable of being stored.
(ii) in the case of a covered vessel, the vessel's name, the name, location and address of the owner or operator, official identification code or call sign, country of registry, common ports of call in Oregon waters, type of oil(s) (see definition of "oil") handled, volume of oil transported and/or used as fuel, expected period of operation in state waters.
(iii) if the covered vessel is enrolled in a cooperative or maritime association plan, the vessel may provide evidence of coverage in lieu of subpart (ii).
(2) Amendments: Each plan shall include a log sheet to record amendments to the plan. The log sheet shall be placed at the front of the plan. The log sheet shall provide for a record of the section amended, the date that the old section was replaced with the amended section, verification that the department was notified of the amendment pursuant to OAR 340-47-220(3), and the initials of the individual making the change. A description of the amendment and its purpose shall also be included in the log sheet, or filed in the form of an amendment letter immediately after the log sheet.
(3) Table of Contents: Each plan shall include a detailed table of contents based on chapter, section, and appendix numbers and titles, as well as tables and figures.
(4) Purpose and Scope: Each plan shall describe the purpose and scope of that plan, including:

(a) The region of operation covered by the plan;
(b) The onshore facility or offshore facility or covered vessel operations covered by the plan; and
(c) The size and type of the maximum probable spill and the worst case spill from the facility or covered vessel.
(**5**) Updates: Each plan shall describe the procedures and time periods corresponding to updates of the plan and distribution of the plan and updates to affected and interested parties.
(**6**) Implementation Strategy: Each plan shall present a strategy to ensure use of the plan for spill response and cleanup operations pursuant to requirements in OAR 340-47-210.
(**7**) Spill Response System: Each plan shall describe the organization of the spill response system, including all task assignments addressed by requirements of this section. This description shall identify the role of an incident commander or primary spill response manager, who shall possess the lead authority in spill response and cleanup decisions. The plan shall describe how the ~~{a smooth}~~ transfer of the incident command~~{er}~~ or primary spill response manager position will take place between individuals. ~~{will be accomplished.}~~ An organizational diagram depicting the chain of command shall also be included.
(**8**) Contractors: (a) For each primary response contractor which a plan holder may or does rely on to perform or supplement its response operations within the region of operation covered by the plan, the plan shall state that contractor's name, address, phone number or other means of contact at any time of the day, and response capability (e.g., land spills only). For each primary response contractor, the plan shall include a letter of intent signed by the primary response contractor which indicates the contractor's willingness to respond. Copies of written contracts or agreements with primary response contractors shall be available for inspection, if requested by the department.
(b) If a plan holder is a member of an oil spill response cooperative and relies on that cooperative to perform or supplement its response operations within the regions of operations covered by the plan, the plan shall state the cooperative's name, address, phone number, and response capability. The plan shall also include proof of cooperative membership.
(c) Plans which rely on primary response contractors shall rely only on primary response contractors who have conformed with the Department's Response Contractor Guidelines.
(**9**) Relationship to Other Plans: Each plan shall briefly describe its relation to all applicable local, state, regional, and federal government spill response plans. Plans shall address how the plan holder's response organization will be coordinated with an incident command system utilized by state and federal authorities. The Department shall maintain a reference library of appropriate plans.
(**10**) Spill Detection: Each plan shall list procedures which will be used to detect and document the presence and size of a spill, including methods which are effective during low visibility conditions.

In addition, the plan shall describe the use of mechanical or electronic monitoring or alarm systems (including threshold sensitivities) used to detect oil discharges into adjacent land or water from tanks, pipes, manifolds and other transfer or storage equipment.

(11) Notifications: Each plan shall describe procedures which will be taken to immediately notify appropriate parties that a spill has occurred.

(a) The plan holder shall maintain a notification call out list which shall be available for inspection if requested by the department ~~[for inspection]~~, and which:

(i) provides a contact at any time of the day for all spill response personnel identified under subsection (7) of this section, including the contact's name, position title, phone number or other means of contact for any time of the day, and an alternate contact in the event the individual is unavailable;

(ii) Lists the name and phone number of all government agencies which must be notified in the event of an oil spill pursuant to requirements under ORS 466.635, and

(iii) Establishes a clear order of priority for immediate notification.

(b) The plan shall identify a central reporting office or individual who is responsible for implementing the call out process.

(c) The plan shall utilize a system of categorizing incident type and severity. Plan holders are encouraged to utilize the system established by the department in Volume II of the Oregon Oil and Hazardous Materials Spill Contingency Plan as developed pursuant to ORS 468B.495-500.

(12) Response Personnel: Each plan shall describe the personnel (including contract personnel) available to respond to an oil spill, including:

(a) A job description for each type of spill response position needed as indicated in the spill response organization scheme addressed in subsection (7) of this section;

(b) The number of personnel available to perform the duties of each type of spill response position;

(c) Arrangements for pre-positioning personnel at strategic locations which will meet criteria pursuant to OAR 340-47-190(3)(d).

(d) The type and frequency of spill response operations and safety training that each individual in a spill response position receives to attain the level of qualification demanded by their job description; and

(e) The procedures, if any, to train and use volunteers willing to assist in beach cleanup and/or wildlife rehabilitation. Volunteer procedures for wildlife rescue shall comply with the Oregon Oiled Wildlife Rehabilitation Plan in Volume II of the Oregon Oil and Hazardous Materials Spill Contingency Plan.

(13) Equipment: (a) Each plan shall list the type, quantity, age, location, maintenance schedule, and availability of equipment used

during spill response, including equipment used for oil containment, recovery, storage, and removal, shoreline and adjacent lands cleanup, wildlife rescue and rehabilitation, and communication.
(b) For equipment listed under part (a) of this subsection that is not owned by or available exclusively to the plan holder, the plan shall also estimate the extent to which other contingency plans rely on that same equipment.
(c) For oil containment and recovery equipment, the plan also shall include equipment make and model, the manufacturer's nameplate capacity of the response equipment (in gallons per minute), and applicable design limits (e.g., maximum wave height capability, inland waters vs. open ocean).
(d) Based on information described in part (c) of this subsection, the plan shall state the maximum amount of oil which could be recovered per twenty-four hour period.
(e) For purposes of determining plan adequacy under OAR 340-47-190, and to assess realistic capabilities based on potential limitations by weather, sea state, and other variables, the data presented in parts (c) and (d) of this subsection will be multiplied by an average efficiency factor of 20 percent. The department will apply a higher efficiency factor for equipment listed in a plan if that plan holder provides adequate evidence that the higher efficiency factor is warranted for particular equipment. The department may assign a lower efficiency factor to particular equipment listed in a plan if it determines that the performance of that equipment warrants such a reduction.
(f) The plan shall provide arrangements for pre-positioning of oil spill response equipment at strategic locations which will meet criteria pursuant to OAR 340-47-190(3)(d).
(14) Communications: Each plan shall describe the communication systems used for spill notification and response operations, including:
(a) Communication procedures;
(b) The communication function (e.g., ground-to-air) assigned to each channel or frequency used; and
(c) The maximum geographic range for each channel or frequency used.
(d) Communication system compatibility with key spill response agencies.
(15) Response Operation Sites: Each plan shall describe the process to establish sites needed for spill response operations, including location or location criteria for:
(a) A central command post;
(b) A central communications post if located away from the command post; and
(c) Equipment and personnel staging areas.
(16) Response Flow Chart: (a) Each plan shall present a flowchart or decision tree describing the procession of each major stage of spill response operations from spill discovery to completion of cleanup. The flowchart or decision tree shall describe the general

order and priority in which key spill response activities are performed.
(b) Each plan shall describe all key spill response operations in checklist form, to be used by spill response managers in the event of an oil spill.
(17) Authorities: (a) Each plan shall list the local, state, and other government authorities responsible for the emergency procedures peripheral to spill containment and cleanup, including:
(i) procedures to control fires and explosions, and to rescue people or property threatened by fire or explosion;
(ii) procedures to control ground and air traffic which may interfere with spill response operations;
(iii) procedures to manage access to the spill response site; and
(iv) procedures to protect environmentally sensitive areas during emergency operations.
(b) Each plan shall describe the plan holder's role in these emergency operation procedures prior to the arrival of proper authorities.
(18) Damage Control: Each plan shall describe equipment and procedures to be used by the facility or covered vessel personnel to minimize the magnitude of the spill and minimize structural damage which may increase the quantity of oil spilled. (a) For facilities, damage control procedures shall include~~[; for facilities]~~; methods to slow or stop pipeline, storage tank, and other leaks, and methods to achieve immediate emergency shutdown.
(b) For tank vessels, damage control procedures shall include methods and onboard equipment to achieve vessel stability and prevent further vessel damage, slow or stop pipe, tank, and other leaks, and achieve emergency shutdown during oil transfer.
(c) For other covered vessels, damage control procedures shall address methods to achieve vessel stability and slow or stop leaks from fuel tanks and lines.
(19) Containment: Each plan shall describe, in detail, methods to contain spilled oil and remove it from the environment using appropriate scenarios. Methods shall describe deployment of equipment and personnel, using diagrams or other visual aids when possible. Response methods covered must include:
(a) Surveillance methods used to detect and track the extent and movement of the spill;
(b) Methods to contain and remove oil in offshore waters;
(c) Methods to contain and remove oil in near-shore waters, including shoreline protection procedures and oil diversion/pooling procedures; and
(d) Methods to contain and remove oil, including surface oil, subsurface oil, and oiled debris and vegetation, from a variety of shoreline, adjacent land, and beach types.
(20) Response Time: Each plan shall briefly describe initial equipment and personnel deployment activities which will accomplish the response standard listed in OAR 340-47-190(3)(d), and provide an estimate of the actual execution time.
(21) Chemical Agents: If the plan holder proposes to use

dispersants, coagulants, bioremediants, or other chemical agents for response operations, conditions permitting, the plan shall describe:
(a) Type and toxicity of chemicals; supplemented with material safety data sheets (MSDS) for each product.
(b) Under what conditions they will be applied in conformance with all applicable local, state, and federal requirements, including Volume II of the Oil and Hazardous Materials Spill Contingency Plan, and OAR 340-47-020,
(c) Methods of deployment; and
(d) Location and accessibility of supplies and deployment equipment.
(22) In Situ Burning: If the plan holder propose to use in-situ burning for response operations, conditions permitting, the plan shall describe:
(a) Type of burning operations;
(b) Under what conditions burning will be applied in conformance with all applicable local, state, and federal requirements, including Volume II of the Oil and Hazardous Materials Spill Contingency Plan, and OAR 340-23-035,
(c) Methods of application; and
(d) Location and accessibility of supplies and deployment equipment.
(23) Environmental Protection: Each plan shall describe how environmental protection will be achieved, including:
(a) Protection of sensitive shoreline and island habitat by diverting or blocking oil movement;
(b) Priorities for sensitive area protection in the region of operation covered by the plan as designated by the department in the environmentally sensitive area maps in Volume I of the Oil and Hazardous Materials Spill Contingency Plan;
(c) Rescue and rehabilitation of birds, marine mammals, and other wildlife contaminated or otherwise affected by the oil spill in compliance with the Oregon Oil Wildlife Rehabilitation Plan.
(d) Measures taken to reduce damages to the environment caused by shoreline and adjacent land cleanup operations. ~~[such as impacts to sensitive shoreline habitat by heavy machinery.]~~
(24) Interim Storage: (a) Each plan shall describe site criteria and methods used for interim storage of oil recovered and oily wastes generated during response and cleanup operations, including sites available within the facility. Interim storage methods and sites shall be designed to prevent contamination of the storage area by recovered oil and oily wastes.
(b) If use of interim storage sites will require approval by local, state, or federal officials, the plan shall include information which could expedite the approval process, including a list of appropriate contacts and a brief description of procedures to follow for each applicable approval process.
(c) Each plan shall describe methods and sites used for permanent disposal of oil recovered and oily wastes generated during response and cleanup operations.

(d) Interim storage and permanent disposal methods and sites shall be sufficient to keep up with oil recovery operations and handle the entire volume of oil recovered and oily wastes generated.
(e) Interim storage and permanent disposal methods and sites shall comply with all applicable local, state, and federal requirements.
(25) Health and Safety: Each plan shall describe procedures to protect the health and safety of oil spill response workers, volunteers, and other individuals on-site. Provisions for training, decontamination facilities, safety gear, and a safety officer position shall be addressed.
(26) Post Spill Review: Each plan shall explain post-spill review procedures, including methods to review both the effectiveness of the plan and the need for plan amendments. Post-spill procedures shall provide for a debrief of the department and other appropriate entities.
(27) Drills and Exercises: (a) Each plan shall describe the schedule and type of drills and other exercises which will be practiced to ensure readiness of the plan elements, including drills which satisfy OAR 340-47-200(3).
(b) Tests of internal call out procedures shall be performed at least once every ninety calendar days and documented by the plan holder. Such tests are only required to involve notification, not actual deployment.
(28) Risk Variables: Each facility and covered vessel plan shall list the spill risk variables within the region of operation covered by the plan, including:
(a) For facilities,
(i) Types, physical properties, and amounts of oil handled;
(ii) A written description and map indicating site topography, stormwater and other drainage systems, mooring areas, pipelines, tanks, and other oil processing, storage, and transfer sites and operations,
(iii) A written description of sites or operations with a history of or high potential for oil spills, including key areas which pose significant navigation risk within the region of operation covered by the plan; and
(iv) Methods to reduce spills during transfer operations, including overfill prevention;
(b) For covered vessels,
(i) Types, physical properties, and amounts of oil handled,
(ii) A written description and diagram indicating cargo, fuel, and ballast tanks and piping, power plants, and other oil storage and transfer sites and operations, and
(iii) A written description of operations with a history of or high potential for oil spills. including key areas which pose significant navigation risks within the region of operation covered by the plan.
(29) Environmental Variables: Each plan shall list the environmental variables within the region of operation covered by the plan, including:
(a) Natural resources, including coastal and aquatic habitat types

and sensitivity by season, breeding sites, presence of state or federally listed endangered or threatened species, and presence of commercial and recreational species (environmental variable information may be obtained directly from environmentally sensitive area maps in Volume I of the Oil and Hazardous Materials Spill Contingency Plan);
(b) Public resources, including public beaches, water intakes, drinking water supplies, and marinas;
(c) Seasonal hydrographic and climatic conditions; and
(d) Physical geographic features, including relative isolation of coastal regions, beach types, and other geological characteristics.
(30) Logistical Resources: Each plan shall list the logistical resources within the region of operation covered by the plan, including:
(a) Facilities for fire services, medical services, and accommodations; and
(b) Shoreline access areas, including boat launches.
(31) Scenarios: (a) Each plan shall describe detailed, plausible, step-by-step response scenarios for:
(i) A small oil spill of less than 500 gallons;
(ii) A maximum probable spill as described in the plan pursuant to subsection (4)(c) of this section; and
(iii) A worst case spill as described in the plan pursuant to subsection (4)(c) of this section.
(b) Each scenario description shall include:
(i) The circumstances surrounding the spill, including size, type, location, climatic and hydrographic conditions, time, and cause;
(ii) An estimate of oil movement during the first 72 hours, including likely shoreline contact points; and
(iii) Estimates of response time and percent recovery for each major phase of operations.
(c) If a plan applies to multiple facilities or covered vessels, each scenario description shall discuss implementation of the plan in the event of simultaneous separate spills.
(32) Financial Responsibility: Each plan shall provide evidence that the facility or vessel is in compliance with federal financial responsibility requirements pursuant to ORS 468B. 390.
(33) Technical Terms Glossary: Each plan shall include a glossary of technical terms and abbreviations used in the plan.

340-47-160 Prevention Strategies for Facilities. (1) The owner or operator of each onshore and offshore facility shall develop spill prevention strategies which, when implemented, will provide the best achievable protection from damages caused by the discharge of oil into the waters of the state. The strategies may be in the form of:
(a) Appendices to oil spill prevention and emergency response plans required under this chapter, or
(b) A stand alone prevention plan which meets all ~~{the}~~ requirements of OAR 340-47-100 to 340-47-230.
(2) Spill Prevention Countermeasure and Control Plans (SPCC).

Operation Manuals, and other prevention documents prepared to meet federal requirements under 33 CFR 154, 33 CFR 156, 40 CFR 109, 40 CFR 112 ~~{110}~~, or the Federal Oil Pollution Act of 1990, or plans prepared to meet the requirements of other states may be submitted to satisfy requirements under this chapter if the department deems that such requirements equal or exceed those of the department, or if the plans are modified or appended to satisfy requirements under this chapter.

(3) Spill prevention strategies shall at a minimum provide for:

(a) Documentation of types and frequency of spill prevention training provided to applicable personnel.

(b) Evidence that the facility has an operations manual. ~~{that includes the implementation criteria established in the department's Technical Standards Guidelines}~~

(c) Description of a drug and alcohol awareness program which provides training and information materials to all employees on recognition of alcohol and drug abuse treatment opportunities, and applicable company policies.

(d) Evidence of a maintenance and inspection program that includes:

(i) Summary of the frequency and type of all regularly scheduled inspection and preventative maintenance procedures for tanks, pipelines, key storage, transfer, or production equipment including associated pumps, valves, and flanges, and overpressure safety devices and other spill prevention equipment.

(ii) Description of integrity testing of storage tanks, and pipelines using such techniques as hydrostatic testing and visual inspection, including but not limited to frequency; means of identifying that a leak has occurred; and measures to reduce spill risk if test material is product;

(iii) external and internal corrosion detection and repair; and

(iv) damage criteria for equipment repair or replacement; and

(v) maintenance and inspection records of the storage and transfer facilities and related equipment will be made available to the department upon request.

(vi) documentation required under 40 CFR 112.7(e) or 33 CFR 154 Subparts C and D ~~{e}~~ may be used to address elements of this subsection.

(e) Description of the use of containment boom at facilities transferring "heavy oil" to include:

(i) type(s) of boom used based upon the varied conditions within the region(s) of operation.

(ii) methods of boom placement and anchoring.

(f) Identification of spill prevention technology currently in use, including if applicable:

(i) tank and pipeline materials and design;

(ii) storage tank overflow alarms, tank overflow cut-off switches, low level alarms and automatic transfer shut-down systems, including methods to alert operators; system accuracy; and tank fill margin remaining at time of alarm activation before overflow would occur at maximum pumping rate (documentation required under 40 CFR 112.7(e)(2)(viii) or 33 CFR 154.310(a)(12-13) may be used to

address some or all of these elements);
(iii) leak detection systems for both active and nonactive pipeline conditions including detection thresholds in terms of duration and percentage of pipeline flow; limitations on system performance due to normal pipeline events; and procedures for operator response to leak alarms, (documentation required under 40 CFR 112.7(e)(3) may be used to address some or all of these elements);
(iv) rapid pump and valve shutdown procedures, including means of ensuring that surge and over-pressure conditions do not occur; rates of valve closure; sequence and time duration (average and maximum) for entire procedure; automatic and remote control capabilities utilized; and visual displays of system status for operator use (documentation required under 40 CFR 112.7(e)(3) may be used to address some or all of these elements);
(v) minimization of post-shutdown residual drain-out from pipes; including criteria for locating valves; identification of all valves (including types and means of operation) that may be open during a transfer process; and any other techniques for reducing drain-out;
(vi) means of relieving pressure due to thermal expansion of liquid in pipes during periods of non-use;
(vii) secondary containment including contents of the largest tank plus space for precipitation, and material design and permeability of the containment area (documentation required under 40 CFR 112.7(e)(1) and (2)(ii-iv) may be used to address some or all of these elements);
(viii) surge control systems;
(ix) internal and external corrosion control coatings or wrappings and instruments;
(x) storm water and other drainage retention, treatment, and discharge systems, including maximum storage capacities and identification of any applicable discharge permits (documentation required under 40 CFR 112.7(e)(1) and (2)(iii and ix) may be used to address some or all of these elements); and
(xi) criteria for suspension of operations while leak detection or other spill control systems are inoperative.
(g) Description of facility site security systems, including:
(i) procedures to control and monitor facility access;
(ii) lighting (documentation required under 33 CFR 154.570 may be used to address some or all of this element);
(iii) signage; and
(iv) right-of-way identification or other measures to prevent third party damage (documentation required under 40 CFR 112.7(e)(3)(v) and (9) may be used to address some or all of this element);
(h) History of any discharges of oil to the land or waters of the state in excess of twenty-five barrels (one thousand and fifty gallons) which occurred during the five year period prior to the plan submittal date. For each discharge, describe:
(i) quantity;
(ii) type of oil;
(iii) geographic area;

(iv) analysis of cause, including source(s) of discharged oil and contributing factors (e.g., equipment failure, employee error, adverse weather, etc.)
(v) measures taken to remedy the cause and prevent reoccurrence.
(i) Detailed and comprehensive site risk analyses which:
(i) evaluates the construction, age, corrosion, inspection and maintenance, operation, and oil spill risk of the transfer, production, and storage system including piping, tanks, pumps, valves, and associated equipment;
(ii) evaluate spill minimization and containment systems;
(iii) incorporates information required in part (f) of this subsection; and
(iv) is prepared under the supervision of (and bears the seal of) a licensed professional engineer.
(v) documentation required under 40 CFR 112.7(b) and (e) may be used to address some or all of the elements in this subsection;
(j) Description of how the facility will incorporate those measures that will provide best achievable protection ~~{technology}~~ to address the spill risks identified in the risk analyses required in part (i) of this subsection. ~~{Address how the facility will meet prevention standards established by the department's Technical Standards Guidelines}~~ (Information documented pursuant to 40 CFR 112.7(e) and 33 CFR 154.310 may be used to address some or all of the elements of this subsection.)

OAR 340-47-170 Prevention Strategies for Vessels. (1) Each covered vessel shall have ~~{develop}~~ spill prevention strategies which when implemented will provide the best achievable protection from damages caused by the discharge of oil into the waters of the state. ~~{The strategies may be in the form of:~~
~~(a) Appendices to oil spill prevention and emergency response plans required under this chapter, or~~
~~(b) A stand alone prevention plan which meets the requirements of OAR 340-47-100 to 340-47-230.~~
~~(2) Application for waivers from specific subsections of vessel prevention strategies must be submitted to the department in writing at the time of plan submission. The application must demonstrate that compliance with the requirement is economically or physically impractical. A waiver will be granted or denied in writing from the department.}~~
(2) ~~{3}~~ Prevention documents prepared to meet federal requirements under the Oil Pollution Act of 1990 or plans prepared to meet the requirements of other states may be used ~~{submitted}~~ to satisfy the criteria of this section. ~~{requirements under this chapter.}~~
(3) Vessel owners or operators will make maintenance and inspection records, and oil transfer procedures available to the department upon request.
~~{(4) Tank vessels operating in the Columbia River shall obtain spill prevention plan or strategy approval from both the State of Oregon and the State of Washington.}~~
~~{(4)[(5)] Spill prevention strategies shall at a minimum provide~~

~~for:~~
~~[(a) Evidence that the vessel has an operations manual, [that includes implementation criteria established in the Department's Technical Standards Guidelines.]~~
~~(b) Description of types and frequency of spill prevention training provided to applicable personnel. Demonstration of operator(s) training and certification will be made available to the department upon request.~~
~~(c) Description of a drug and alcohol awareness program which provides training and information materials to all employees on recognition of alcohol and drug abuse treatment opportunities and applicable company policies.~~
~~(d) Evidence of a maintenance and inspection program that includes:~~
~~(i) summary of the frequency and type of all regularly scheduled inspection and preventative maintenance procedures;~~
~~(ii) damage criteria for equipment repair or replacement;~~
~~(iii) maintenance and inspection records will be made available to the department upon request.~~
~~(e) Description of the use of containment boom during transfers of heavy oil, to include:~~
~~(i) type(s) of boom used based on the varied conditions within the region(s) of operation.~~
~~(ii) methods of boom placement and anchoring.~~
~~(f) Description of spill prevention technology currently in use.~~
~~(g) History of oil discharges in excess of 25 barrels (one thousand fifty gallons) and number of reported casualties which have occurred during the five year period prior to the plans submitted date. For each incident, describe as appropriate:~~
~~(i) quantity;~~
~~(ii) type of oil discharged;~~
~~(iii) geographic area;~~
~~(iv) analysis of cause, including source(s) and contributory factors to the spill and/or casualty~~
~~(v) corrective action taken.]~~

OAR 340-47-180 **Plan submittal.** (1) (a) Plans for onshore and offshore facilities on the Columbia River and Willamette River capable of storing 10,000 gallons or more of oil, shall be submitted to the department within six months after adoption of this chapter but not later than January 1, 1993.
(b) Plans for covered vessels of three hundred gross tons or more which transit the Columbia River and Willamette River shall be submitted to the ~~[office]~~ department within six months after adoption of this chapter but not later than January 1, 1993.
(c) All other facilities and covered vessels shall submit plans to the ~~[office]~~ department within twenty-four ~~[eighteen]~~ months after adoption of this chapter.
(2) Any onshore or offshore facility or covered vessel that first begins operating after the above deadlines shall submit a plan to the department at least ninety calendar days prior to the beginning of operations.

(3) Four ~~{Eight}~~ copies of the plan and appendices (a minimum of 3 ~~{1}~~ hard copies ~~{y}~~ and 1 optional ~~{7}~~ computerized disk copy ~~{ies}{)}~~ formatted in 4.2 or 5.1) shall be delivered to:

Department of Environmental Quality
Oil Spill Contingency Plan Coordinator
Water Quality Division
811 S.W. Sixth
Portland, OR 97204

(4) Onshore and offshore facility plans may be submitted by:
(a) The facility owner or operator; or
(b) A maritime association in which the facility owner or operator is a participating member.
(5) Tank vessel plans may be submitted by:
(a) The tank vessel owner or operator;
(b) The owner or operator of a facility where the tank vessel unloads cargo, in conformance with requirements under OAR 340-47-150(1); or
(c) An oil spill response cooperative or maritime association in which the tank vessel owner or operator is a participating member.
(6) Cargo and passenger vessel plans may be submitted by:
(a) The vessel owner or operator;
(b) The agent for the vessel resident in this states; or
(c) Subject to the conditions imposed by the Department, the owner, operator, agent or a maritime association, may submit a single contingency plan for cargo vessels or passenger vessels of a particular class.
(d) A primary response contractor .
(7) A single plan may be submitted for more than one facility or covered vessel provided that the plan contents meet the requirements of 340-47-100 to 340-47-230 for each facility or covered vessel listed.
(8) The plan submitter may request that proprietary information be kept confidential under ORS 192.501(2)

OAR 340-47-190 Plan review. (1) Upon receipt of a plan, the department shall promptly evaluate ~~{promptly whether}~~ the plan for completeness ~~{is incomplete}~~. If the department determines that a plan is incomplete, the submitter shall be notified of deficiencies. The review period shall not begin until the department receives a complete plan.
(2) The department shall regularly notify interested parties of any contingency plans which are under review by the department, and make plans available for review to ODFW, DLCD, SFM and to any other state, local, and federal agencies, and the public who are interested. The department shall accept comments from these interested parties on the plan during the first thirty calendar days of review by the department.
(3) A plan shall be approved if, in addition to meeting criteria in OAR 340-47-130 and OAR 340-47-140, it demonstrates that when implemented, it can:

(a) To the maximum extent practicable, provide for prompt and proper response to and cleanup of a variety of spills, including small spills, maximum probable spills, and worst case spills;
(b) To the maximum extent practicable, provide for prompt and proper protection of the environment from oil spills;
(c) Provide for immediate notification and mobilization of resources upon discovery of a spill;
(d) Provide for initial deployment of response equipment and personnel at the site of the spill within 1 hour for facilities and 2 hours for covered vessels of the plan holder's awareness that a spill has occurred given suitable safety conditions; and
(4) When reviewing plans, the department shall, in addition to the above criteria, consider the following:
(a) The volume and type of oil(s) addressed by the plan;
(b) The history and circumstances of prior spills by similar types of facilities, including spill reports by DEQ spill responders;
(c) The presence of operating hazards;
(d) The sensitivity and value of natural resources within the geographic area covered by the plan;
(e) Any pertinent local, state, federal agency, or public comments received on the plan;
(f) The extent to which reasonable, cost-effective spill prevention measures have been incorporated into the plan.
(5) The department may approve a plan without a full review as per provisions of this section if that plan has been approved by a federal agency or other state which the department has deemed to possess approval criteria which equal or exceed those of the department.
(6) The department may prepare a manual to aid department staff responsible for plan review. This manual shall be made available to provide guidance for plan preparers. While the manual will be used as a tool to conduct review of a plan, the department will not be bound by the contents of the manual.
(7) The department shall endeavor to notify the facility or covered vessel owner or operator within five working days after the review is completed whether the plan has been approved.
(a) If the plan receives approval, the facility or covered vessel owner or operator shall receive a certificate of approval describing the conditions of approval, including expiration dates not to exceed 5 years.
(b) (i) The department may approve a plan conditionally by requiring a facility or covered vessel owner or operator to operate with specific precautionary measures until unacceptable components of the plan are resubmitted and approved.
(ii) Precautionary measures may include, but are not limited to, reducing oil transfer rates, increasing personnel levels, or restricting operations to daylight hours. Precautionary measures may also include additional requirements to ensure availability of response equipment.
(iii) A plan holder shall have thirty calendar days after the department gives notification of conditional status to submit and

implement required changes to the department, with the option for an extension at the department's discretion. Plan holders who fail to meet conditional requirements or provide required changes in the time allowed shall lose conditional approval status.
(c) If plan approval is denied, the facility or covered vessel owner or operator shall receive an explanation of the factors for disapproval and a list of actions to be taken to gain approval. The facility or covered vessel shall not continue oil storage, transport, transfer, production, or other operations until a plan for that facility or covered vessel has been approved.
(d) A plan holder may appeal the department's decision's under OAR 340 Division 11.
(e) If a plan holder demonstrates an inability to comply with an approved contingency plan or otherwise fails to comply with requirements of this chapter, the department may, at its discretion:
(i) place conditions on approval pursuant to (b) of this subsection; or
(ii) revoke its approval pursuant to (c) of this subsection.
(f) Approval of a plan by the department does not constitute an express assurance regarding the adequacy of the plan nor constitute a defense to liability imposed under state law.

OAR 340-47-200 Drills and inspections. (1) For the purpose of determining plan adequacy, the department may require a plan holder to participate in one unannounced full deployment drill annually. The department shall choose plan holders for such drills through a random process.
(2) The department may require a plan holder to participate in one announced, limited deployment drill annually. The department shall choose plan holders for such drills through a random process.
(3) Requirements under subsections (1) and (2) of this section may be met:
(a) by drills led by other state, local, or federal authorities if the department finds that the criteria for drill execution and review equal or exceed those of the department;
(b) by drills initiated by the plan holder, if the department is involved in participation, review, and evaluation of the drill, and if the department finds that the drill adequately tests the plan; or
(c) by responses to actual spill events, if the department is involved in participation, review, and evaluation of the spill response, and if the department finds that the spill event adequately tests the plan.
(4) The department may excuse a primary response contractor from full deployment participation in more than one drill, if in the past twelve months, the primary response contractor has performed to the department's satisfaction in a full deployment drill or an exercise listed in subsection (3) of this section.
(5) The department shall review the degree to which the specifications of the plan are implemented during the drill. The

department shall endeavor to notify the facility or covered vessel owner or operator of the review results within thirty calendar days following the drill. If the department finds deficiencies in the plan, the department shall report those deficiencies to the plan holder and require the plan holder to make specific amendments to the plan pursuant to requirements in OAR 340-47-220.
(6) The department may publish an annual report on plan drills, including a summary of response times, actual equipment and personnel use, recommendations for plan requirement changes, and industry response to those recommendations.
(7) The department may require the facility or covered vessel owner or operator to participate in additional drills beyond those required in subsections (1) and (2) of this section if the department is not satisfied with the adequacy of the plan during exercises or spill response events.
(8) The department may require the plan holder to publish an annual report on plan drills including a summary of response times, active equipment and personnel use, and recommendations for improvement.
(9) The department may verify compliance with this chapter by unannounced inspections in accordance with ORS 468B.370.

OAR 340-47-210 Plan maintenance and use (1) At least one copy of the plan shall be kept in a central location accessible at any time by the incident commander or spill response manager named in accordance with OAR 340-47-150(7). Each facility covered by the plan shall possess a copy of the plan and keep it in a conspicuous and accessible location.
(2) A field document prepared under OAR 340-47-140(5) shall be available to all appropriate personnel. Each covered vessel covered by the plan shall possess a copy of the field document and keep it in a conspicuous and accessible location <u>as soon as practical</u>.
(3) A facility or covered vessel owner or operator or their designee shall implement the plan in the event of a spill. The facility or covered vessel owner or operator or their designee must receive approval from the department before it conducts any major aspect of the spill response contrary to the plan unless:
(a) such actions are necessary to protect human health and safety;
(b) such actions must be performed immediately in response to unforeseen conditions to avoid additional environmental damage; or
(c) the plan holder has been directed to perform such actions by the department or the United States Coast Guard.

OAR 340-47-220 Plan update timeline (1) The department shall be notified in writing as soon as possible and within twenty-four hours of any significant change which could affect implementation of the plan, including a substantial decrease in available spill response equipment or personnel. The plan holder shall also provide a schedule for the prompt return of the plan to full operational status. A facsimile will be considered written notice for the purposes of this subsection. Changes which are not

considered significant include minor variations in equipment or personnel characteristics, call out lists, or operating procedures. Failure to notify the department of significant changes shall be considered noncompliance with this chapter and subject to provisions of OAR 340-47-190(7)(e) .
(2) If the department finds that, as a result of the change, the plan no longer meets approval criteria pursuant to OAR 340-47-190, the department may, in its discretion, place conditions on approval, require additional drills or inspections, or revoke approval in accordance to OAR 340-47-190(7)(e). Plan holders are encouraged to maintain back-up response resources in order to ensure that their plans can always be fully implemented.
(3) Within thirty calendar days of an approved change, the facility or covered vessel owner or operator shall distribute the amended page(s) of the plan to the department and other plan holders.
(4) Plans shall be reviewed by the department every five years pursuant to ORS 468B.345(3). Plans shall be submitted for reapproval unless the plan holder submits a letter requesting that the department review the plan already in the department's possession. The plan holder shall submit the plan or such a letter at least ninety calendar days in advance of the plan expiration date.
(5) The department may review a plan following any spill for which the plan holder is responsible.

OAR 340-47-230 Noncompliance with plan requirements. (1) Any violation of this chapter may be subject to the enforcement and penalty sanctions of ORS 468.140.
(2) (a) The department may notify the secretary of state to suspend the business license of any onshore or offshore facility or other person that is in violation of this section,
(b) The department may deny entry onto waters of the state to any covered vessel that does not have an approved plan and is so required.

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335 (7), this statement provides information on the Environmental Quality Commission's intended action to adopt a rule.

(1) Legal Authority

ORS 468B.345 to 468B.390 (Senate Bill 242 passed in June, 1991), requires covered vessels and facilities to have spill prevention and emergency response plans that will be submitted to the Department for review and approval.

(2) Need for the Rule

ORS 468B.350 requires the Department to adopt by rule a set of standards which detail the elements that the plans. ORS 468B.355 and 468B.365 requires the Department to adopt by rule a plan submission schedule and rules for determining the adequacy of the plans.

(3) Principal Documents Relied Upon in this Rulemaking

ORS 468B.340 to 468B.600 and State of Washington regulations WAC 173-181, WAC 173-180, and WAC 317-10.

FISCAL AND ECONOMIC IMPACT STATEMENT

I. Introduction

The proposed oil spill prevention and emergency response plan rules as well as the proposed rule to require booming during transferring operations are intended to help prevent major spills of oil. Implementation of the rules will have an impact on the oil transport and storage industry. It is our estimate the impact will not significantly impact industry above and beyond what is already required under the new Federal Oil Pollution Act of 1990 (OPA 90).

II. Small Business

The rules are directed at the maritime shipping industry, and the oil transport and storage industry. It should have no direct impacts on small business. It could have an indirect impact by causing a small increase in the cost of fuel. The booming requirements and contingency plan rules may create new business for small contractors

III. Large Business

The rules will impact the several sectors of the maritime industry. It should be noted that in some cases, groups of vessel owner or operators and groups of facilities have formed associations that provide overall coverage for their members. This effectively spreads the cost over a larger group and allows them to contract for plan development and response capability jointly. The following is a summary of the direct and indirect costs, to the extent they can be determined, on the four sectors affected by the rules:

(1). Cargo vessels over 300 gross tons (vessels that do not carry oil but have significant amounts of fuel:

Number of vessels covered = est 1400
Number of trips/year = est 2100
Estimated cost breakdown:

a. fee for membership in association = $200/trip/vessel (covers cost have having a spill response contract on retainer and purchase of spill coop equipment)
b. contingency plan development = est $50 one time fee for each vessel
c. equipment, training, drills = covered by assn. fee
d. insurance = minimum $500,000/year required by OPA 90 depending on tonnage
e. DEQ administration fee = $25/trip
f. booming during fuel transfer = est $500-1000/transfer

Total estimated cost = $300 - $1300/trip excluding insurance.

Assumptions:
- all cargo vessels will belong to assn.
- total cost based on 0 to 1 transfer of fuel per trip
- the total annual cost will be directly proportional to the number of trips

(2) Oil transport barges over 300 gross tons:

Number of vessels = est. 50
Number of trips/year = est. 1700
Estimated cost breakdown:

a. plan development = est $10,000/corporation (2 corporations do the bulk of the transport, 3 to 4 corporations have a limited number of trips/year).
b. spill response contractor on retainer = est.$300,000 to $400,000/year/corporation.
c. equipment, training, drills = est $100,000/year
d. insurance = est $300,000/year required by OPA 90 depending on tonnage
e. DEQ administration fee = $28/trip
f. booming during fuel transfer = $300-1000/transfer

Total estimated cost = $1000 - $2000/trip excluding insurance
Assumptions:
- per trip costs based on summing the combined costs for 5 corporations and dividing that by 1700 trips/year and adding in the cost of 1 fuel transfer per trip. Since multiple transfers may occur on one trip, the cost would increase accordingly.

(3) Oil tankers (self propelled tank vessels) over 300 gross tons:

Number of vessels = est. 30
Number of trips/year = est. 110
Estimated cost breakdown:

a. plan development = est $10,000 - $20,000/plan estimate 5 to 7 plans
b. spill response contractor on retainer = est. $300,000 to 400,000/year
c. equipment, training, drills = est $100,000/plan holder
d. insurance = minimum $2 million depending on tonnage
e. DEQ administration fee = $650/trip
f. booming during transfer = $300-1000/transfer

Total estimated cost = $1000 - $2000/trip excluding insurance if the vessel owner or operator elects to belong to an association.
= $400,000 - $500,000/year if a corporation elects to go independent of an association.

Assumptions: 1. The per trip figure assumes a $200/trip fee to an association and $650/trip fee for the DEQ as well as a probable transfer cost.
2. The annual costs for a corporation are based on very rough estimates and is probably not very accurate.

(4) Oil storage facilities with 10,000 or more gallons capacity that receive oil from vessels or pipelines:

Number of covered facilities = 24
Estimated cost breakdown:

a. membership in cooperative = $500 initiation fee and an annual assessment estimated at $10,000 to $15,000 per facility. The assessment is based on the amount of oil handled at the facility. It covers cost of having spill response contractor on retainer, conducting drills and training exercises.
b. plan development = est $4000 per facility
c. training, equipment, drills = covered in coop assessment
d. insurance = not required by OPA 90
e. DEQ administration fee = $3000/year/facility
f. booming during transfer = $300-1000/transfer

Total estimated cost = $17,000 to $20,000/facility on an annual basis.

Assumptions: Costs are based on all facilities belonging to a spill cleanup cooperative.

(5) It is estimated that costs to the regulated community as a result of the fees assessed by DEQ to administer the program will range from .006 to .01 cents/gallon.

(6) With the exception of the direct assessment by DEQ to manage the program mandated by ORS 468B.345 to 468B.390 and the costs to deploy boom during transfer, all of the identified costs above including insurance, emergency response plan development, training, equipment and drills are required by the Federal Oil Pollution Act of 1990.

In addition, cargo vessels, barges and tankers using the Columbia River are covered by existing Washington state laws and rules. To comply with Washington requirements they must develop nearly identical programs with similar associated costs.

IV. General Public

Our assumption is that this will not affect the price of gas to the consumer at the gas pump.

V. Local Governments

The vessels that call at Yaquina Bay and Coos Bay and the facilities that are located at those two ports will likely incur larger costs than those on the Columbia River because the cost must be spread among fewer participants. The costs are difficult to project at the moment but the present draft rule language provides for an extra 18 months for compliance to ensure that viable options can be developed that will not negatively impact the industry and local governments in those local areas. We will be working closely with these areas to ensure that a workable arrangement can be developed.

VI. State Agencies

1. DEQ: The administrative fees identified above in III provide funds for the DEQ to administer the program. The rule development and implementation will utilize 1 FTE at the ES 3 level and 1/2 FTE at the clerical specialist level.

2. ODFW: No FTE identified to support plan review function for natural resources.

3. DLCD: No FTE identified to support plan review function for State Wide Land Use Goals consistency.

4. SFM: No FTE identified to support plan review function to ensure consistency with local emergency plans.

ATTACHMENT D

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

SPILL PREVENTION AND EMERGENCY RESPONSE CONTINGENCY PLAN RULES

Notice Issued: 3-23-92
Comments Due: 5-1-92
Hearings dates: 4-27-92
4-28-92
4-29-92

WHO IS AFFECTED:

- All owners or operators of oil transport barges, cargo vessels, and oil tankers over 300 gross tons that operate on Oregon navigable waters.
- All owners or operators of oil storage facilities over 10,000 gallons that receive oil by pipeline or vessel and are on or near navigable waters.

WHAT IS PROPOSED:

Pursuant to the mandates of Senate Bill 242, (ORS 468B.345 to ORS 468.390), the Department of Environmental Quality is proposing a set of rules that detail what shall be contained in an industry oil spill prevention and emergency response plan, how the plans will be approved, and a schedule for their submission.

WHAT ARE THE HIGHLIGHTS:

Detailed in the rules are:

1. Plan preparation and format requirements,
2. 33 subsections on plan content requirements,
3. Prevention strategies to be included,
4. Submittal requirements,
5. Review procedures,
6. Drills and inspection requirements,
7. Maintenance and use requirements,
8. Update timelines, and
9. Noncompliance penalties.

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

FOR FURTHER INFORMATION:

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

HOW TO COMMENT:

Copies of the proposed rules may be obtained from the Water Quality Division in Portland (811 SW 6th Ave). For further information, contact Rebecca DeMoss at 229-5046.

Public hearings will be held before a hearings officer at:

1. Time - 1:00 - 5:00 PM
   Date - April 27, 1992
   Place - Room 3A, Executive Building
   811 SW 6th Avenue, Portland

2. Time - 1:00 - 3:00 PM
   Date - April 28, 1992
   Place - Astoria Public Library Flag Room
   450 10th Street
   Astoria, Oregon

3. Time - 1:00 - 3:00 PM
   Date - April 29, 1992
   Place - Coos County Annex, Room 306
   1975 McPherson
   North Bend, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ Water Quality Division, 811 SW 6th Avenue, Portland, Oregon 97204, but must be received by no latter than 5:00 pm on May 1st, 1992.

WHAT IS THE NEXT STEP:

After public hearings the Environmental Quality Commission may adopt rules identical to the proposed rules, adopt modified rules, or decline to act. The Commission's decision should come on July 24th, 1992 a part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

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spill or an owner of property on which oil has been spilled fails to act to restrain or to remove the oil.

(2) Damages, other than those caused by the oil spill, suffered from the actions of the director pursuant to subsection (1) of this section shall be the responsibility of the state. [Formerly 468.802]

468B.330 Action to collect costs. (1) If the amount of state-incurred expenses under ORS 468B.320 is not paid by the responsible person to the commission at the time provided in subsection (2) of this section, the Attorney General, upon the request of the director, shall bring action in the name of the State of Oregon in the Circuit Court of Marion County or the circuit court of any other county in which the violation may have taken place to recover the amount specified in the order of the commission.

(2) Payment must be made within 15 days after the end of the appeal period or, if an appeal is filed, within 15 days after the court renders its decision if the decision affirms the order. [Formerly 449.165 and then 468.805]

468B.335 Effect of federal regulations of oil spillage. Nothing in ORS 468.020, 468.095, 468.140 (3) and 468B.300 to 468B.500 or the rules adopted thereunder shall require or prohibit any act if such requirement or prohibition is in conflict with any applicable federal law or regulation. [Formerly 449.175 and then 468.815]

(Contingency Planning)

468B.340 Legislative findings and intent. (1) The Legislative Assembly finds that:

(a) Oil spills present a serious danger to the fragile natural environment of the state.

(b) Commercial vessel activity on the navigable waters of the state is vital to the economic interests of the people of the state.

(c) Recent studies conducted in the wake of disastrous oil spills have identified the following problems in the transport and storage of oil:

(A) Gaps in regulatory oversight;

(B) Incomplete cost recovery by states;

(C) Despite research in spill cleanup technology, it is unlikely that a large percentage of oil can be recovered from a catastrophic spill;

(D) Because response efforts cannot effectively reduce the impact of oil spills, prevention is the most effective approach to oil spill management; and

(E) Comprehensive oil spill prevention demands participation by industry, citizens, environmental organizations and local, state, federal and international governments.

(2) Therefore, the Legislative Assembly declares it is the intent of ORS 468B.345 to 468B.415 to establish a program to promote:

(a) The prevention of oil spills especially on the large, navigable waters of the Columbia River, the Willamette River and the Oregon coast;

(b) Oil spill response preparedness, including the identification of actions and content required for an effective contingency plan;

(c) A consistent west coast approach to oil spill prevention and response;

(d) The establishment, coordination and duties of safety committees as provided in ORS 468B.415; and

(e) To the maximum extent possible, coordination of state programs with the programs and regulations of the United States Coast Guard and adjacent states. [1991 c.651 §2]

468B.345 Oil spill contingency plan required to operate facility or covered vessel in state or state waters. (1) Unless an oil spill prevention and emergency response plan has been approved by the Department of Environmental Quality and has been properly implemented, no person shall:

(a) Cause or permit the operation of an onshore facility in the state;

(b) Cause or permit the operation of an offshore facility in the state; or

(c) Cause or permit the operation of a covered vessel within the navigable waters of the state.

(2) It is not a defense to an action brought for a violation of subsection (1) of this section that the person charged believed that a current contingency plan had been approved by the department.

(3) A contingency plan shall be renewed at least once every five years. [1991 c.651 §4]

468B.350 Standards for contingency plans. (1) On or before July 1, 1992, the Environmental Quality Commission shall adopt by rule standards for the preparation of contingency plans for facilities and covered vessels.

(2) The rules adopted under subsection (1) of this section shall be coordinated with rules and regulations adopted by the State of Washington and the United States Coast Guard and shall require contingency plans that at a minimum meet the following standards. The plan shall:

(a) Include complete details concerning the response to oil spills of various sizes from any covered vessel or facility covered by the contingency plan.

(b) To the maximum extent practicable, be designed, in terms of personnel, materials and equipment, to:

(A) Remove oil and minimize any damage to the environment resulting from a maximum probable spill; and

(B) Remove oil and minimize any damage to the environment resulting from a worst case spill.

(c) Consider the nature and number of facilities and marine terminals in a geographic area and the resulting ability of a facility to finance a plan and pay for department review.

(d) Describe how the contingency plan relates to and is coordinated with the response plan developed by the Department of Environmental Quality under ORS 468B.495 and 468B.500 and any relevant contingency plan prepared by a cooperative, port, regional entity, the state or the Federal Government in the same area of the state covered by the plan.

(e) Provide procedures for early detection of an oil spill and timely notification of appropriate federal, state and local authorities about an oil spill in accordance with applicable state and federal law.

(f) Demonstrate ownership of or access to an emergency response communications network covering all locations of operation or transit by a covered vessel. The emergency response communications network also shall provide for immediate notification and continual emergency communications during cleanup response.

(g) State the number, training preparedness and fitness of all dedicated, pre-positioned personnel assigned to direct and implement the plan.

(h) Incorporate periodic training and drill programs to evaluate whether the personnel and equipment provided under the plan are in a state of operational readiness at all times.

(i) State the means of protecting and mitigating the effects of a spill on the environment, including fish, marine mammals and other wildlife, and insuring that implementation of the plan does not pose unacceptable risks to the public or to the environment.

(j) Provide a detailed description of equipment, training and procedures to be used by the crew of a vessel, or the crew of a tugboat involved in the operation of a nonself-propelled tank vessel, to minimize vessel damage, stop or reduce spilling from the vessel and only when appropriate and the vessel's safety is assured, contain and clean up the spilled oil.

(k) Provide arrangements for prepositioning oil spill containment and cleanup equipment and trained personnel at strategic locations from which the personnel and equipment can be deployed to the spill site to promptly and properly remove the spilled oil.

(L) Provide arrangements for enlisting the use of qualified and trained cleanup personnel to implement the plan.

(m) Provide for disposal of recovered oil in accordance with local, state and federal laws.

(n) State the measures that have been taken to reduce the likelihood a spill will occur, including but not limited to design and operation of a vessel or facility, training of personnel, number of personnel and backup systems designed to prevent a spill.

(o) State the amount and type of equipment available to respond to a spill, where the equipment is located and the extent to which other contingency plans rely on the same equipment.

(p) If the commission has adopted rules permitting the use of dispersants, describe the circumstances and the manner for the application of dispersants in conformance with the rules of the commission. [1991 c.651 §5]

468B.355 Submission of contingency plan; participation in maritime association; lien; liability of maritime association. (1) A contingency plan for a facility or covered vessel shall be submitted to the Department of Environmental Quality within 12 months after the commission adopts rules under ORS 468B.350. The department may adopt a schedule for submission of an oil contingency plan within the 12-month period. The schedule for the Columbia River shall be coordinated with the State of Washington. The department may adopt an alternative schedule for the Oregon coast and the Willamette River.

(2) The contingency plan for a facility shall be submitted by the owner or operator of the facility or by a qualified oil spill response cooperative in which the facility owner or operator is a participating member.

(3) The contingency plan for a tank vessel shall be submitted by:

(a) The owner or operator of the tank vessel;

(b) The owner or operator of the facility at which the vessel will be loading or unloading its cargo; or

(c) A qualified oil spill response cooperative in which the tank vessel owner or operator is a participating member.

(4) Subject to conditions imposed by the department, the contingency plan for a tank vessel, if submitted by the owner or operator of a facility, may be submitted as a single plan for all tank vessels of a particular class that will be loading or unloading cargo at the facility.

(5) The contingency plan for a cargo vessel or passenger vessel may be submitted by the owner or operator of the vessel, or the agent for the vessel resident in this state. Subject to conditions imposed by the department, the owner, operator, agent or a maritime association may submit a single contingency plan for cargo vessels or passenger vessels of a particular class.

(6) A person that has contracted with a facility or covered vessel to provide containment and cleanup services and that meets the standards established by the commission under ORS 468B.350 may submit the contingency plan for any facility or covered vessel for which the person is contractually obligated to provide services. Subject to conditions imposed by the department, the person may submit a single plan for more than one covered vessel.

(7) The requirements of submitting a contingency plan under this section may be satisfied by a covered vessel by submission of proof of assessment participation by the vessel in a maritime association. Subject to conditions imposed by the department, the association may submit a single plan for more than one facility or covered vessel or may submit a single plan providing contingencies to respond for different classes of covered vessels.

(8) A contingency plan prepared for an agency of the Federal Government or an adjacent state that satisfies the requirements of ORS 468B.345 to 468B.360 and the rules adopted by the Environmental Quality Commission may be accepted as a plan under ORS 468B.345. The commission shall assure that to the greatest extent possible, requirements for a contingency plan under ORS 468B.345 to 468B.360 are consistent with requirements for a plan under federal law.

(9) Covered vessels may satisfy the requirements of submitting a contingency plan under this section through proof of current assessment participation in an approved plan maintained with the department by a maritime association.

(10) A maritime association may submit a contingency plan for a cooperative group of covered vessels. Covered vessels that have not previously obtained approval of a plan may enter the navigable waters of the state if, upon entering such waters, the vessel pays the established assessment for participation in the approved plan maintained by the association.

(11) A maritime association shall have a lien on the responsible vessel if the vessel owner or operator fails to remit any regular operating assessments and shall further have a lien for the recovery for any direct costs provided to or for the vessel by the maritime association for oil spill response or spill related communications services. The lien shall be enforced in accordance with applicable law.

(12) Obligations incurred by a maritime association and any other liabilities or claims against the association shall be enforced only against the assets of the association, and no liability for the debts or action of the association exists against either the State of Oregon or any other subdivision or instrumentality thereof, or against any member, officer, employee or agent of the association in an individual or representative capacity.

(13) Except as otherwise provided in ORS chapters 468, 468A and 468B, neither the members of the association, its officers, agents or employees, nor the business entities by whom the members are regularly employed, may be held individually responsible for errors in judgment, mistakes or other acts, either of commission or omission, as principal, agent, person or employee, save for their own individual acts of dishonesty or crime.

(14) Assessment participation in a maritime association does not constitute a defense to liability imposed under ORS 468B.345 to 468B.415 or other state or federal law. Such assessment participation shall not relieve a covered vessel from complying with those portions of the approved maritime association contingency plan that may require vessel specific oil spill response equipment, training or capabilities for that vessel. [1991 c.651 §6]

468B.360 Review of contingency plan. In reviewing the contingency plan required by ORS 468B.345, the Department of Environmental Quality shall consider at least the following factors:

(1) The adequacy of containment and cleanup equipment, personnel, communications equipment, notification procedures and call-down lists, response time and logistical arrangements for coordination and implementation of response efforts to remove oil spills promptly and properly and to protect the environment;

(2) The nature and amount of vessel traffic within the area covered by the plan;

(3) The volume and type of oil being transported within the area covered by the plan;

(4) The existence of navigational hazards within the area covered by the plan;

(5) The history and circumstances surrounding prior spills of oil within the area covered by the plan;

(6) The sensitivity of fisheries and wildlife and other natural resources within the area covered by the plan;

(7) Relevant information on previous spills contained in on-scene coordinator reports covered by the plan; and

(8) The extent to which reasonable, cost-effective measures to reduce the likelihood that a spill will occur have been incorporated into the plan. [1991 c.651 §7]

468B.365 Plan approval; change affecting plan; certificate of approval. (1) The department shall approve a contingency plan only if it determines that the plan meets the requirements of ORS 468B.345 to 468B.360 and:

(a) The covered vessel or facility demonstrates evidence of compliance with ORS 468B.390; and

(b) If implemented, the plan is capable, to the maximum extent practicable in terms of personnel, materials and equipment, of removing oil promptly and properly and minimizing any damage to the environment.

(2) An owner or operator of a covered vessel or facility shall notify the department in writing immediately of any significant change affecting the contingency plan, including changes in any factor set forth in this section or in rules adopted by the Environmental Quality Commission. The department may require the owner or operator to update a contingency plan as a result of these changes.

(3) A holder of an approved contingency plan does not violate the terms of the contingency plan by furnishing to another plan holder, after notifying the department, equipment, materials or personnel to assist the other plan holder in a response to an oil discharge. The plan holder shall replace or return the transferred equipment, materials and personnel as soon as feasible.

(4) The department may attach any reasonable term or condition to its approval or modification of a contingency plan that the department determines is necessary to insure that the applicant:

(a) Has access to sufficient resources to protect environmentally sensitive areas and to prevent, contain, clean up and mitigate potential oil discharges from the facility or tank vessel;

(b) Maintains personnel levels sufficient to carry out emergency operations; and

(c) Complies with the contingency plan.

(5) The contingency plan must provide for the use by the applicant of the best technology available at the time the contingency plan was submitted or renewed.

(6) The department may require an applicant or a holder of an approved contingency plan to take steps necessary to demonstrate its ability to carry out the contingency plan, including:

(a) Periodic training;

(b) Response team exercises; and

(c) Verification of access to inventories of equipment, supplies and personnel identified as available in the approved contingency plan.

(7) The department may consider evidence that oil discharge prevention measures such as double hulls or double bottoms on vessels or barges, secondary containment systems, hydrostatic testing, enhanced vessel traffic systems or enhanced crew or staffing levels have been implemented and in its discretion, may make exceptions to the requirements of this section to reflect the reduced risk of oil discharges from the facility or tank vessel for which the plan is submitted or being modified.

(8) Before the department approves or modifies a contingency plan required under ORS 468B.345, the department shall provide a copy of the contingency plan to the State Department of Fish and Wildlife, the office of the State Fire Marshal and the Department of Land Conservation and Development for review. The agencies shall review the plan according to procedures and time limits established by rule of the Environmental Quality Commission.

(9) Upon approval of a contingency plan, the department shall issue to the plan holder a certificate stating that the plan has been approved. The certificate shall include the name of the facility or tank vessel for which the certificate is issued, the effective date of the plan and the date by which the plan must be submitted for renewal.

(10) The approval of a contingency plan by the department does not constitute an express assurance regarding the adequacy of the plan or constitute a defense to liability imposed under ORS chapters 468, 468A and 468B or any other state law. [1991 c.651 §8]

468B.370 Determination of adequacy of plan; practice drills. (1)(a) The Environmental Quality Commission by rule shall

adopt procedures to determine the adequacy of a contingency plan approved under ORS 468B.365.

(b) The rules shall require random practice drills without prior notice to test the adequacy of the responding entities. The rules may provide for unannounced practice drills of an individual contingency plan.

(c) The rules may require the contingency plan holder to publish a report on the drills. This report shall include an assessment of response time and available equipment and personnel compared to those listed in the contingency plan relying on the responding entities and requirements, if any, for changes in the plans or their implementation. The department shall review the report and assess the adequacy of the drill.

(d) The department may require additional drills and changes in arrangements for implementing the approved plan that are necessary to insure the effective implementation of the plan.

(2) The Environmental Quality Commission by rule may require any tank vessel carrying oil as cargo in the navigable waters of the state to:

(a) Place booms, in-water sensors or other detection equipment around tank vessels during transfers of oil; and

(b) Submit to the department evidence of a structural and mechanical integrity inspection of the tank vessel equipment and hull structures.

(3) A tank vessel that is conducting, or is available only for conducting, oil discharge response operations is exempt from the requirements of subsection (1) of this section if the tank vessel has received prior approval of the department. The department may approve exemptions under this subsection upon application and presentation of information required by the department. [1991 c.651 §9]

468B.375 Inspection of facilities and vessels; coordination with State of Washington. (1) In addition to any other right of access or inspection conferred upon the department by ORS 468B.370, the department may at reasonable times and in a safe manner enter and inspect facilities and tank vessels in order to insure compliance with the provisions of ORS 468B.345 to 468B.415.

(2) The department shall coordinate with the State of Washington in the review of the tank vessel structural integrity inspection programs conducted by the United States Coast Guard and other federal agencies to determine whether the programs as actually operated by the federal agencies adequately protect the navigable waters of the state. If the department determines that tank vessel inspection programs conducted by the federal agencies are not adequate to protect the navigable waters of the state, the department shall establish a state tank vessel inspection program. [1991 c.651 §10]

468B.380 Tank vessel inspection program. If the department determines under ORS 468B.375 that a state tank vessel inspection program is necessary, the Environmental Quality Commission shall adopt rules necessary to enable the department to implement the state tank vessel inspection program. [1991 c.651 §11]

468B.385 Modification of approval of contingency plan; revocation of approval; violation. (1) Upon request of a plan holder or on the department's own initiative, the department, after notice and opportunity for hearing, may modify its approval of a contingency plan if the department determines that a change has occurred in the operation of the facility or tank vessel necessitating an amended or supplemental plan, or that the operator's discharge experience demonstrates a necessity for modification.

(2) The department, after notice and opportunity for hearing, may revoke its approval of a contingency plan if the department determines that:

(a) Approval was obtained by fraud or misrepresentation;

(b) The operator does not have access to the quality or quantity of resources identified in the plan;

(c) A term or condition of approval or modification has been violated; or

(d) The plan holder is not in compliance with the plan and the deficiency materially affects the plan holder's response capability.

(3) Failure of a holder of an approved or modified contingency plan to comply with the plan or to have access to the quality or quantity of resources identified in the plan or to respond with those resources within the shortest possible time in the event of a spill is a violation of ORS 468B.345 to 468B.415 for purposes of ORS 466.890, 468.140, 468.992 and any other applicable law.

(4) If the holder of an approved or modified contingency plan fails to respond to and conduct cleanup operations of an unpermitted discharge of oil with the quality and quantity of resources identified in the plan and in a manner required under the plan, the holder is strictly liable, jointly and severally, for the civil penalty assessed under ORS 466.890 and 468.140.

(5) In order to be considered in compliance with a contingency plan, the plan holder must:

(a) Establish and carry out procedures identified in the plan as being the responsibility of the holder of the plan;

(b) Have access to and have on hand the quantity and quality of equipment, personnel and other resources identified as being accessible or on hand in the plan;

(c) Fulfill the assurances espoused in the plan in the manner described in the plan;

(d) Comply with terms and conditions attached to the plan by the department under ORS 468B.345 to 468B.380; and

(e) Successfully demonstrate the ability to carry out the plan when required by the department under ORS 468B.370. [1991 c.651 §12]

468B.390 Compliance with Federal Oil Pollution Act of 1990. (1) No person shall cause or permit the operation of a facility in the state unless the person has proof of compliance with Section 1016 of the Federal Oil Pollution Act of 1990 (P.L. 101-380), if such compliance is required by federal law.

(2) No person may cause or permit the operation of an offshore exploration or production facility in the state unless the person has proof of compliance with Section 1016 of the Federal Oil Pollution Act of 1990 (P.L. 101-380).

(3) Except for a barge that does not carry oil as cargo or fuel or a spill response vessel or barge, the owner of any vessel over 300 gross tons shall have proof of financial responsibility for the following vessels:

(a) For tank vessels over 300 gross tons:

(A) $1,200 per gross ton or $2 million for vessels of 3,000 gross tons or less, whichever is greater; and

(B) $1,200 per gross ton or $10 million for vessels over 3,000 gross tons, whichever is greater; or

(b) For any other covered vessel over 300 gross tons, $600 per gross ton or $500,000, whichever is greater.

(4) On or before January 1, 1992, the department shall enter into an agreement with the United States Coast Guard to receive notification of noncompliance with the provisions of this section. [1991 c.651 §13]

468B.395 Department duties. The Department of Environmental Quality shall:

(1) In cooperation with other natural resource agencies, develop a method of natural resource valuation that fully incorporates nonmarket and market values in assessing damages resulting from oil discharges;

(2) Work with other potentially affected states to develop a joint oil discharge prevention education program for operators of fishing vessels, ferries, ports, cruise ships and marinas;

(3) Review the adequacy of and make recommendations for improvements in equipment, operating procedures and the appropriateness of west coast locations for transfer of oil;

(4) In cooperation with industry and the United States Coast Guard, develop local programs to provide oil discharge response training to fishing boat operators and marinas;

(5) Adopt an incident command system to enhance the department's ability to manage responses to a major oil discharge;

(6) Coordinate oil spill research with other west coast states and develop a framework for information sharing and combined funding of research projects;

(7) Annually review and revise the interagency response plan for oil spills in certain navigable waters of the state developed under ORS 468B.495 and 468B.500;

(8) On the Oregon coast, assist affected local agencies and industry groups to complete an inventory of existing plans and resources and to identify or establish an organization to coordinate oil spill contingency planning as part of the alternative schedule adopted for the Oregon coast described in ORS 468B.355 (1);

(9) Where adequate resources do not exist to prevent, contain, clean up and mitigate potential oil spills, assist local agencies and industry groups to secure necessary funds and equipment; and

(10) In its annual review and revision of the plan developed under ORS 468B.495 and 468B.500:

(a) Consult with all affected local, state and federal agencies, municipal and community officials and representatives of industry;

(b) Provide training in the use of the plan; and

(c) Conduct spill exercises to test the adequacy of the plan. [1991 c.651 §14]

468B.400 Wildlife rescue training program. The State Department of Fish and Wildlife shall develop and implement a program to provide wildlife rescue training for volunteers. In developing the program, the department shall:

(1) Work with agencies responsible for wildlife protection in other west coast states;

(2) Rely upon the oil wildlife rehabilitation plan developed under ORS 468B.495; and

(3) Take such action as is required for reimbursement in accordance with the pro-

TO: Environmental Quality Commission

FROM: Rebecca J. DeMoss
Oil Spill Specialist

SUBJECT: Hearings Officer's Report - Summary of testimony SB 242 Oil Spill Prevention and Emergency Response Planning Proposed Rules

Public Hearings were held in Portland on April 27, Astoria on April 28, and Coos Bay on April 29, to receive oral and written testimony on proposed rules to implement the Oil Spill Prevention Act of 1991 (SB 242). A summary of the oral and written testimony received during the public comment period are presented below.

Oral and Written Testimony received at the April 27-29, 1992 Public Hearings and through the Public Comment Period ending May 1, 1992

1. Glen Tulloch, Portland Steamship Operators' Association, Inc.

Oil spill prevention strategy rules are premature in that Washington has not yet adopted their prevention rules for vessels. Many of the prevention requirements are impractical and impossible because of the number of foreign vessels entering Oregon waters.

Deployment of containment boom during transfer operations and prevention requirements for vessels can not be implemented in a practical way and will not offer any actual protection of the environment. The Coast Guard has adequate rules for spill prevention during transfer operations.

The current draft rules will cause Oregon cargo owners to pay a higher price to ship their product. The higher cost to ship would be the result of fewer cargo vessels available meeting the strict Oregon rules. The use of the spot charter market allows the vessel broker and cargo broker to negotiate price, fewer vessels will qualify to enter the Columbia River even though it would be a OPA 90 qualified vessel. More than half the vessels trading in Oregon are hired through the spot charter market.

Requirements for spill prevention are unreasonable in that crews for various vessels are hired through crewing agencies. Crewing agencies pool crews informally and without much record keeping on particular crew members. Hiring of both vessels and crews are often done over telex. Requests for specific prevention related information on vessels and crew would make negotiations cumbersome and unworkable.

2. Mike Hoff - Vice President Columbia River Division, Brix Maritime Co.

The proposed rule for booming during transfer operations has not adequately accounted for technical limitations of boom deployment in heavy currents, or the financial impact the requirement will have on bunkering operators. A boom deployment rule will put Oregon in a significant competitive disadvantage without providing comparable environmental protection.

The booming requirement imposes substantial liability risk on the bunkering operator who takes responsibility for deploying the boom. Technical limitations associated with the use of containment boom in heavy currents will result in oil escaping containment. If the boom is not capable of containing oil in the event of a spill, the liability will rest with the bunkering operator who deployed the boom.

A booming requirement is premature in relation to rule making in the State of Washington, and will detract from oil spill response preparation currently underway in the river.

3. Michael Rike, Chairman, Columbia River Towboat Association

The booming requirement during transfer operations is not a viable prevention option because of technical limitations of boom in conditions of heavy river current. The inability of the boom to contain the oil in the event of a spill will present unreasonable liability to Towboat Association members.

The cost associated with booming will reduce the competitiveness of the Oregon maritime industry. A more through industry review of the prevention requirements of the rules is needed to accomplish the goals of the SB 242 legislation.

4. Alan Willis, Government Relations Representative, Port of Portland

Concerned with potential competitive impacts of the prevention strategies contained in the draft rules. The current rules need to be more closely reviewed by industry representatives to assure the prevention requirements are effective, practical and avoid unnecessary and noncompetitive vessel costs and delays.

The cost of services such as fuel bunkering, as well as the need to meet difficult prevention requirements can impact a vessel's decision to call here. The fewer number of vessels calling here will have a financial impact on the cost of shipping Oregon products. Final rules need to have a better

balance between environmental and competitive concerns.

5. Paul Vogel, General Manager, Oregon International Port of Coos Bay

Booming during transfer operations will not be practical as a spill containment or prevention measure in most cases on the Columbia River or in Coos Bay. Technical limitations make booming ineffective in conditions of heavy current and winds. If booming is required it will provide a false sense of security. The cost of booming as compared to the environmental benefit does not justify the requirement. The current language makes booming subjective based on local conditions, but fails to clearly state who can make the decision.

Cargo vessel traffic in Coos Bay is primarily charter or tramp steamer service as opposed to liner service on the Columbia. The nature of the charter business makes it difficult to predict or classify vessels for coverage under an umbrella plan for contingency and response planning. There is no reference in the draft rules addressing the Department's commitment to provide the Coos Bay shipping industry with an inventory and analyses of vessel traffic and facilities particular to the area.

The draft rules do not reflect a two year extension for compliance in Coos Bay and Yaquina Bay that was inferred during the legislative session. The compliance dates are not consistent with the language in the bill. As a result of commitments by the Department and language in the senate bill the ultimate compliance date for Coos Bay should be January 1995. The compliance date for the use of booming during transfers should be consistent with the same dates.

There is no reference in the draft rules of the commitment the Department made to support grant or direct appropriation requests for equipment and planning work for the coastal ports.

6. June Spence, Port Commissioner, Port of Astoria

Recommendations were made to clarify awkward sentence structure in Plan Content requirements, and identified the need for the Department to identify by name and location the interim storage sites designated for use in the event of a large spill. In addition, assurances are needed by local authorities that the communication systems identified and used by plan holders are known to work on frequencies used by response operation personnel.

The listing of risk variables by the plan holder is seen as burdensome. Risk variables are best known by state and local

governments. This information should be supplied to the plan writer by the state.

Changes made to the plan that are considered "minor" need to be defined.

7. Jeffery Krug, Manager Marine Operations, NYK Line (North America) Inc.

OAR 340-47-170 **(Prevention Strategies for Vessels)** Item (5)(a)(b)(d)) are covered in federal requirements found in 33 CFR Subchapter O. This information could be provided for most vessels, but would be impossible to obtain if the vessel had recently sold and past history records were removed from the vessel at the time of sale. The Oregon requirement for drug and alcohol awareness training is unlike any federal requirement, and would be difficult for foreign vessel operators to comply with.

The requirement for booming during transfer operations is not a federal requirement. The calculated cost for receiving a bunker in the Columbia River at anchor is much higher than the fiscal impact statement indicates. The additional cost will greatly impact maritime trade in Oregon. The cost benefit of booming is questionable, particularly in the heavy current conditions of the Columbia.

8. Christina McDowell, Senior Environmental Projects Engineer, Western Fuel Oil Company

Concerned with the draft rule requiring booming for all oil transfer operations. The use of containment boom in the outgoing tide conditions experienced in Coos Bay would render the boom ineffective in containing oil in the event of a spill.

The booming requirement would impact the operability and economics of the oil terminal facility.

9. Ronald Holton, Manager of Safety Training & Environment Chevron Shipping Company

Suggest modifying OAR 340-47-040 **(Transfer Requirement)** to provide an exclusion for situations when booming would be impractical. Suggested language change to " ... unless conditions exist that would make boom deployment dangerous or impractical."

OAR 340-47-130 **(Plan Preparation)** requires an excessive amount of paper work that does little for planning, training or drilling. Suggest altering format requirements (item (3)) to state "plans shall be concise and contain only enough

information...".

OAR 340-47-150 **(Plan Content)** Item (13) (c) list of equipment should be limited to model numbers for only major pieces of equipment. Item (28) (b)(ii) written description of "power plants" should be deleted because this piece of equipment doesn't directly figure into spill risk assessment of a vessel.

OAR 340-47-170 **(Prevention Strategies)** Item (4) is inappropriate, Oregon should not be requiring a private party to obtain plan approval in another state.

OAR 340-47-180 **(Plan Submittal)** Item (3) fails to recognize the compatibility problems between different hardware and software. Suggest changing requirement to a specific number of hard copies and encourage computerized disks if possible.

OAR 340-47-190 **(Plan Review)** Item (7)(b)(iii) plan holders should be allowed 60 days instead of 30 days to respond to department requests for changes.

OAR 340-47-200 **(Drills and Inspections)** Measures should be taken to reduce the burden of drills on major shipping companies operating in many states with similar requirements. Full deployment drills should be planned in advance. Unannounced drills should be limited to call-out drills. Item (3) (b) should eliminate the need for Oregon personnel to be involved in participation, review, and analysis of drills in other states. It would be more cost effective to accept a written report from the lead state agency.

OAR 340-47-220 **(Plan Update Timeline)** Item (1) states a 24 hour notice of significant change which could affect the implementation of a plan. A more realistic timeline of 72 hours will allow for exchange and transfer of this type of information as it passes from spill response co-op to plan holder to DEQ, particularly when accounting for weekends.

10. Clifford Journey, Manager International Oil Spill Response, Texaco Inc.

Oregon's proposed rules don't suggest compatibility and coordination through a single authority causing concern that coordination between state and USCG may not be occurring. There is no mention in the rules about contingency plans integrating with the local Area Contingency Plan as required by OPA 90.

The proposed rules require too much physical information to be present in each plan. Contingency plans should focus on response and allow for referencing information available

elsewhere to make the plan more concise and useable. Information not relevant to an actual response operation should be maintained in separate appendices or binders. Suggested examples are extensive lists of equipment, and oil recovery data of clean up equipment.

Suggests Oregon require plan holders define the system(s) that would be activated to ensure initiation of a rapid state-of-the-art response and management of possible long-term activities instead of requiring lists of specific equipment to activate and amounts of oil to recover.

OAR 340-47-010 **(Definitions)** Item (12) "Facility" exempts facilities located near navigable water that receive oil by truck or railroad tank cars, yet includes facilities located significant distances away from navigable water that receive oil by pipeline. Recommend changing the definition by adding at the end "...and is not located adjacent to any navigable waters or other environmentally sensitive areas." Item (19) "Navigable waters of the state" should include a distance limit in the Pacific Ocean. Item (23) "Onshore facility" - substantial harm needs to be defined.

OAR 340-47-150 **(Plan Content Requirements)** Item (17) Authorities Places the burden of keeping up with all local, state, and other government response plans on plan holders. In the case of vessel operators calling on multiple states, the requirement will be nearly impossible to maintain. Recommend each plan contain a single point contact for the state. The single point contact would then notify appropriate local authorities. Listing of these roles and responsibilities belongs only in the Area Contingency Plan or any state or local plan. Description in a vessel plan of the plan holders role in emergency operations has no value. Because of liability issues, participation by plan holders in actual emergency operations would only be after the arrival and direction of authorities given statutory responsibility. Item (28) (a) (iii) Risk Variables for facilities should not include navigation risks that are the concern of vessel owners/operators. Navigation risks will be documented in vessel plans, and Area Contingency Plans. Recommend deleting all after "...high potential for oil spills."
Item (30) Logistical Resources for vessel plan holders should be contained in the primary response contractors contingency plan. These lists, if required in a vessel plan will further clutter up the plan. Item (31) (a)(b) Scenarios Requirements for a worst case scenario for facilities are unrealistic. Facilities with secondary containment, and located some distance from navigable water create little potential for product to actually enter the water. Recommend in this case that worst case scenario be dropped in lieu of the maximum probable spill, or provide more flexibility in the definition

of worst case spill.

OAR 340-47-180 **(Plan Submittal)** Item (1) (b)(c) Recommend changing "office" to the Department. There is no definition for office. Item (3) requires 8 copies of a plan to be submitted. Significant amounts of the information being requested in a plan are not available on computer disk (environmental sensitivity maps, blue prints, topographic maps). Are plan holders expected to re-submit map information originally obtained from the Department back to the Department with a plan? If procedures are adopted from the state or Area Contingency Plans will this also be expected to be copied again to submit with a plan?

OAR 340-47-190 **(Plan Review)** If continued operation of a vessel or facility is contingent upon the state's approval of the plan, the state should adopt a method to notify the plan submitter within 72 hour of plan review. there may be significant financial burden associated with an owner/operator having to wait for the state to contact them.

11. J.S. Webb, Manager - Environment, Health and Training, Texaco Marine Services Inc.

OAR 340-47-180 **(Plan Submittal)** Requiring submittal of 8 copies of a plan and associated appendices is excessive. Will the lead state agency be responsible for providing the other agencies with plans, copies of updates and changes? Is it necessary to send back eight copies of the environmental variables required in OAR 340-47-140 item 29?

12. Kurt Oxley, Consultant Government Relations, ARCO Transportation Company

OAR 340-47-010 **(Definitions)** Item 36 (c) <u>"Worst Case Spill"</u> definition is unrealistic. Recommend following the USCG approach which recognizes that some amount less than 100% would actually be lost in a spill incident, and a certain amount would be recovered. A definition should be added that sets required recovery rates for available equipment.

OAR 340-47-040 **(Transfer Requirements).** Boom deployment should be limited to a facility requirement. Vessels do not have room for boom and are ill-suited to make deployment. Term "heavy oil" should be modified to require booming only when the flash point of the oil is in excess of 100 degrees fahrenheit. Some light crudes have low flash points.

OAR 340-47-150 **(Plan Content Requirements)** Item (11)(a) (ii) <u>Notifications</u>) Recommend listing the government agencies needing spill notification instead of referencing ORS 466.635. Item (13) (a) <u>Equipment</u> Plans should not include a list of

equipment provided by a co-op or contractor. This information will be duplicated in many plans. Lists should only include major equipment. (e) Equipment adequacy should be based on both spill size and expectations of recovery. Item (22) In Situ Burning Asking for a description of the use of in situ burning by referencing Vol. II and OAR 340-23-035 makes the requirement unclear which rule applies to vessels or facilities. Item (23)(b) Environmental Protection Unclear as to what Vol. I is and if this is something that applies to vessels. (d) Poorly worded, infers heavy equipment will be used on sensitive shorelines. Item (27) Drills and Exercises Call out tests once every 90 days is excessive, what constitutes a successful test? A yearly call out with defined objectives could be used to improve response efforts.

OAR-47-170 **(Prevention Strategies For Vessels)** Item (5)(e) Containment boom should not be a vessel issue. Marine terminals would be best suited to maintain and deploy boom.

OAR 340-47-190 **(Plan Review)** Item (3)(d) The one and two hour response requirement, at the site, is not realistic. Recommend following the USCG approach of 30 minute notification and two hour for responders to be en-route.

13. J.S. White, Manager Environmental Legislation and Regulation, ARCO Products Co.

Recommend Oregon wait for finalization of the federal regulations regarding revisions to USEPA SPCC Phase I regulations before adopting our own state spill plan requirements.

OAR 340-47-010 **(Definitions)** Item (10) "Discharge" Recommend making an exception to discharges that are permitted under 402 of the Clean Water Act.

14. D.J. Kinnaird, Operations Manager, BP Marine

OAR 340-47-040 **(Transfer Requirements)** Item 3 Proposed regulation for booming heavy oil transfers is not a technically viable option for advanced spill prevention. Not viable due to entrainment caused by heavy currents, and because the location of anchorages are not ideal for booming. However, there are locations on the River and adjacent waterways that do lend themselves to booming. Booming a transfer at berth would also be difficult unless the dock area is permanently boomed. To be effective the boom would still have to be properly angled. The wear on boom from continued deployment will require constant replacement at a significant cost.

15. Richard Copeland and Mark Copeland, representing:
Maritime Fire and Safety Association
Clean Rivers Cooperative
Portland Steamship Operators' Association
Columbia River Towboat Association

OAR 340-47-010 **(Definitions)** "Maximum probable spill" Does the use of "in" instead on "on or near" navigable waters increase the area of responsibility?

OAR 340-47-150 **(Plan Content Requirements)** Item (1) Submittal Agreement (d)(iii) Unclear as to what requirements are covered when a plan holder is a member of a maritime association. Item (32) Financial Responsibility Are vessels enrolled in a maritime association required to show evidence of compliance?

OAR 340-47-170 **(Prevention Strategies for Vessels)** Are vessels enrolled in a maritime association required to meet prevention requirements? This information is difficult to obtain from occasional foreign vessels. Item (5)(e)(i)(ii) If booming during transfer operations is required there needs to be guidelines for deployment.

OAR 340-47-040 **(Transfer Requirements)** "Industry" has concerns about making this a requirement. Too many resources will be required to implement in the short term, would need to be phased in.

OAR 340-47-180 **(Plan Submittal)** Item (5)(c) Maritime association needs to be added along with a oil spill response cooperative for submitting tank vessel plans.

OAR 340-47-210 (Plan Maintenance and Use)(2) Not clear when the field document is expected to be on each covered vessel. The time requirement needs to be clearly stated.

16. Lisa Stone, Environmental Advisor and William Park, General Manager, Marine Spill Response Corporation (MSRC)

Recommend Oregon wait and use the federal response plan requirements as guidelines for our rule development. It would be more efficient and less confusing if DEQ used the federal proposal as a baseline for our rule development.

OAR 340-47-190 **(Plan Review)** Item (3)(d) Mandates a performance standard by requiring initial deployment of response equipment and personnel at the site of a spill within one hour for facilities and two hours for vessels. OAR 340-47-150 **(Plan Content Requirements)** Item (20) requires an explanation of how the response standard will be accomplished. There are too many variables affecting the ability to cleanup

a spill in a particular circumstance. MSRC recommends using the approach soon to be proposed by the USCG of defining the recovery capacity that is capable of being on-scene within certain time frames, strictly for planning purposes.

OAR 340-47-180 **(Plan Submittal)** Many contingency plan holders will be relying on MSRC to provide catastrophic response capability to meet the "worst case" response scenario. MSRC will not be ready to supply staff or resources until the August 18, 1993 federal compliance date. Plan submittal dates of January 1993 for the Columbia River will leave plan holders without access to resources to respond to "worst case" scenarios.

OAR 340-47-210 **(Plan Maintenance and Use)** Item (3) Fails to recognize the uniqueness and unpredictability of oil spills by requiring rigid adherence to an oil spill response plan. Plan adherence may conflict with sound professional judgement. Proposed approach will encourage additional and lengthy litigation into inconsistences between the response and the plan. Recommend the rules allow for prudent deviations during the course of the spill, "based on professional judgement, consistent with the NCP and goal of minimizing impact of the spill."

OAR 340-47-150 **(Plan Content Requirements)** Item (10) Spill Detection The technology for reliable and effective low visibility spill detection equipment is not yet proven or available. Recommend the rule not require the technology until it is proven.

17. Richard Lauer, Manager, Sause Bros. Ocean Towing Co., Inc.

Preventative booming of vessels during transfer operations will be marginally effective against small spills and not effective against large spills. Booming technology is limited in current conditions of 1.5 to 1.7 knots predominant in Coos Bay and the Columbia River. The cost of booming will be too high, and provide little protection to the environment. The increased cost will force vessels not to take a bunker in Oregon.

18. John Peterson, Regional Sales Manager, Riedel Environmental Services, Inc.

Preventative booming during fuel transfers of vessels swinging at anchor will be virtually ineffective. Vessels anchor in the deepest part of the river where the river current is running the fastest. Boom deployment under these conditions will cause wave splash over, entrainment underneath the boom and possible breakage of the boom. An anchored vessel can swing approximately 360 degrees according to changing wind

conditions and tidal fluctuations. It could require up to 4,000 feet of boom to surround a vessel. The associated costs for booming during transfers will be significant to bunkering operators on the river.

19. Drew Emmett, Port Superintendent, Glenbrook Nickel Company

Concerned that the costs of implementing the proposed rules will adversely affect the already depressed economic climate of the Coos Bay area. The problem lies in the funding. The costs should be shared by a broad spectrum of economic and geographic interests. If the cost is passed only to the vessel operator in terms of higher fuel costs, then their margin of profitability is reduced. When the economic incentive for a vessel to call Coos Bay is reduced, it will translate to fewer jobs for the Port.

20. Sue Knight, Oregon Environmental Council

OAR 340-47-040 **(Transfer Requirements)** Supports the requirement of booming during transfer operations. It is essential to mitigating the environmental impact of oil spills in Oregon.

OAR 340-47-160 and OAR 340-47-170 **(Prevention Strategies for Facilities and Vessels)** References a Technical Standards Manual which is currently nonexistent, and OAR 340-47-190 **(Plan Review)** references a plan review manual which is also nonexistent. Concerned about the timeliness of both of these documents with deadlines for plan submittal in January 1993.

Recommends that the proposed rules provide for contingency plans that require simplified information to assure the plan will be used.

OAR 340-47-150 **(Plan Content Requirements)** Item (6) Implementation Strategy Implies the contingency plan is peripheral and not central to the operation of the vessel or facility.

OAR 340-47-170 **(Prevention Strategies for Vessels)** Item (2) Waiver provisions for economic impracticality will establish a precedent in Oregon that recognizes economic considerations over concerns of protection of the environment.

OAR 340-47-220 **(Plan Update Timeline)** Significant change to a plan should include reporting of an increase in personnel and/or equipment.

OAR 340-47-100 **(Purpose)** Concerned with why the purpose doesn't state "prevent most oil spills"? Promoting prevention of oil spills is not the same as a commitment to oil spill

prevention.

21. Mary Kearns-Kaplan, Program Director - Columbia/Willamette River Watch, Northwest Environmental Advocates

OAR 340-47-010 **(Definitions)** Item 31 "Region of Operation" Should include hydrographic information based on daily tides and seasonal currents and flows. This information will help anticipate the full geographic scope of the spill.

OAR 340-47-150 **(Plan Content Requirements)** Item (10) Spill Detection Plan should describe time schedule for system inspection. Item (17) (ii) Authorities and/or (23) Environmental Protection Language should be added to ensure no ground or air vehicles will be allowed to enter environmentally sensitive areas. Item (28) Risk Variables (a) (iv) Recommend adding language to address the deployment of booms during transfer operations. Suggest "methods to reduce spills during transfer operations, including overfill prevention, deployment of booms.

OAR 340-47-190 **(Plan Review)** Item (6) Recommend the department change may to " shall prepare a manual to provide guidance..."

OAR 340-47-200 **(Drills and Inspections)** Recommend requiring mandatory yearly drills held jointly with local, state, federal agencies.

OAR 340-47-220 **(Plan Update Timeline)** Recommend plans be reviewed once every two years not five years to keep up with changes in oil spill technology.

22. James Knight, Special Assistant for Coordination, Department of Land Conservation and Development **(DLCD)**

Recommends the department establish criteria for selecting sites used for spill response activities. The criteria should be established before owners and operators develop their response plans. The criteria could appear in the departments Technical Guidance Manual or in the rule. Guidance should be provided for interim storage and disposal sites, command centers and staging areas, wildlife rehabilitation operations, and shoreline access. Criteria could be included in OAR 340-47-150 (15) Response Operation Sites and (24) Interim Storage.

OAR 340-47-010 **(Definitions)** Item (12) "Facility" recommend including interim storage sites as item (iv).

OAR 340-47-150 **(Plan Content Requirements)** Item (17) (ii) Authorities recommend including a reference to water by stating "procedures to control ground, water and air

traffic..." Item (19) Containment recommend adding additional item (e) Methods to temporarily store oily debris. Item (28) Risk Variables should be further clarified.

OAR 340-47-190 **(Plan Review)** Item (2) List of agencies needing to review plans should include Department of Transportation, Division of State Lands, Department of Parks and Recreation and the State Military Department.

RESPONSE TO TESTIMONY

A total of 22 petroleum transporters, maritime associations or co-ops, port authorities, spill response corporations, industry and environmental groups provided testimony. The comments generally fell into five categories:

1. Pollution prevention requirements for vessels.
2. Preventative booming during transfer operations.
3. Inconsistencies with proposed USCG and the state of Washington vessel and facility response, prevention and contingency planning rules.
4. Plan submittal requirements
5. Minor editing changes for language clarification

The SB 242 Rules Committee held a fifth meeting after the public hearings to discuss the testimony and written comments received by the Department. Rule language options and alternatives, in addition to minor editing changes for clarification were reviewed and discussed. Decisions made by the Committee during the fifth meeting are reflected in the proposed rules in Attachment A.

1. Pollution prevention requirements for vessels

Comment: Eleven commenters asserted that the Vessel Prevention Strategies (OAR 340-47-170) were impractical because they required vessel owners/operators to obtain and submit information for prevention planning from foreign vessels who make infrequent calls to Oregon. The process by which most vessels are hired makes implementing prevention requirements a costly undertaking, ultimately reducing the number of vessels qualified or willing to call on Oregon ports.

The requirements for spill prevention are seen as unreasonable and economically burdensome because the information being requested may be unavailable (i.e. drug and alcohol training programs not required in other countries). Oregon would be requesting information that has never been required by the

federal government or any other state.

Response: The issue of including all covered vessels in prevention strategy requirements was discussed during two of the SB 242 Rules Committee meetings. The Committee recognized prevention planning should be shared by all covered vessels not just tank vessels. All fuel carrying vessels have the capability of spilling/discharging oil into Oregon waters.

The draft prevention strategies would require all covered vessels coming to Oregon under a maritime association umbrella contingency plan to submit a separate vessel specific prevention plan to meet Oregon requirements. The ability to obtain the required information would demand the cooperation of the vessels shipping agent or owner representative. The most important consideration discussed was whether prevention planning for foreign vessels is even feasible.

The Department has agreed to continue studying the foreign vessel dilemma, and to work closely with the state of Washington as they develop prevention plan rules for tank vessels and screening procedures for cargo and passenger vessels. A technical subcommittee will be formed to assist the Department in researching and developing vessel prevention strategies that will be achievable for Oregon.

2. Preventative booming during transfer operations

Comments: Thirteen commenters asserted that preventative deployment of containment boom during transfer operations can not be implemented in a practical way, and will not provide the environmental protection thought. Washington has not developed a comparable booming requirement which puts Oregon bunkering operators at a financial disadvantage. The environmental protection provided by preventative booming can not be justified. Other options need to be evaluated.

Response: The Department recognizes the value a consistent west coast approach to preventative booming during fuel transfers would have on the maritime industry. The primary interest of the Department is to develop an equitable requirement that will provide the necessary environmental protection without causing an unreasonable financial burden on Oregon's maritime industry.

An investment by industry in new technology to address boom design deficiencies would expedite the development of boom capable of being effective in river current conditions. It also needs to be recognized that preventative booming is currently used voluntarily by several petroleum companies to reduce the risk of environmental damage. The costs associated

with spill cleanup and damage assessment can make preventative booming cost effective under certain environmental conditions.

The draft rule addressing booming requirements was intended to allow for the use of "best professional judgement" in determining whether preventative booming could be safely and effectively deployed during a particular transfer operation.

Comment: The cost associated with boom deployment will put Oregon at an economic disadvantage. Vessels will no longer take their bunker fuel in Oregon because of the increased cost to the bunker operators. The time delays that would result from the requirement will reduce the number of cargo vessels willing to call in Oregon. Technical limitations of boom in conditions of heavy current make this pollution prevention requirement impractical.

Response: The Department does not intend for boom to be deployed in conditions that would be dangerous or impractical. The cost estimates for boom deployment around standard sized vessels under favorable conditions were provided by a local oil spill response contractor who have provided such services by contract. The Department did not consider all bunkering operations to be conducive to booming, particularly those taking place in open river conditions with vessels at anchor. The public comment received about the dangers booming fuel transfer operations in open river conditions bring up a serious concern as to whether fuel transfers should be taking place in under those circumstances. This is an issue to be considered by the newly formed Harbor Safety Committees mandated by SB 242.

3. Inconsistencies with the recently proposed USCG and the state of Washington prevention and contingency plan rules

Comment: Seven commenters stated they had concerns about conflicts with recently proposed USCG vessel and facility response plan rules being developed under the Federal Oil Pollution Act. For purposes of regulatory consistency it was recommended that Oregon use the federal guidelines as opposed to the state of Washington.

Response: SB 242 mandated the creation of an oil spill prevention and emergency response program for Oregon. The concept and language of our legislation followed existing legislation in the state of Washington primarily to assure consistent requirements on the Columbia River, a shared border. To assure protection of our natural resources on the river and provide industry with compatible regulations, coordination with the state of Washington was and is considered critical.

Response to Testimony

Regulatory consistency is a concern to be shared by state and federal agencies, the oil industry and other industry affected by contingency plan requirements. The Federal Oil Pollution Act of 1990 requires vessels and facilities to have emergency spill response plans but the rules for implementing the law are still in proposed form. These is still opportunity for the federal requirements to be consistent with already adopted rules in Washington and other states. In addition, the federal requirements will focus on emergency response rather than prevention.

Comment: Seven commenters stated concerns about Oregon developing vessel prevention rules prior to the state of Washington. Potential inconsistences in rule requirements between the two states would prevent one plan from being written to meet the requirements of both states.

Response: Oregon's Vessel Prevention Strategies were developed with input from the Washington Office of Marine Safety early in the rule development process. Initially the SB 242 Rules Committee supported incorporating vessel prevention strategies into the Oregon rules recognizing that Washington was still developing their rules. The committee's preference was to create one rule package covering all criteria relating to oil spill prevention and response planning for vessels and facilities. Committee members were of the understanding that Washington's Office of Marine Safety would have draft vessel prevention rules available for review prior to Oregon's scheduled rule adoption in July 1992.

The time schedule for draft rule development for vessel prevention in Washington has been delayed until August 1992. After reviewing Washington's Preliminary Rules Summary, the Committee and the Department have recognized that Washington has modified their approach to development of vessel prevention rules from what was originally thought. The Summary Statement indicates there could be inconsistencies between the two states requirements if Oregon were to adopt the Vessel Prevention Strategies originally proposed.

Based on Washington's delay in adopting prevention rules for vessels, and the modified approach, the Department has determined that rules addressing prevention would best be postponed while staff continues to works with Washington to develop consistent requirements.

4. Four commenters had concerns about Plan Submittal requirements.

Comment: It was asserted that the compliance dates for the Oregon coast should be 24 months from rule adoption, not 18 months as currently written in the proposed rules.

Response to Testimony

Response: The Department recognizes the difficulties coastal communities will have in complying with these rules, and agree that an additional six months will provide time for program development and evaluation.

Comment: A request was made for the Department to reconsider the number of hard copies needed for plan review. Eight hard copies seemed excessive and unnecessary.

Response: After reevaluating the number of state agencies requesting copies of oil spill contingency plans for review, it was determined three hard copies and one computerized disk would satisfy the requirement.

State of Oregon

Department of Environmental Quality Memorandum

Date: July 23, 1992

To: Environmental Quality Commission

From: Fred Hansen

Subject: Director's Report

BOND SALE

Bonds to support the cleanup of orphan sites and mid-county sewers were sold on July 21st. Sites are termed "orphans" because the parties responsible are unknown, unwilling or unable to implement site cleanup activities. The bonds provide $7.3 million for six orphan sites: McCormick & Baxter, Lakewood Estates, East Multnomah County Groundwater, Milwaukie Groundwater, Nu-Way Oil, and Northwest Pipe and Casing. The cleanup bonds were sold at an interest rate of 5.7%.

Bonds totaling $1,395,000 were sold for Gresham and mid-Multnomah County sewer projects at an interest rate of 6.1%.

DROUGHT UPDATE

The Department is participating in the Drought Council with other Natural Resource Agencies to stay informed about drought conditions statewide. The Water Quality Division has met with industry association representatives to describe drought conditions and outline potential actions. In some cases, discharges may be asked to remain on their summer discharge limits into the fall.

OUT OF STATE WASTE

The Oregon Appeals court upheld DEQ's out of state waste fee. The Commission had imposed a fee of $2.25 on solid waste from out-of-state. The fee was based on real costs to Oregon of accepting the out-of-state waste. The court also ruled that the fee was properly set by the EQC, and that the Legislative E-Board did not have authority to set a different fee.

GOVERNOR'S TASK FORCE ON MOTOR VEHICLE EMISSIONS

The Task Force is reviewing options to decrease motor vehicle emissions in the Portland Metropolitan Area. Task Force members seem most interested in market based incentives rather than more government regulation. The Task Force will forward its recommendations to the Governor to take a proposal to the legislature.

HEARING AUTHORIZATIONS

Small Business Assistance Program

A Small Business Assistance Program is required under the Clean Air Act to help small business stationary sources understand and comply with air quality regulations, particularly new air toxics emission standards. The proposed program designates an Ombudsman to represent the interests of small business in implementing air quality regulations.

New Source Review Rules

New rules a needed to meet requirements of new Clean Air Act. The proposed rule package would incorporate new Clean Air Act provisions in our existing rules for new sources. The new rules primarily relate to offset requirements.

OSPIRG
The Oregon State Public Interest Research Group
1536 SE 11th Portland, Oregon 97214 (503) 231-4181, FAX: (503) 231-4007

Statement of
Quincy Sugarman, Environmental Advocate
Oregon State Public Interest Research Group
on the pollution control tax credit program
July 24, 1992

Thank you for the opportunity to make a statement. My name is Quincy Sugarman, and I am an environmental advocate for the Oregon State Public Interest Research Group. OSPIRG is a statewide consumer and environmental research and advocacy organization with 35,000 members. I am a member of the Pollution Control Tax Credit Task Force. Today I am commenting on the existing pollution control tax credit program.

The Environmental Quality Commission (EQC) is considering an application by Oregon Waste Systems for a $4.7 million tax credit for the liner and groundwater monitoring system at the Columbia Ridge Landfill in Arlington, Oregon. Under existing law, the EQC is required to approve this tax credit. These tax credits amount to a subsidy to large businesses to comply with environmental laws.

In 1991, the EQC approved $21.5 million in credits, and since its inception in 1968, credits in the program have totaled $383 million. This is money removed from the state's general fund. In this time of fiscal difficulty, the taxpayers of Oregon can't afford to pay businesses to comply with the law. Businesses need to assume the full costs of polluting the environment and the costs of risking public health.

Instead of subsidizing compliance, the state should prioritize programs that proactively protect the environment and prevent pollution, such as the Toxics Use Reduction, Wellhead Protection and the Groundwater Protection program. While the state should offer incentives to businesses, these incentives should be targeted so that they encourage businesses to go beyond minimal compliance with state laws.

The Arlington landfill receives approximately 1.1 million tons of solid waste per year, filling one module each year. With just the first three modules that are before the EQC today, the pollution control tax credit will subsidize solid waste landfills in the state by $4.7 million for facilities required by federal

(continued)

Environmental Protection Agency and state Department of Environmental Quality laws. Each module developed in the future will require these liners and monitoring systems.

At the current pace of filling one module per year, under the existing tax credit program, Oregon could continuing subsidizing solid waste disposal at Arlington at a rate of approximately $1.5 million per year, or $1.36 per ton on top of normal costs to take waste to Arlington.

We hope that the EQC will look at the history of the program and help bring a proposal to the 1993 Legislature that will eliminate the excesses in the system.

July 24, 1992

Comments before the Environmental Quality Commission
OAR 340-47
Rules Regarding Oil Spills Into Public Waters
submitted by
Sue Knight, Oregon Environmental Council

I am a member of the SB242 Rules Committee and my comments address the proposed rules governing mandatory vessel and facility oil spill response and prevention plans. Inclusion of concrete and aggressive prevention strategies is essential if the document is to remain useful. Effective prevention makes long term economic sense and can simplify short term operations by potentially eliminating costly and time-consuming discharges. Yet the Rules as written now contain barely more than prevention rhetoric, and do little to address the necessity for changing Oregon's approach to potential oil spills.

Three areas of discussion present compelling reasons to highlight rather than append prevention strategies. These issues are not divisive when clarified:

1) Mandatory booming during vessel to vessel transfer.

Booming during a vessel to vessel transfer is currently mandatory in Florida. According to the Oil Movement Index (US Army Corps of Engineers 1987) Port Everglades, Tampa, and Jacksonville Florida handle almost seven times the volume handled in the Columbia River. Booming compliance among Florida bunkering operators is clearly not impracticable, economically unfeasible, or routinely too dangerous.

Arguments against booming during transfer include the initial capital expense; expenses of vessel "down" time, securing a deployment vessel, and personnel training for deployment; the dangers of booming in high winds or rough water; and the inefffectiveness of booming in fast current. My responses follow:

*The capital cost for 4000' of open water boom (enough to completely surround two vessels during a transfer according to many industry estimates) and even costs associated with repeated boom deployment are minute compared to, for example, Exxon's $1 billion settlement with Alaska. Although the Valdez spill did not result from a transfer, it would not have occured had spill prevention been vessel policy.

*In the case of high winds and rough water it seems reasonable to question whether a transfer should occur at all, boomed or unboomed.

*Even though currents affect the ability of boom to contain oil, encircling a spill immediately will decrease its initial spread. Containment, even partial, avoids unnecessary environmental harm and cleanup costs.

Industry representatives suggest that full surround booming can be particularly ineffective because of the time required for deployment, the large area covered, and the possibility that the upstream current will push the (upstream side of the) boom too close to the vessel to effectively contain a spill. Alternate booming scenarios exist. According to Lin Bernhardt of Washington's Department of Ecology a two thirds downstream surround is feasible in relatively slow currents (1 knot or less). Vessels could also have their own boom deployment vessels on board, or have a contractor with boom at each transfer, enabling a quicker response.

2) Mandatory booming during vessel-facility transfer.

This is required in Florida and New Jersey. Our Rules merely request a description of the "use of containment boom" and whether or not this technology has ever been, or will ever be, applied is not questioned. General descriptions are easy to come by, but they neither help analyze the safety of a transfer nor commit a transfer agent to deploying boom.

3) Prevention rather than response as the most effective policy.

This principle is clearly stated in SB242. According to Carl Moore (California oil spill response planning) spills during transfer, although not necessarily individually large, are chronic and frequent. To ignore the possibility of decreasing this source of pollution is short sighted and, simply, wrong.

According to Tom Wendell of Washington's Office of Marine Safety Washington's Prevention Rules currently focus on an analysis of personnel practices and human error, corporate policy and a comparison of safety records with operation policies. (Booming is to be considered separately.) If, as DEQ's recommendations for Oregon's Rules state, we are waiting for Washington's plans to be developed so we can coordinate, we have already fallen behind. Our Rules, while including a section on "Prevention" for facilities, ask for descriptions of equipment, practices and operations. Again, descriptions do not encourage actual review. The Rules must clarify the necessity of improving upon past practices and learning from mistakes.

Similarly it is ironic that our 24 page document pertaining to oil spills in public waters contains less than four pages of text addressing prevention, a sharp contrast to Washington's 21 page Prevention document. Item (5) stated on page 1 under "PURPOSE", "General Pollution Prevention", is barely touched upon. And page 6, the "Prevention" section, has been reduced to three sentences. The "Prevention Strategies for Vessels" and "Prevention Strategies for Facilities" subsections assume strategies which "will provide the best achievable protection from damages caused by the discharge of oil". These misleading introductions refer to what to do after the fact, not how to avoid the spill in the first place.

The Rules Coordination and Planning Subcommittee of the BC/States Task Force is responsible for coordinating interstate spill response and prevention planning. Despite provisions within the Rules which require that Oregon and Washington be in accordance, and the tight adoption schedule mandated by the Legislature, the Subcommittee last met in May, yet has not met since, and has no plans for when next to meet. This is not the aggressive action we need to ensure that the BC/States region makes headway on spill planning.

I believe the Rules as written lack direction and foresight. They offer nothing that does not already exist in USCG, OPA or EPA regulations. Oregon should not be content to, for example, wait the six to eight hours Adolfo Ramirez of the US Coast Guard says it would take for the Pacific Strike Team, based at California's Hamilton AFB, to respond to a spill in Astoria. And to get most response equipment on site (from Stockton, California) would take a full 24 hours. What happens during hours zero to six if the initial spill goes unboomed, or if the vessel does not have its own recourse for immediate action?

Oregon has much to gain from taking an aggressive stance on oil spill prevention and much to lose by letting this opportunity pass. I encourage you to adopt Rules only when they address prevention seriously and constructively.

*

Even though the EQC and DEQ stated they were not bound by Advisory Committee decisions they sent the Rules back to the Committee. Moreover, since the group is dominated by industry representatives who struck the prevention provisions from the document in the first place, I find it hard to believe that the outcome will be a vigorous and applicable prevention section as the EQC and DEQ claim they support.

It is disappointing that even though the Rules 1) fell far short of providing prevention guidelines, and 2) failed to be adopted by 7.1.92, both as dictated in the original legislation, they were formally adopted on 7.24.92 with only cursory questioning under the guise of facilitating a deadline. If the Department deems timeliness as crucial as oil spill prevention and response planning, hopefully it will see fit to allocate more resources to the planning staff.

STATUS REPORT ON THE
LOWER COLUMBIA RIVER BI-STATE WATER QUALITY PROGRAM

ENVIRONMENTAL QUALITY COMMISSION
JULY 24, 1992

PURPOSE OF THE BI-STATE PROGRAM

- To characterize water quality and identify water quality problems in the lower Columbia River.
- To determine whether beneficial uses are being impaired.
- To develop solutions to problems found in the study area.

PURPOSE OF THE RECONNAISSANCE STUDY

- To collect reconnaissance-level data on water, sediment and fish tissue in the lower 146 miles of the Columbia River.
- To flag potential contaminants and/or areas of concern that should be more completely sampled in order to characterize water quality in the lower Columbia River.

SUMMARY OF RECONNAISSANCE RESULTS

- Sampling strategy: a single, low-flow sampling event; single composite samples per station. Results serve as indicators of potential problems.
- <u>Water</u>

  Metals: Forty-five water samples were analyzed for 17 metals. Six of the 17 metals exceeded water quality criteria.

  Bacteria: The Oregon Enterococcus criterion was exceeded at all 6 bacteria stations and the geometric mean for fecal coliform exceeded the Washington state marine criterion at one station.

  AOX: AOX was detected in all but one of the 19 samples analyzed for AOX. Levels generally tended to increase down river.

  Temperature met criteria (taken after temperatures typically begin to decline for the season). **Phytoplankton** did not indicate evidence of eutrophication.

- <u>Sediment</u>

  Metals: Fourteen of 17 metals were detected in sediment. Nine of the 14 metals were detected in nearly all of the 54 samples analyzed. In addition, organotins were detected in 7 of the 10 samples analyzed for these metals.

Organic compounds: Forty-nine of 108 organic compounds (including PAHs, PCBs, pesticides) were detected in sediments, although the detection frequency was generally substantially lower than that for metals. One PCB was detected in one sediment sample.

Dioxins and furans: Dioxin and furan congeners were detected in all of the 20 samples for which they were analyzed. 2,3,7,8-TCDD was detected in 19 and 2,3,7,8-TCDF was detected in 20 samples.

Radionuclides: Six sediment samples were analyzed for six radionuclides. Maximum concentrations were at levels typically attributed to atmospheric deposition.

Twenty-three of the 54 sites sampled had a concentration of at least one contaminant that exceeded effects-based reference levels. Reference levels were available for approximately 24 of 108 organic chemicals and for 12 of 17 metals.

o Fish Tissue

Five species were analyzed (crayfish, carp, largescale sucker, peamouth chub and white sturgeon).

Contaminants most frequently detected in fish included **metals, pesticides, PCBs** and **dioxins and furans.** The contaminants appear to be widely distributed.

Comparing to NY State guidelines for picivorous birds, **PCBs** exceeded guidelines at 19 of 33 locations, **DDE** exceeded at 3 of 33 locations and **dioxins and furans** exceeded at 13 of 33 locations. **Metals** did not exceed any levels used for comparison.

o Benthos

Bottom dwelling (benthic) organisms were evaluated to determine if they might be used as indicators of contamination. Results indicate that benthic organisms did not appear to be good indicators for the lower Columbia River.

NEXT STEPS

The Program is currently evaluating what studies to conduct over the next several months to follow-up on the reconnaissance results. Areas of particular interest appear to be confirming selected results (particularly bacteria results), sampling above Bonneville Dam and investigating potential human health risks

Environmental Quality Commission

☑ Rule Adoption Item
☐ Action Item
☐ Information Item

Agenda Item L
July 23-24, 1992 Meeting

Title:

Proposed Adoption of Amendments to Rules for Enforcement Procedures and Civil Penalties

Summary:

In 1991, the Oregon Legislature passed Senate Bill 184, significantly modifying and enhancing the Department's enforcement capabilities. The statute directs changes in three major areas: 1) changing the requirement for advance warning prior to assessing a penalty; 2) establishing a Notice of Permit Violation (NPV); and, 3) increasing the civil penalty authority to $100,000 for intentional or reckless violations. The statute also increases the maximum daily civil penalty authority for solid waste and noise violations from $500 to $10,000, making this penalty authority consistent with most other authority in the Department. In separate legislation that addresses recycling (Senate Bill 66), the legislature sets out a $500 daily maximum penalty for a local government that fails to provide the required opportunity to recycle. This new penalty provision is also included in the proposed rules.

The Department also proposes the adoption of other modifications to the enforcement rules. These modifications include definition changes, classification and magnitude changes for certain types of violations, a new $2,500 penalty matrix for open burning and on-site sewage violations, and a revised method for considering economic benefit and the inability to pay when assessing civil penalties.

The rules for adoption have been developed with the assistance of the Enforcement Advisory Committee. The work of the advisory committee is summarized in a letter from the chair, Craig Johnson. This letter, along with letters from other interested parties, is included with the report. The Department's response to Mr. Johnson's summary and the additional letters received are included in the staff report.

Department Recommendation:

Adopt the rules regarding enforcement as presented in Attachment A of the staff report.

Report Author	Division Administrator	Director

e:\wp51\enforce.rle 7/1/92

REQUEST FOR EQC ACTION

Meeting Date: July 24, 1992
Agenda Item: L
Division: Regional Operations
Section: Enforcement

SUBJECT:

Proposed Adoption of Amendments to Rules for Enforcement Procedures and Civil Penalties

PURPOSE:

The proposed amendments to Division 12 rules incorporate new statutory authority/mandate from 1991 legislation providing for three significant changes. First, there is the adoption of a schedule and criteria for determining the amount of civil penalty that may be imposed for a $100,000 maximum civil penalty for reckless or intentional violations which result in or create the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment.

Second, there is now a requirement of advance notice of violation prior to civil penalty assessments only for air, water, or solid waste permittees. Other advance notice requirements contained in the former statute were repealed.

Third, there now is an increased maximum daily civil penalty authority for solid waste and noise violations. The daily maximum was increased from $500 to $10,000 per violation.

In addition to providing for new statutory changes, the Enforcement Section has completed an extensive evaluation and review of the current enforcement rules and the Hearing Officer's case decisions applying those rules. This process has resulted in many other amendments. We have consulted with our counsel in the Attorney General's Office and with program and regional staff and incorporated their suggestions along with those of the 1992 DEQ Environmental Enforcement Advisory Committee which was convened to advise on the integration of the new statutes into Department rules.

The Enforcement Advisory Committee consisted of ten members variously representing municipalities, industry, and the public interest. The Committee's report and membership list is included with this Report as Attachment F. The Committee was convened primarily to advise the Department on proposing rule amendments made necessary as a result of 1991 Oregon Laws, Chapter 650 (See Attachment E). This law was passed after introduction of Senate Bill 184 which was endorsed by the Department.

The Advisory Committee also conducted a limited review of the draft rules currently proposed and made recommendations accordingly. Below is a list of the significant changes contained in the proposed Division 12 revisions to make the enforcement and contested case processes more efficient and effective and to add the new statutory changes:

1. $100,000 PENALTY -- 1991 Oregon Laws, Chapter 650, Section 2 (codified as ORS 468.996) - $100,000 maximum civil penalty for intentional or reckless violations which result in or create the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment. The Enforcement Advisory Committee has made recommendations on the implementation of this new law within the Division 12, providing for base penalties of $50,000 for reckless, $75,000 for intentional, and $100,000 for flagrant violations. The Department has incorporated the Committee's recommendations into the proposed amendments to Division 12.

2. NOTICE OF PERMIT VIOLATION (NPV) -- 1991 Oregon Laws, Chapter 650, Section 9 (codified as ORS 468.126) - The former advance notice statute (former ORS 468.125) was repealed. The new law requires 5-day advance notice before assessing a civil penalty only if the violator is an air, water, or solid waste permittee. Advance notice is not required if the violation was intentional, the water or air violation would not exist for five consecutive days, or if the permittee has received a prior advance warning within the preceding 36 months. The Enforcement Advisory Committee has made recommendations on the implementation of this provision, including specific language to be contained in the NPV document. The Department has incorporated the Committee's recommendations into the proposed amendments to Division 12.

3. DEFINITION CHANGES -- Several definition changes are proposed. Most changes are the result of our own evaluation of case weaknesses observed over time and noted by the hearing officer in contested case decisions. Other changes are the result of recommendations from our Advisory Committee in the integration of 1991 Oregon Laws, Chapter 650, into Division 12.

4. CLASSIFICATION CHANGES - Current classifications have been reviewed in consultation with program and regional managers. Many more violations have been specifically classed, especially the violations that occur frequently. This proposal will reduce the resource and time intensive burden on DEQ to prove case-by-case risk assessment determinations that are often required under the current Division 12 rules. Specific risk of harm determinations will only be required in exceptional cases where it can be shown that a violation was more likely than not a major risk of harm to public health or the environment. Otherwise, if a violation is not specifically classed as a Class I or Class III, it will be a Class II by rule.

5. INCREASED BASE PENALTIES FOR MAJOR & MODERATE MAGNITUDE VIOLATIONS ON THE $10,000 MATRIX - Current base penalties are $5,000 and $2,500, respectively. Increases to $6,000 and $3,000 are proposed in order to facilitate the assessment of civil penalty sums commensurate with those violations subject to $10,000 per day by law. The increases are fundamentally consistent with the Department's perspective in regard to Class I, $10,000 matrix violations.

6. SELECTED MAGNITUDE CATEGORIES - This was also put together in consultation with program and regional managers. It is desirable to specifically list some magnitude parameters by rule for the same case-by-case efficiency reasons stated for the specific classification of more violations. The selected magnitudes are set forth in amended OAR 340-12-080. Programs/areas considered include: open burning, asbestos, air and water discharge limitations, and hazardous waste.

7. NEW $2,500 MATRIX - This is proposed for open burning and most on-site sewage cases and should result in more straightforward and equitable civil penalty determinations. Use of this matrix is also expected to reduce the number of contested cases in these programs, especially in conjunction with the body of other proposed rule amendments regarding classification and magnitude.

8. ECONOMIC BENEFIT/INABILITY TO PAY - As a sanction for those violators who receive an economic benefit ("EB") as a result of noncompliance with environmental laws, rules, etc., we propose to separate this concept from the other economic consideration ("economic and financial condition," also known as "inability to pay") by moving the economic benefit calculation to the end of the civil penalty formula. The dollar sum of the "EB" will be added to the civil penalty for

a final dollar total within the maximum daily limits set by law.

A respondent's inability to pay is addressed in accordance with the proposal suggested by the Advisory Committee. Both "EB" and "inability to pay" provisions are set forth in new subsections of the civil penalty determination formula (OAR 340-12-045).

9. OTHER ISSUES

The Advisory Committee also deliberated over other issues related to enforcement, primarily the development of "environmental credit projects" and the Hearing Officer's standard of review in contested cases. The Committee recommended that the Department, in conjunction with the Department of Justice, explore the idea of applying funds that would otherwise be spent on environmental penalties in ways that would confer direct environmental benefits. The Committee noted that, nationally, this is a growing trend.

The Committee was split over the issue of limiting the Hearing Officer's standard of review in contested case hearings. The majority of the Committee recommended that the Department amend OAR 340-11-132(5) in order to resolve dissatisfactions that the Department had expressed in regard to reductions of assessed civil penalty sums after review in contested case hearings. The Committee majority recommended a proposed amendment which the Department included in the rulemaking package offered for public comment (See Attachment I).

After review of the comments received, and in consideration of the Department's confidence in the quality of the proposed amendments to Division 12, the Department does not recommend adoption of the amendment to OAR 340-11-132(5) proposed by the Advisory Committee majority. The Department believes that the public interest purposes of the contested case process are best served by allowing the Hearing Officer the ability to fully review the Department's civil penalty determinations.

ACTION REQUESTED:

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

___ Authorize Rulemaking Hearing
_X_ Adopt Rules

Proposed Rules	Attachment A
Rulemaking Statements	Attachment B
Fiscal and Economic Impact Statement	Attachment C
Public Notice	Attachment D

___ Issue a Contested Case Order
___ Approve a Stipulated Order
___ Enter an Order

Proposed Order	Attachment ___

___ Approve Department Recommendation

___ Variance Request	Attachment ___
___ Exception to Rule	Attachment ___
___ Informational Report	Attachment ___
___ Other: (specify)	Attachment ___

DESCRIPTION OF REQUESTED ACTION:

Adoption of proposed rules. Public hearings were simultaneously held on May 18, 1992, in Portland, Eugene, Medford, and Pendleton. Comments were also received from twenty-six commentors by mail. The Department has considered the comments and responded after consultation with the Attorney General's Office. In addition, the Department formed a citizen's advisory committee to assist the Department in implementing its statutory mandates and to aid the Department in general enforcement rules amendment considerations. The 1992 Environmental Enforcement Advisory Committee reviewed the new legislation and made recommendations for incorporating the statute into the Department's rules. The Committee also reviewed, in a limited fashion, the Department's current Division 12 rules on enforcement procedures and civil penalties.

The Committee made several recommendations, many of which were incorporated into the proposed rule amendments. The various subjects that the Committee considered included development of

a procedure to assess civil penalties for violations of ORS 468.996 (extreme violations subject to the $100,000 civil penalty), implementation of the Notice of Permit Violation as required by the new law, generally increased civil penalty sums, limitations on the hearing officer's scope of review, methods of sanctioning violators for obtaining economic benefits from noncompliance, and consideration of a respondent's inability to pay an assessed civil penalty. A copy of the 1992 Environmental Enforcement Advisory Committee Report is included herein as Attachment F.

AUTHORITY/NEED FOR ACTION:

_X_ Required by Statute: ORS 468.020, .996; & 459.995 Attachment E

Enactment Date: July 22, 1991; & June 28, 1991, respectively

_X_ Statutory Authority: ORS 468.020, .996, and 459.995 Attachment E

___ Pursuant to Rule: _____ Attachment ___

___ Pursuant to Federal Law/Rule: _____ Attachment ___

___ Other: Attachment ___

___ Time Constraints: (explain)

DEVELOPMENTAL BACKGROUND:

_X_ Advisory Committee Report/Recommendation Attachment F

_X_ Hearing Officer's Report/Recommendations Attachment G

_X_ Response to Testimony/Comments Attachment H

___ Prior EQC Agenda Items: (list) Attachment ___

___ Other Related Reports/Rules/Statutes: Attachment ___

_X_ Supplemental Background Information:

* 5/1/92 Rules Presented for Public Comment Attachment I

* Public Comments Attachment J

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The effects of the proposed rule amendments are presented in the Fiscal and Economic Impact Statement that was included in the rulemaking package presented for public comment in May. In summary, the proposed rules would have no significant adverse fiscal or economic effect on state agencies, local governmental bodies, or members of the public and private sectors, including small businesses, unless the entity or person is issued a formal enforcement action for a civil violation of state environmental laws or rules.

Significant adverse fiscal and economic effects may result from the assessment and imposition of civil penalties or specific Department Orders or other formal enforcement actions, such as a Notice of Permit Violation (NPV), issued in accordance with these proposed rules. NPV's require that air, water, or solid waste permittees undertake certain actions within five (5) working days.

PROGRAM CONSIDERATIONS:

The Department believes that the refinement of the classification scheme obviates the resource-intensive process of case-by-case risk assessments by program staff often made necessary by the current rules. This also applies in regard to the development of the selected magnitude categories for the several programs and violations listed in the proposed rule amendments. The proposed rule amendments create greater specificity in both the classification of violations and the determination of their magnitudes. The enforcement process, including contested case hearings, should become more efficient as a result of the proposed amendments.

The legal requirements of the Notice of Permit Violation could result in an increased workload for regional staff, especially during the period of time when the Department is reviewing the permittees' responses to the Notices.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Adopting only those amendments mandated by 1991 Oregon Laws, Chapters 358 and 650;

2. Adopting proposed rules amendments.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends adopting the proposed rule amendments. The amendments provide for the adoption of new rules as mandated by 1991 legislation, as well as provide for clarification and streamlining of the application of the existing rules. The amendments also refine the civil penalty determination procedure and facilitate the issuance of more efficient, timely and equitable formal enforcement actions.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rule amendments are consistent with agency and legislative policy, as well as statutory authority and legislative directives. In the Department's Strategic Plan, Goal 1 states: "Address environmental issues on the basis of a comprehensive cross-media (air, water, land) approach." The proposed amendments further develop a uniform and consistent method of processing enforcement sanctions across all programs.

Goal 8 states: "Streamline agency programs and activities by identifying and implementing more efficient ways to accomplish essential actions and by eliminating low priority tasks." The proposed amendments effectively streamline the Department's process, issuance and defense of formal enforcement actions. This effect will also carry over and have a positive effect on the contested case process. There will be fewer bona fide issues for determination by the Hearing Officer at the hearing, or by the Commission on appeal.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the Commission adopt the language recommended by the Environmental Enforcement Advisory Committee for proposed OAR 340-12-045(3)(b), regarding inability to pay, which reads:

> "In appropriate circumstances, the Department or Commission may impose a penalty that may likely result in a respondent going out of business. Such circumstances may include situations where the violations is intentional or flagrant or situations where the Respondent's financial condition poses a serious concern regarding its ability or incentive to remain in compliance."

2. Should the Commission adopt the proposed $2,500 civil penalty matrix?

3. Should the Class I, base penalty amounts for major and moderate magnitude violations in the $10,000 civil penalty matrix be increased as proposed?

INTENDED FOLLOWUP ACTIONS:

Explore various methods of calculating the economic benefit of noncompliance obtained by a respondent and present a recommendation with alternatives to the Commission as a future work session item for Commission consideration and guidance.

Develop a method for efficiently processing cases in which a respondent claims an inability to pay an assessed civil penalty, and present a recommendation with alternatives to the Commission as a future work session item.

Discuss classification revisions for hazardous waste management and disposal violations, including those violations that may qualify for consideration for future listing as Class III violations. This issue arose during the public comment process and will be fully explored by Hazardous and Solid

Waste and Enforcement staff, in consultation with U.S. Environmental Protection Agency program staff. This may result in additional amendments to Division 12 at a later date.

Approved:

Section: Van A Kollias

Division: Tom Bispham

Director: Jill Lawan

Report Prepared By: Michael V. Nixon

Phone: 229-5217

Date Prepared: July 6, 1992

Attachment A
Agenda Item L
July 24, 1992
EQC Meeting

Attachment A

Attachment A

OREGON ADMINISTRATIVE RULES, CHAPTER 340, DIVISION 12
ENFORCEMENT PROCEDURE AND CIVIL PENALTIES

CHAPTER 340, DIVISION 12

ENFORCEMENT PROCEDURE AND CIVIL PENALTIES

POLICY
340-12-026

(1) The goal of enforcement is to:

(a) Obtain and maintain compliance with the Department's statutes, rules, permits and orders;

(b) Protect the public health and the environment;

(c) Deter future violators and violations; and

(d) Ensure an appropriate and consistent statewide enforcement program.

(2) [~~Except as provided by 340-12-040(3), t~~] The Department shall endeavor by conference, conciliation and persuasion to solicit compliance.

(3) [~~Subject to subsection (2) of this section, t~~] The Department shall address all documented violations in order of seriousness at the most appropriate level of enforcement necessary to achieve the goals set forth in subsection (1) of this section [~~under the particular circumstances of each violation~~].

[~~(4)~~] (3) Violators who do not comply with an initial enforcement action shall be subject to increasing levels of enforcement until compliance is achieved.

(Statutory Authority: ORS CH 468, 468A, 468B)

DEFINITIONS
340-12-030

Unless otherwise required by context, as used in this Division:

(1) "Class One Equivalent" or "Equivalent", which is used only for the purposes of determining the value of the "P" factor in the civil penalty formula, means two Class Two violations, [~~or~~] one Class Two and two Class Three violations, or three Class Three violations.

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

(3) "Compliance" means meeting the requirements of the Commission's and Department's statutes, rules, permits or orders.

(4) "Director" means the Director of the Department or the Director's authorized deputies or officers.

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

(6) "Documented Violation" means any violation which the Department or other government agency [~~verifies through~~] records after observation, investigation or data collection.

(7) [~~"Enforcement" means any documented action taken to address a violation.~~]

[~~(8)~~] "Flagrant" means any documented violation where the [~~r~~]Respondent had actual knowledge of the law and had consciously set out to commit the violation.

[~~(9)~~] (8) "Formal Enforcement Action" means an [~~administrative~~] action signed by the Director or Regional Operations Administrator or authorized representatives or deputies which is issued to a Respondent for[~~on the basis that~~] a documented violation. [~~has been documented,~~] Formal enforcement actions may require[~~s~~] the Respondent to take [~~specific~~] action within a specified time frame, and/or state[~~s~~] the consequences for the violation or continued noncompliance.

[~~(10)~~](9) "Intentional", [~~Respondent consciously and voluntarily took an action or omitted to take action and knew the probable consequences of so~~

~~acting or omitting to act.~~] means conduct by a person with a conscious objective to cause the result of the conduct.

[~~(11)~~](10) "Magnitude of the Violation" means the extent of a violator's deviation from the Commission's and Department's statutes, rules, standards, permits or orders[~~,~~]. [~~taking into account such factors as, but not limited to, concentration, volume, percentage, or duration, toxicity, or proximity to number of human or environmental receptors.~~] In determining magnitude the Department shall consider available information, including such factors as concentration, volume, percentage, duration, toxicity, and the extent of the effects of the violation. In any case, the Department may consider any single factor to be conclusive. Deviations shall be categorized as major, moderate or minor.

(11) "Negligence" or "Negligent" means failure to take reasonable care to avoid a foreseeable risk of committing an act or omission constituting a violation.

(12) "Order" means:

(a) Any action satisfying the definition given in ORS Chapter 183; or

(b) Any other action so designated in ORS Chapter 454, 459, 465, 466, 467, [~~or~~] 468, 468A, or 468B.

(13) "Person" includes, but is not limited to, individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, [~~the~~] states and [~~any~~] their agencies [~~thereof~~], and the Federal Government and [~~any~~] its agencies [~~thereof~~].

(14) "Prior Significant Action" means any violation [~~proven pursuant to a contested case hearing, or~~] established either with or without admission of a violation by payment of a civil penalty, [~~by an order of default,~~] or by a [~~stipulated or~~] final order of the Commission or the Department.

(15) "Reckless" or "recklessly" means conduct by a person who is aware of and consciously disregards a substantial and unjustifiable risk that the result will occur or that the circumstance exists. The risk must be of such a nature and degree that disregard thereof constitutes a gross deviation from the standard of care a reasonable person would observe in that situation.

[~~(15)~~] (16) "Residential Open[~~ing~~] Burning" means the open burning of any domestic wastes [~~, except rubber and petroleum based products prohibited by OAR 340 23 042(2),~~] generated by a single family dwelling and conducted by an occupant of the dwelling on the dwelling premises. This does not include the open burning of materials prohibited by OAR 340-23-042(2).

[~~(16)~~] (17) "Respondent" means the person to whom a formal enforcement action is issued.

[~~(17)~~] (18) "Risk of Harm" means the individual or cumulative [~~level of risk~~] possibility of harm to public health or the environment caused by a violation or violations. [~~created by the likelihood of exposure, either individual or cumulative, or the actual damage, either individual or cumulative, caused by a violation to public health or the environment.~~] Risk of harm shall be categorized as major, moderate or minor.

[~~(18)~~] (19) "Systematic" means any documented violation which occurs on a regular basis.

[~~(19)~~] (20) "Violation" means a transgression of any statute, rule, order, license, permit, or any part thereof and includes both acts and omissions. Violations shall be categorized as Class One (or I), Class Two (or II) or Class Three (or III), with Class One designating the most serious class of violation. [~~follows:~~

~~(a) "Class One or I" means any violation which causes major harm or poses a major risk of harm to public health or the environment, or violation [of any compliance schedule contained in a Department permit or a Department or Commission order];~~

~~(b) "Class Two or II" means any violation which causes moderate harm or poses a moderate risk of harm to public health or the environment;~~

~~(c) "Class Three or III" means any violation which poses a minor risk of harm to public health or the environment classed as such by Department rule.~~]

(Statutory Authority: ORS CH 468)

CONSOLIDATION OF PROCEEDINGS

340-12-035

Notwithstanding that each and every violation is a separate and distinct offense, and in cases of continuing violations, that each day's continuance is a separate and distinct violation, proceedings for the assessment of multiple civil penalties for multiple violations may be consolidated into a single proceeding.

(Statutory Authority: ORS CH 468)

[~~PRIOR~~] NOTICE OF PERMIT VIOLATIONS AND EXCEPTIONS

340-12-040

[~~(1) Except as provided in subsection (3) of this section, prior to the assessment of any civil penalty the Department shall serve a Notice of Violation upon the respondent. Service shall be in accordance with rule 340-11-097.~~

~~(2) A Notice shall be in writing, specify the violation and state that the Department will assess a civil penalty if a violation continues or occurs after five days following receipt of the notice.~~

~~(3) (a) The above Notice shall not be required where the respondent has otherwise received actual notice of the violation not less than five days prior to the violation for which a penalty is assessed.~~

~~(b) No advanced notice, written or actual, shall be required under subsections (1) and (2) of this section if:~~

~~(A) The act or omission constituting the violation is intentional;~~

~~(B) The violation consists of disposing of solid waste or sewage at an unauthorized disposal site;~~

~~(C) The violation consists of constructing a sewage disposal system without the Department's permit;~~

~~(D) The water pollution, air pollution, or air contamination source would normally not be in existence for five days;~~

~~(E) The water pollution, air pollution, or air contamination source might leave or be removed from the jurisdiction of the Department;~~

~~(F) The penalty to be imposed is for a violation of ORS 466.005 to 466.385 relating to the management and disposal of hazardous waste or polychlorinated biphenyls, or rules adopted or orders or permits issued pursuant thereto.; or~~

~~(G) The penalty to be imposed is for a violation of ORS 468.893(8) relating to the control of asbestos fiber releases into the environment, or rules adopted thereunder.~~]

[~~(Statutory Authority: ORS CH 459, 466 & 468)~~]

(1) Prior to assessment of a civil penalty for a violation of the terms or conditions of an Air Contaminant Discharge Permit, National Pollutant Discharge Elimination System Permit, Water Pollution Control Facilities Permit, or Solid Waste Disposal Permit, the Department shall provide a Notice of Permit Violation to the permittee. The Notice of Permit Violation shall be in writing, specifying the violation and stating that a civil penalty will be imposed for the permit violation unless the permittee submits one of the following to the Department within five working days of receipt of the Notice of Permit Violation:

(a) A written response from the permittee acceptable to the Department certifying that the permitted facility is complying with all terms of the permit from which the violation is cited. The certification shall include a sufficient description of the information on which the permittee is certifying compliance to enable the Department to determine that compliance has been achieved; or,

(b) A written proposal, acceptable to the Department, to bring the facility into compliance with the permit. An acceptable proposal under this rule shall include at least the following:

1) A detailed plan and time schedule for achieving compliance in the shortest practicable time;

2) A description of the interim steps that will be taken to reduce the impact of the permit violation until the permitted facility is in compliance with the permit;

3) A statement that the permittee has reviewed all other conditions and limitations of the permit and no other violations of the permit were discovered.

(c) In the event that any compliance schedule to be approved by the Department pursuant to subsection 1(b) of this section provides for a compliance period of greater than six months, the Department shall incorporate the compliance schedule into an Order described in OAR 340-12-041(4)(b)(C) which shall provide for stipulated penalties in the event of any noncompliance therewith. The stipulated penalties shall not apply to circumstances beyond the reasonable control of the permittee. The stipulated penalties shall be set at amounts consistent with those established under OAR 340-12-048.

(d) The certification allowed in subsection (1)(a) of this section shall be signed by a Responsible Official based on information and belief after making reasonable inquiry. For purposes of this rule "Responsible Official" of the permitted facility means one of the following:

1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or the manager of one of more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2) For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

3) For a municipality, State, Federal, or other public agency, either a principal executive officer or appropriate elected official.

(e) For the purposes of this section, when a regional authority issues an NPV, different acceptability criteria may apply for (a) and (b) above.

(2) No advance notice prior to assessment of a civil penalty shall be required under subsection (1) of this section and the Department may issue a Notice of Civil Penalty Assessment if:

(a) The violation is intentional;

(b) The water or air violation would not normally occur for five consecutive days; or

(c) The permittee has received a Notice of Permit Violation with respect to any violation of the permit within 36 months immediately preceding the documented violation.

(d) For purposes of this section, "permit" includes permit renewals and modifications and no such renewal or modification shall result in the requirement that the Department provide the permittee with an additional advance warning if the permittee has received a Notice of Permit Violation within 36 months.

(Statutory Authority: ORS CH 468)

(1) Notice of Noncompliance (NON) [~~.--An enforcement action which~~]:

(a) Informs a person of [~~the existence of~~] a violation, [~~the actions required to resolve the violations~~] and the consequences of the violation or continued noncompliance. The notice may state the actions required to resolve the violation and may specify a time by which compliance is to be achieved and that the need for formal enforcement action will be evaluated;

(b) Shall be issued under the direction of [~~the appropriate Regional Manager, or Section M~~] a manager or authorized representative;

(c) Shall be issued for all classes of documented violations.

[~~(d) Satisfies the requirements of OAR 340-12-026(2).~~]

(2) Notice of Permit Violation (NPV) [~~and Intent to Assess a Civil Penalty.--A formal enforcement action which~~]:

(a) Is issued pursuant to OAR 340-12-040;

[~~(b) May include a time schedule by which compliance is to be achieved;~~]

[~~(c)~~](b) Shall be issued by the Regional Operations Administrator or authorized representative[~~;~~].

(c) Shall be issued for the first occurrence of a documented Class I violation which is not excepted under OAR 340-12-040(2), or the repeated or continuing occurrence of documented Class II or III violations where a NON has failed to achieve compliance or satisfactory progress toward compliance. A permittee shall not receive more than three NONs for Class II violations of the same permit within a 36 month period without being issued a NPV.

[~~(d) Shall be issued for the first occurrence of a documented Class One violation which is not excepted under OAR 340-12-040(3)(b), or the repeated or continuing occurrence of documented Class Two or Three violations where a Notice of Noncompliance has failed to achieve compliance or satisfactory progress toward compliance.~~]

[~~(3) Notice of Violation and Compliance Order.--A formal enforcement action which:~~

~~(a) Is issued pursuant to ORS 466.190 for violations related to the management and disposal of hazardous waste;~~

~~(b) Includes a time schedule by which compliance is to be achieved;~~

~~(c) Shall be issued by the Director;~~

~~(d) May be issued for documented violations related to hazardous waste.~~]

(3)[~~(4)~~] Notice of Civil Penalty Assessment (CPA) [~~.--A formal enforcement action which~~]:

(a) Is issued pursuant to ORS 468.130, and OAR 340-12-042 and 340-12-045;

(b) Shall be issued by the Director or authorized representative;

(c) May be issued for the occurrence of any Class of documented violation [~~excepted by OAR 340-12-040(3), for any class of repeated or continuing documented violations or where a person has failed to comply with a Notice of Violation and Intent to Assess a Civil Penalty or Order~~] that is not limited by the NPV requirement of OAR 340-12-040(2).

(4)[~~(5) Enforcement~~]Order[~~.--A formal enforcement action which~~]:

(a) Is issued pursuant to ORS Chapters 183, 454, 459, 465, 466, 467, 468, 468A, or 468B;

(b) May be in the form of a Commission or Department Order, or a Stipulat[~~ed~~]ion and Final Order (SFO);

(A) Commission Orders shall be issued by the Commission, or the Director on behalf of the Commission;

(B) Department Orders shall be issued by the Director or authorized representative;

(C) [~~Stipulated Final~~] All other Orders:

(i) May be negotiated [~~between the Department and the subject party~~];

(ii) Shall be signed by the Director or authorized representative [~~on behalf of the Department~~] and the authorized representative of [~~the subject~~] each other party[~~; and~~]

[~~(iii) Shall be approved by the Commission or by the Director on behalf of the Commission~~].

(c) May be issued for[~~, but is not limited to, Class One or Two violations~~] any Class of violation.

(6) The [~~formal~~] enforcement actions described in subsection (1) through (5) of this section in no way limit[~~s~~] the Department or Commission from seeking legal or equitable remedies [~~in the proper court~~] as provided by ORS Chapters 454, 459, 465, 466, 467, [~~and~~] 468, 468A, and 468B. (Statutory Authority: ORS CHS 454, 459, 465, 466, 467, [~~and~~] 468, 468A and 468B)

CIVIL PENALTY SCHEDULE MATRICES

340-12-042

In addition to any liability, duty, or other penalty provided by law, the Director may assess a civil penalty for any violation pertaining to the Commission's or Department's statutes, [~~regulations~~]rules, permits or orders by service of a written notice of assessment of civil penalty upon the [~~r~~]Respondent. Except for civil penalties assessed under OAR 340-12-048 and 340-12-049, [~~T~~] the amount of any civil penalty shall be determined through the use of the following matrices in conjunction with the formula contained in OAR 340-12-045:

(1) $10,000 Matrix

← Magnitude of Violation

Class of Violation	Major	Moderate	Minor
Class I	~~[$5,000]~~ $6,000	~~[$2,500]~~ $3,000	$1,000
Class II	$2,000	$1,000	$500
Class III	$500	$250	$100

No civil penalty issued by the Director pursuant to this matrix shall be less than fifty dollars ($50) or more than ten thousand dollars ($10,000) for each day of each violation. This matrix shall apply to the following types of violations:

(a) Any violation related to air quality statutes, rules, permits or orders, ~~[except for residential open burning]~~ except for the selected open burning violations listed in section (3) below;

~~[(b) Any violation related to of ORS 468.875 to 468.899 relating to asbestos abatement projects;]~~

(b) ~~[(c)]~~ Any violation related to ORS 164.785 and water quality statutes, rules, permits or orders, ~~[except for violations of ORS 164.785(1) relating to the placement of offensive substances into waters of the state,]~~ violations of ORS Chapter 454 and on-site sewage disposal rules by a person performing sewage disposal services; ~~[, and violations of ORS 468.825 and 468.827 and rules adopted thereunder relating to the financial assurance requirements for ships transporting hazardous materials and oil;]~~

(c) ~~[(d)]~~ Any violation related to underground storage tanks statutes, rules, permits or orders, except for failure to pay a fee due and owing under ORS 466.785 and 466.795;

(d) ~~[(e)]~~ Any violation related to hazardous waste management statutes, rules, permits or orders, except for violations of ORS 466.890 related to damage to wildlife;

(e) ~~[(f)]~~ Any violation related to oil and hazardous material spill and release statutes, rules ~~[and]~~ , or orders, except for negligent or intentional oil spills;

(f) ~~[(g)]~~ Any violation related to polychlorinated biphenyls management and disposal statutes;

(g) ~~[(h)]~~ Any violation of ORS ~~[466.540 to 466.590]~~ Chapter 465 ~~[related to]~~ or environmental cleanup ~~[statutes,]~~ rules~~[, agreements]~~ or orders; ~~[and]~~

~~[*]~~ ~~[(i) Any violation related to used oil management statutes, rules and, or orders under ORS 468.869.;]~~

(h) ~~[(j)]~~ Any violation of ORS Chapter 467 or any violation related to noise control rules or orders;

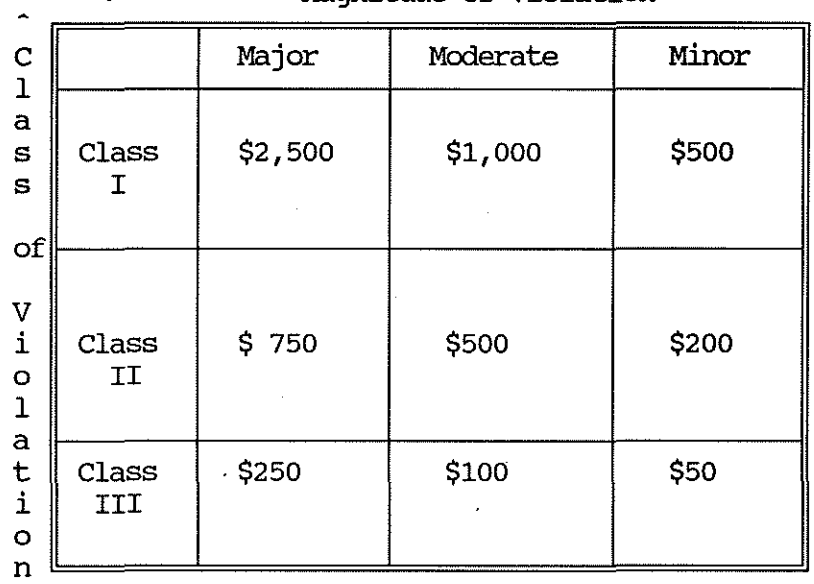
(i) ~~[(k)]~~ Any violation of ORS Chapter 459 or any violation related to solid waste statutes, rules, permits, or orders, except any violation by a

city, county or metropolitan service district of failing to provide the opportunity to recycle as required by law ; and

~~[(1) Any violation related to waste tire statutes, rules, permits, or orders;]~~

(2) In addition to any other penalty provided by law, any [P] person[~~s~~] causing an oil spill[~~s~~] through an intentional or negligent act shall incur a civil penalty of not less then one hundred dollars ($100) or more than twenty thousand dollars ($20,000). The amount of the penalty shall be determined by doubling the values contained in the matrix in subsection [~~(a)~~] (1) of this rule in conjunction with the formula contained in 340-12-045.

(3) $2,500 Matrix



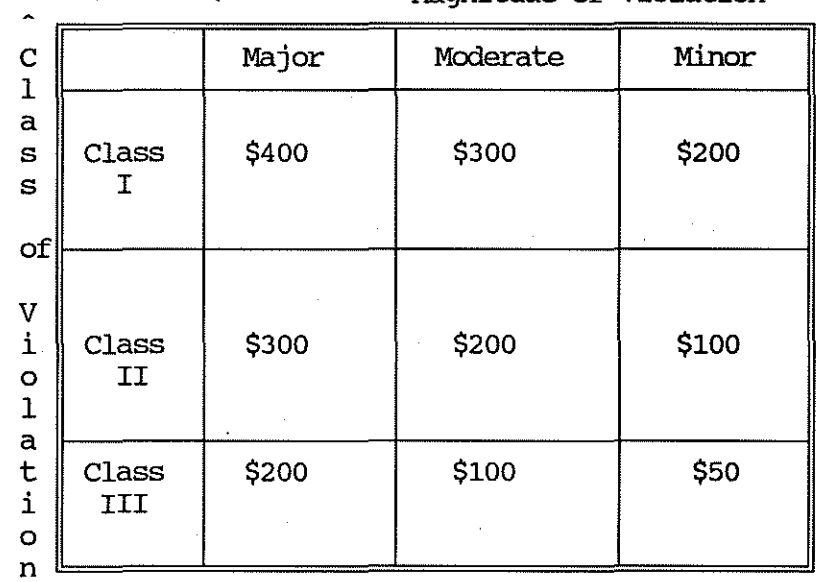
	Major	Moderate	Minor
Class I	$2,500	$1,000	$500
Class II	$ 750	$500	$200
Class III	$250	$100	$50

No civil penalty issued by the Director pursuant to this matrix shall be less than $50. The total civil penalty may exceed $2,500 for each day of each violation, but shall not exceed $10,000 for each day of each violation.

This matrix shall be applied to any violation related to on-site sewage statutes, rules, permits, or orders, other than violations by a person performing sewage disposal services; and for violations of the Department's Division 23 open burning rules, excluding all industrial open burning violations, and violations of OAR 340-23-042(2) where the volume of the prohibited materials burned is greater than or equal to twenty-five cubic yards. In cases of the open burning of tires, this matrix shall apply only if the number of tires burned is less than fifteen. The matrix set forth in section (1) above shall be applied to the open burning violations excluded from this section.

(4) [~~(3)~~]

$500 Matrix



	Major	Moderate	Minor
Class I	$400	$300	$200
Class II	$300	$200	$100
Class III	$200	$100	$50

No civil penalty issued by the Director pursuant to this matrix shall be less than fifty dollars ($50) or more than five hundred dollars ($500) for each day of each violation. This matrix shall apply to the following types of violations:

(a) [~~Any violation related to residential open burning;~~]

[~~(b) Any violation related to noise control statutes, rules, permits and orders;~~]

[~~(c) Any violation related to on site sewage disposal statutes, rules, permits, licenses and orders;~~]

[~~(d) Any violation related to solid waste statutes, rules, permits and orders; and~~]

[~~(e) Any violation related to waste tire statutes, rules, permits and orders;~~]

[~~(f) Any violation of ORS 164.785 relating to the placement of offensive substances into the waters of the state or on to land; and~~]

[~~(e)~~] Any violation of laws, rules, orders or permits relating to woodstoves, except violations relating to the sale of new woodstoves;

(b) Any violation by a city, county or metropolitan service district of failing to provide the opportunity to recycle as required by law; and

(c) [~~(g)~~] Any violation of ORS [~~468.825 and 468.827~~] 468B.480 and 468B.485 and rules adopted thereunder relating to the financial assurance requirements for ships transporting hazardous materials and oil.

(Statutory Authority: ORS Ch. 454, 459, 456, 466, 467, 468, 468A & 468B & ~~468~~)

[~~(* effective August 15, 1990)~~]

CIVIL PENALTY DETERMINATION PROCEDURE

340-12-045

(1) When determining the amount of civil penalty to be assessed for any violation, other than violations of ORS 468.996, which are determined according to the procedure set forth below in OAR 340-12-049(8), the Director or authorized representative shall apply the following procedures:

(a) Determine the class [~~of violation~~] and the magnitude of each violation;

(b) Choose the appropriate base penalty (BP) established by the matrices of 340-12-042 [~~based upon the above finding~~] after determining the class and magnitude of each violation;

(c) Starting with the base penalty [~~(BP)~~], determine the amount of penalty through application of the formula:

BP + [(.1 x BP)(P + H + [E] + O + R + C)] + EB where:

(A) "P" is whether the [r] Respondent has any prior significant actions relating to statutes, rules, orders and permits pertaining to environmental quality or pollution control. For the purposes of this determination, violations that were the subject of any prior significant actions that were issued before the effective date of the Division 12 rules as adopted by the Commission in March 1989, shall be classified in accordance with the classifications set forth in the March 1989 rules to ensure equitable consideration of all prior significant actions. The values for "P" and the finding which supports each are as follows:

(i) 0 if no prior significant actions or there is insufficient information on which to base a finding;
(ii) 1 if the prior significant action is one Class Two or two Class Threes;
(iii) 2 if the prior significant action(s) is one Class One or equivalent;
(iv) 3 if the prior significant actions are two Class One or equivalents;
(v) 4 if the prior significant actions are three Class Ones or equivalents;
(vi) 5 if the prior significant actions are four Class Ones or equivalents;
(vii) 6 if the prior significant actions are five Class Ones or equivalents;
(viii) 7 if the prior significant actions are six Class Ones or equivalents;
(ix) 8 if the prior significant actions are seven Class Ones or equivalents;
(x) 9 if the prior violations significant actions are eight Class Ones or equivalents;
(xi) 10 if the prior significant actions are nine Class Ones or equivalents, or if any of the prior significant actions were issued for any violation of ORS 468.996.
(xii) In determining the appropriate value for prior significant actions as listed above, the Department shall reduce the appropriate factor by:
(I) A value of two (2) if all the prior significant actions are greater than three years old but less than five years old;
(II) A value of four (4) if all the prior significant actions are greater than five years old;
(III) In making the above reductions, no finding shall be less than 0.
(xiii) Any prior significant action which is greater than ten years old shall not be included in the above determination.

(B) "H" is past history of the [r] Respondent in taking all feasible steps or procedures necessary or appropriate to correct any violation cited in any prior significant actions. In no case shall the combination of the "P" factor and the "H" factor be a value less than zero. In such cases where the sum of the "P" and "H" values is a negative numeral the finding and determination for the combination of these two factors shall

be zero. The values for "H" and the finding which supports each are as follows:

(i) -2 if [~~violator~~] Respondent took all feasible steps to correct [~~any violations~~] each violation contained in any prior significant action;

(ii) 0 if there is no prior history or if there is insufficient information on which to base a finding;

[~~(iii) 1 if violator took some, but not all, feasible steps to correct a Class Two or Three violation;~~

~~(iv) 2 if violator took some, but not all, feasible steps to correct a Class One violation;~~

~~(v) 3 if violator took no action to correct prior significant actions.~~]

(C) [~~"E" is the economic condition of the respondent. The values for "E" and the finding which supports each are as follows:~~

~~(i) 0 to 4 if economic and financial hardship is condition is poor, subject to subsection (4) of this section;~~

~~(ii) 0 if there is insufficient information on which to base a finding, the respondent gained no economic benefit through noncompliance, or the respondent is economically sound;~~

~~(iii) 2 if the respondent gained a minor to moderate economic benefit through noncompliance;~~

~~(iv) 4 if the respondent gained a significant economic benefit through noncompliance.~~]

[~~(D)~~] "O" is whether the violation was [~~a single occurrence or was~~] repeated or continuous [~~during the period resulting in the civil penalty assessment~~]. The values for "O" and the finding which supports each are as follows:

(i) 0 if [~~single occurrence~~] the violation existed for one day or less and did not recur on the same day;

(ii) 2 if [~~repeated or continuous~~] the violation existed for more than one day or if the violation recurred on the same day.

[~~(E)~~] (D) "R" is whether the violation resulted from an unavoidable accident, or a negligent, [~~or~~ an] intentional or flagrant act of the [~~r~~] Respondent. The values for "R" and the finding which supports each are as follows:

(i) [~~-2 if unavoidable accident;~~]

[~~(ii)~~] 0 if an unavoidable accident, or if there is insufficient information to make [~~any other~~] a finding;

[~~(iii)~~] (ii) 2 if negligent;

[~~(iv) 4 if grossly negligent; or~~]

[~~(v)~~] (iii) 6 if intentional; or

[~~(vi)~~] 10 if flagrant.

[~~(F)~~] (E) "C" is the [~~violator's~~] Respondent's cooperativeness and efforts to correct [~~in correcting~~] the violation. The values for "C" and the finding which supports each are as follows:

(i) -2 if [~~violator is~~] Respondent was cooperative and took reasonable efforts to correct the violation or minimize the effects of the violation;

~~(ii)~~ 0 if [~~violator is neither cooperative nor uncooperative or~~] there is insufficient information [~~on which~~] to [~~base~~] make a finding, or if the violation or the effects of the violation could not be corrected;

(iii) 2 if [~~violator is~~] Respondent was uncooperative and did not take reasonable efforts to correct the violation or minimize the effects of the violation.

(F) "EB" is the approximated dollar sum of the economic benefit that the Respondent gained through noncompliance. The Department or Commission may increase the penalty by the approximated dollar sum of the economic benefit, provided that the sum penalty does not exceed the maximum allowed for the violation by rule or statute. After determining the base penalty and applying the civil formula penalty above to determine the gravity and magnitude-based portion of the civil penalty, "EB" is to be determined as follows:

(i) Add to the formula the approximate dollar sum of the economic benefit gained through noncompliance, as calculated by determining both avoided costs and the benefits obtained through any delayed costs, where applicable;

(ii) The Department need not calculate nor address the economic benefit component of the civil penalty when the benefit obtained is de minimis;

(iii) As stated above, under no circumstances shall the imposition of the economic benefit component of the penalty result in a penalty exceeding the statutory maximum allowed for the violation by rule or statute. When a violation has extended over more than one day, however, for determining the maximum penalty allowed, the Director may treat the violation as extending over at least as many days as necessary to recover the economic benefit of noncompliance. When the purpose of treating a violation as extending over more than one day is to recover the economic benefit, the Department has the discretion not to impose the gravity and magnitude-based portion of the penalty for more than one day.

(2) In addition to the factors listed in subsection (1) of this rule, the Director may consider any other relevant rule of the Commission and shall state the [~~a~~]effect the consideration had on the penalty. On review, the Commission shall consider the factors contained in subsection (1) of this rule and any other relevant rule of the Commission.

[~~(3) If the Department or Commission finds that the economic benefit of noncompliance exceeds the dollar value of 4 in subsection (1)(c)(C)(iv) of this section, it may increase the penalty by the amount of economic gain, as long as the penalty does not exceed the maximum penalty allowed by rule and statute.~~]

[~~(4) In any contested case proceeding or settlement in which Respondent has raised economic and financial condition as an issue, Respondent has the responsibility of providing documentary evidence concerning its economic condition. In determining whether to mitigate a penalty based on economic and financial condition, the Commission or Department may consider the causes and circumstances of Respondent's economic condition.~~]

(3) The Department or Commission may reduce any penalty based on the Respondent's inability to pay the full penalty amount. If the Respondent seeks to reduce the penalty, the Respondent has the responsibility of providing to the Department or Commission documentary evidence concerning Respondent's inability to pay the full penalty amount.

(a) When the Respondent is currently unable to pay the full amount, the first option should be to place the Respondent on a payment schedule with interest on the unpaid balance for any delayed payments. The Department or Commission may reduce the penalty only after determining that the Respondent is unable to meet a long-term payment schedule.

(b) In appropriate circumstances, the Department or Commission may impose a penalty that may result in a Respondent going out of business. Such circumstances may include situations where the violation is intentional or flagrant or situations where the Respondent's financial

condition poses a serious concern regarding its ability or incentive to remain in compliance.
(Statutory Authority: ORS CH 468)

WRITTEN NOTICE OF ASSESSMENT OF CIVIL PENALTY; WHEN PENALTY PAYABLE
340-12-046

(1) A civil penalty shall be due and payable [~~when the respondent is served a written notice of assessment of civil penalty signed by the Director. Service shall be in accordance with rule 340 11 097~~] ten (10) days after the order assessing the civil penalty becomes final and the civil penalty is thereby imposed by operation of law or on appeal. A person against whom a civil penalty is assessed shall be served with a notice in the form and manner provided in ORS 183.415 and OAR Chapter 340, Division 11.

(2) The written notice of assessment of civil penalty shall [~~substantially follow the form prescribed by rule 340 11 098 for a notice of opportunity for a hearing in a contested case,~~] comply with ORS 468.135(1) and ORS 183.090, relating to notice and contested case hearing applications, and shall state the amount of the penalty or penalties assessed.

[~~(3)~~] The rules prescribing procedure in contested case proceedings contained in OAR Chapter 340, Division 11 shall apply thereafter.
(Statutory Authority: ORS CH 468)

COMPROMISE OR SETTLEMENT OF CIVIL PENALTY BY DIRECTOR
340-12-047

(1) Any time [~~subsequent to~~] after service of the written notice of assessment of civil penalty, the Director may compromise or settle any unpaid civil penalty at any amount that the Director deems appropriate. Any compromise or settlement executed by the Director shall be final .

(2) In determining whether a penalty should be compromised or settled, the Director may take into account the following:

(a) New information obtained through further investigation or provided by [r] Respondent which relates to the penalty determination factors contained in OAR 340-12-045;

(b) The effect of compromise or settlement on deterrence;

(c) Whether [r] Respondent has or is willing to employ extraordinary means to correct the violation or maintain compliance;

(d) Whether [r] Respondent has had any previous penalties which have been compromised or settled;

(e) Whether the compromise or settlement would be consistent with the Department's goal of protecting the public health and environment;

(f) The relative strength or weakness of the Department's case[~~,~~].
(Statutory Authority: ORS CH 468)

STIPULATED PENALTIES
340-12-048

Nothing in OAR Chapter 340 Division 12 shall affect the ability of the Commission or Director to include stipulated penalties in a Stipulat[~~ed~~]ion and Final Order, Consent Order, Consent Decree or any other agreement issued under [~~ORS 466.570 or 466.577, or~~] ORS Chapters 183, 454, 459, 465, 466, 467, [~~or~~] 468, 468A, or 468B.
(Statutory Authority: ORS CH 454, 459, 465, 466, 467, [~~&~~] 468, 468A, & 468B)

[~~CIVIL PENALTY FOR VIOLATIONS NOT SUBJECT TO OAR 340-12-042 AND OAR 340-12-045~~]

ADDITIONAL CIVIL PENALTIES

340-12-049

In addition to any other penalty provided by law, the following violations are subject to the civil penalties specified below:

(1) Any person who wilfully o[~~f~~]r negligently causes an oil spill shall incur a civil penalty commensurate with the amount of damage incurred. The amount of the penalty shall be determined by the Director with the advice of the Director of Fish and Wildlife. In determining the amount of the penalty, the Director may consider the gravity of the violation, the previous record of the violator and such other considerations the Director deems appropriate.

(2) Any person planting contrary to the restriction of subsection (1) of ORS 468.465 pertaining to the open field burning of cereal grain acreage shall be assessed by the Department a civil penalty of $25 for each acre planted contrary to the restrictions.

(3) Whenever an underground storage tank fee is due and owing under ORS 466.785 or 466.795, the Director may issue a civil penalty not less twenty-five dollars ($25) nor more than one hundred dollars ($100) for each day the fee is due and owing.

(4) Any owner or operator of a confined animal feeding operation who has not applied for or does not have a permit required by ORS [~~468.740~~] 468B.050 shall be assessed a civil penalty of $500.

(5) Any person who fails to pay an automobile emission fee when required by law or rule shall be assessed a civil penalty of $50.

[~~(5)~~] (6) Any person who has care, custody or control of a hazardous waste or a substance which would be a hazardous waste except for the fact that it is not discarded, useless or unwanted shall incur a civil penalty according to the schedule set forth in this section for the destruction, due to contamination of food or water supply by such waste or substance, of any of the wildlife referred to in this section that are property of the state.

(a) Each game mammal other than mountain sheep, mountain goat, elk or silver gray squirrel, $400.

(b) Each mountain sheep or mountain goat, $3,500.

(c) Each elk, $750.

(d) Each silver gray squirrel, $10.

(e) Each game bird other than wild turkey, $10.

(f) Each wild turkey, $50.

(g) Each game fish other than salmon or steelhead trout, $5.

(h) Each salmon or steelhead trout, $125.

(i) Each fur-bearing mammal other than bobcat or fisher, $50.

(j) Each bobcat or fisher, $350.

(k) Each specimen of any wildlife species whose survival is specified by the wildlife laws or the laws of the United States as threatened or endangered, $500.

(l) Each specimen of any wildlife species otherwise protected by the wildlife laws or the laws of the United, but not otherwise referred to in this section, $25[~~.~~];

(7) Any person who intentionally or recklessly violates any provision of ORS 164.785, 459.205 to 459.426, 459.705 to 459.790, ORS Chapters 465, 466, 467 or 468 or any rule or standard or order of the commission adopted or issued pursuant to ORS 459.205 to 459.426, 459.705 to 459.790, ORS Chapters 465, 466, 467 or 468, which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment shall incur a penalty up to $100,000. When determining the civil penalty sum to be assessed under this section, the Director shall apply the following procedures:

(a) Select one of the following base penalties after determining the cause of the violation:

(i) $50,000 if the violation was caused recklessly;

(ii) $75,000 if the violation was caused intentionally;

(iii) $100,000 if the violation was caused flagrantly;

(b) Then determine the civil penalty through application of the formula: BP + (.1 x BP) (P + H + O + C) + EB, in accord with the applicable subsections of OAR 340-12-045(1)(c).

(Statutory Authority: ORS CHS 466 & 468)

AIR QUALITY CLASSIFICATION OF VIOLATIONS

340-12-050

Violations pertaining to air quality shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order, or variance;

(b) ~~[Exceeding an allowable emission level such that an ambient air quality standard is exceeded.]~~

~~[(f)]~~ Constructing or operating a source without an Air Contaminant Discharge Permit;

(c) ~~[(g)]~~ Modifying a source with an Air Contaminant Discharge Permit without first notifying and receiving approval from the Department;

(d) ~~[(h)]~~ Violation of a compliance schedule in a permit;

(e) [~~(c)~~] Exceeding an allowable emission level of a hazardous air pollutant.

(f) Exceeding an emission or opacity permit limitation for a criteria pollutant, by a factor of greater than or equal to two times the limitation, within 10 kilometers of either a Non-Attainment Area or a Class I Area for that criteria pollutant;

(g) ~~[(d)]~~ Causing emissions that are a hazard to public safety;

(h) [~~(e)~~R] Failure to comply with Emergency Action Plans or allowing excessive emissions during emergency episodes;

(i) Violation of a work practice requirement for asbestos abatement projects which [~~results in or creates the likelihood~~] causes a potential for public exposure to asbestos or release of asbestos into the environment;

(j) Storage or accumulation of friable asbestos material or asbestos-containing waste material from an asbestos abatement project which [~~results in or creates the likelihood~~] causes a potential for public exposure to asbestos or release of asbestos into the environment;

(k) Visible emissions of asbestos during an asbestos abatement project or during collection, processing, packaging, transportation, or disposal of asbestos-containing waste material;

(l) Conduct of an asbestos abatement project by a person not licensed as an asbestos abatement contractor;

(m) Violation of a disposal requirement for asbestos-containing waste material which [~~results in or creates the likelihood of~~] causes a potential for public exposure to asbestos or release of asbestos into the environment;

(n) Advertising to sell, offering to sell or selling a[~~n un~~] non-certified wood stove;

(o) Illegal open burning[~~, including stack burning, which poses a major risk of harm to public health or the environment~~] in violation of OAR 340-23-042(2);

[~~(q)~~] (p) Cause[~~s~~]ing or allow[s]ing open field burning without first obtaining a valid open field burning permit;

[~~(r)~~] (q) Cause[~~s~~]ing or allow[~~s~~]ing open field burning or stack burning where prohibited by OAR 340-26-010(7) or OAR 340-26-055(1)(e);

[~~(s)~~] (r) Cause[~~s~~]ing or allow[~~s~~]ing [~~to be maintained~~] any propane flaming which results in visibility impairment on any Interstate Highway or Roadway specified in OAR 837-110-080(1) and (2);

[~~(t)~~] (s) Fail[~~s~~]ing to immediately and actively extinguish all flames and smoke sources when any propane flaming results in visibility impairment on any Interstate Highway or Roadway specified in OAR 837-110-080(1) and (2);

[~~(u)~~] (t) Causing or allowing propane flaming of grass seed or cereal grain crops, stubble, or residue without first obtaining a valid propane flaming burning permit;

[~~(v)~~] (u) Stack or pile burning grass seed or cereal grain crop residue without first obtaining a valid stack or pile burning permit;

[~~(w)~~] (v) Open field burning or propane flaming when State Fire Marshal restrictions are in effect;

(w) Failure to install vapor recovery piping in accordance with standards set forth in OAR Chapter 340, Division 150;

(x) Installing vapor recovery piping without first obtaining a service provider license in accordance with requirements set forth in OAR Chapter 340, Division 160;

(y) Submitting falsified actual or calculated interim emission fee data;

(z) Failure to provide access to premises or records when required by law, rule, permit or order;

(aa) Any [~~other~~] violation related to air quality which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) [~~Allowing discharges of a magnitude that, though not actually likely to cause an ambient air violation, may have endangered citizens;~~

~~(b) Exceeding emission limitations in permits or rules;~~

~~(c) Exceeding opacity limitations in permits or rules;~~]

Exceeding emission or opacity limitations in permits or rules;

(b) [~~(d)~~] Violating standards in permits or rules for fugitive emissions, particulate deposition, or odors [~~in permits or rules~~];

(c) [~~(e)~~] Illegal open burning [~~, including stack burning, which poses a moderate risk of harm to public health or the environment~~] of commercial, construction and/or demolition, and/or agricultural waste;

(d) [~~(f)~~] Fail[~~ure~~]ing to report excess emissions due to upset or breakdown of air pollution control equipment[~~, or an emission limit violation~~];

[~~(g) Violation of a work practice requirement for asbestos abatement projects which are not likely to result in a potential for public exposure to asbestos or release of asbestos into the environment;~~

~~(h) Improper storage or accumulation of friable asbestos material or asbestos containing waste material from an asbestos abatement project which is not likely to result in a potential for public exposure to asbestos or release of asbestos into the environment;~~

~~(i) Violation of a disposal requirement for asbestos containing waste material which is not likely to result in a potential for public exposure to asbestos or release of asbestos to the environment;~~]

(e) Failure to comply with asbestos abatement licensing, certification, or accreditation requirements;

[~~(j) Conduct of an asbestos abatement project by a contractor not licensed as an asbestos abatement contractor;~~]

(f) [~~(k)~~] Failure to provide notification of an asbestos abatement project;

(g) [~~(l)~~] Failure to display permanent labels on a certified woodstove;

(h) [~~(m)~~] Alteration of a permanent label for a certified woodstove [~~permanent label~~];

(i) [~~(n)~~] Failure to use Department-approved vapor control equipment when transferring fuel;

(j) Operating a vapor recovery system without first obtaining a piping test performed by a licensed service provider as required by OAR Chapter 340, Division 160;

(k) Failure to obtain Department approval prior to installing a Stage II vapor recovery system not already registered with the Department as specified in Department rules;

[~~(o) Failure to file a Notice of Construction or permit application;~~]

[~~(p) Failure to submit a report or plan as required by permit;~~]

[~~(q)~~] (l) Failure to actively extinguish all flames and major smoke sources from open field or stack burning when prohibition conditions are imposed by the Department or when instructed to do so by an agent or employe of the Department;

[~~(r)~~](m) Causing or allowing a propane flaming operation to be conducted in a manner which causes or allows an open flame to be sustained;

[~~*(s)~~] (n) Installing, servicing, repairing, disposing of or otherwise treating automobile air conditioners without recovering and recycling chlorofluorocarbons using approved recovery and recycling equipment;

[~~*(t)~~] (o) Selling, or offering to sell, or giving as a sales inducement any aerosol spray product which contains as a propellant any compound prohibited under ORS [~~468.605~~]468A.655;

[~~*(u)~~] (p) Selling any chlorofluorocarbon or halon containing product prohibited under ORS [~~468.616~~]468A.635;

(q) Failure to pay an interim emission fee;

(r) Substantial underpayment of an interim emission fee;

(s) Submitting inaccurate actual or calculated interim emission fee data;

[~~(v)~~] (t) Any [~~other~~] violation related to air quality which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

(3) Class Three:

(a) Illegal residential open burning [~~, including stack burning, which poses a minor risk of harm to public health or the environment~~];

(b) Improper notification of an asbestos abatement project;

[~~(c) Failure to comply with asbestos abatement certification, licensing, certification, or accreditation requirements not elsewhere classified;~~]

[~~(d)~~](c) Failure to display a temporary label on a certified wood stove;

[~~(e) Violation of any other requirement of OAR Chapter 340, Division 26 pertaining to open field burning and propane flaming operations which is not otherwise classified;~~]

[~~(f) Any other violation related to air quality which poses a minor risk of harm to public health or the environment.~~]

(Statutory Authority: ORS CH 468A)

[~~(* effective August 15, 1990)~~]

NOISE CONTROL CLASSIFICATION OF VIOLATIONS

340-12-052

Violations pertaining to noise control shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department order or variance;

(b) Violations that exceed noise standards by ten (10) decibels or more;

(c) Exceeding the ambient degradation rule by five (5) decibels or more; or

(d) Failure to submit a compliance schedule required by OAR 340-35-035(2);

(e) Operating a motor sports vehicle without a properly installed or well-maintained muffler or exceeding the noise standards set forth in OAR 340-35-040(2);

(f) Operating a new permanent motor sports facility without submitting and receiving approval of projected noise impact boundaries;

(g) Failure to provide access to premises or records when required by law, rule, or order;

(h) Violation of motor racing curfews set forth in OAR 340-35-040(6);

(i) Any [~~other~~] violation related to noise control which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violations that exceed noise standards by three (3) decibels or more;

(b) Advertising or offering to sell or selling an uncertified racing vehicle without displaying the required notice or obtaining a notarized affidavit of sale;

(c) Any [~~other~~] violation related to noise control which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

(3) [~~Class Three:~~]

[~~(a)~~] Violations that exceed noise standards by one (1) or two (2) decibels are Class III violations;

[~~(b) Any other violation of related to noise control which poses a minor risk of harm to public health or the environment.~~]

(Statutory Authority: ORS CH 467 & 468)

WATER QUALITY CLASSIFICATION OF VIOLATIONS

340-12-055

Violations pertaining to water quality shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) [~~Intentional unauthorized discharges;~~]

[~~(c) Negligent spills which pose a major risk of harm to public health or the environment;~~]

(c) Any discharge of waste that enters waters of the state, either without a waste discharge permit or from a discharge point not authorized by a waste discharge permit;

(d) [~~Waste discharge permit limitation violations which pose a major risk of harm to public health or the environment;~~]

[~~(e) Discharge of waste to surface waters without first obtaining a National Pollutant Discharge Elimination System Permit;~~]

[~~(f)~~] Failure to comply with statute, rule, or permit requirements regarding notification of a spill or upset condition which results in a non-permitted [~~immediately notify of spill or upset condition which results in an unpermitted~~] discharge to public waters;

(e) [~~(g)~~] Violation of a permit compliance schedule;

(f) [~~(h)~~] Any violation of any pretreatment standard or requirement by a user of a municipal treatment works which either impairs or damages the treatment works, or causes a major harm or poses a major risk of harm to public health or the environment;

(g) Failure to provide access to premises or records when required by law, rule, permit or order;

(h) Failure of any ship carrying oil to have financial assurance as required in ORS [~~468.780 to 468.815~~] 468B.300 to 468B.335 or rules adopted thereunder;

(i) Any [~~other~~] violation related to water quality which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) [~~Waste discharge permit limitation violations which pose a moderate risk of harm to public health or the environment;~~]

[~~(b)~~] Operation of a disposal system without first obtaining a Water Pollution Control Facility Permit;

[~~(c) Negligent spills which pose a moderate risk of harm to public health or the environment;~~]

(b) [~~(d)~~] Failure to submit a report or plan as required by rule permit, or license;

(c) Any violation of OAR Chapter 340, Division 49 regulations pertaining to certification of wastewater system operator personnel;

(d) Placing wastes such that the wastes are likely to enter public waters by any means;

(e) Failure by any ship carrying oil to keep documentation of financial assurance on board or on file with the Department as required by ORS [~~468.780 to 468.815~~] 468B.300 to 468B.335 or rules adopted thereunder;

(f) [~~(e)~~] Any [~~other~~] violation related to water quality which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

(3) Class Three:

(a) Failure to submit a discharge monitoring report [(DMR)] on time;

(b) Failure to submit a complete[~~d DMR~~] discharge monitoring report;

(c) [~~Negligent spills which pose a minor risk of harm to public health or the environment;~~]

[~~(d) Violation of~~] Exceeding a waste discharge permit biochemical oxygen demand (BOD), carbonaceous biochemical oxygen demand (CBOD), or total suspended solids (TSS) limitation [~~which poses a minor risk of harm to public health or the environment~~] by a concentration of 20 per cent or less, or exceeding a mass loading limitation by 10 per cent or less;

(d) Violation of a removal efficiency requirement by a factor of less than or equal to 0.2 times the number value of the difference between 100 and the applicable removal efficiency requirement (e.g., if the requirement is 65% removal, 0.2(100-65) = 0.2(35) = 7%; then 7% would the maximum percentage that would qualify under this rule for a permit with a 65% removal efficiency requirement);

(e) Violation of a pH requirement by less than 0.5 pH;

[~~Any other violation related to water quality which poses a minor risk of harm to public health or the environment.~~]

(Statutory Authority: ORS CH 468B)

ON-SITE SEWAGE DISPOSAL CLASSIFICATION OF VIOLATIONS

340-12-060

Violations pertaining to On-Site Sewage Disposal shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department order;

(b) Performing, advertising or representing one's self as being in the business of performing sewage disposal services without first obtaining and maintaining a current sewage disposal service license from the Department[~~, except as otherwise provided by statute or rule~~];

(c) Installing or causing to be installed an on-site sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit [~~from the Agent~~];

(d) Disposing of septic tank, holding tank, chemical toilet, privy or other treatment facility contents in a manner or location not authorized by the Department;

(e) Failure to provide access to premises or records when required by law, rule, permit or order;

(f) Any [~~other~~] violations related to on-site sewage disposal which cause major harm or pose[~~s~~] a major risk of harm to public health, welfare, safety or the environment.

(2) Class Two:

(a) Installing or causing to be installed an on-site sewage disposal system, or any part thereof, or the repairing of any part thereof, which fails to meet the requirements for satisfactory completion within thirty (30) days after written notification or posting of a Correction Notice at the site;

(b) Operating or using a nonwater-carried waste disposal facility without first obtaining a letter of authorization from the Agent [~~therefore~~];

(c) Operating or using a newly constructed, altered or repaired on-site sewage disposal system, or part thereof, without first obtaining a Certificate of Satisfactory Completion [~~from the Agent, except as provided by statute or rule~~];

(d) [~~As a licensed sewage disposal service worker, p~~]Provid[~~es~~]ing any sewage disposal service in violation of [~~the~~] any statute, rule, [~~s~~] license, or permit, provided that the violation is not otherwise classified in these rules [~~of the Commission~~];

(e) Failing to obtain an authorization notice from the [~~a~~]Agent prior to affecting change to a dwelling or commercial facility that results in the potential increase in the projected peak sewage flow from the dwelling or commercial facility in excess of the sewage disposal system's peak design flow.

(f) Installing or causing to be installed a nonwater-carried waste disposal facility without first obtaining written approval from the Agent [~~therefor~~];

(g) Failing to connect all plumbing fixtures [~~from which sewage is or may be discharged to~~] to, or failing to discharge waste water or sewage into, a Department approved system;

(h) Operating or using an on-site sewage disposal system which is failing by discharging sewage or effluent onto the ground surface or into surface public water;

(i) Any [~~other~~] violation related to on-site sewage disposal which [~~poses a moderate risk of harm to public health, welfare, safety or the environment~~] is not otherwise classified in these rules.

(3) [~~Class Three:~~]

[~~(a) In situations~~] Violations where the sewage disposal system design flow is not exceeded, placing an existing system into service, or changing the dwelling or type of commercial facility, without first obtaining an authorization notice [~~from the agent~~] are Class III violations. [~~, except as otherwise provided by rule or statute;~~]

[~~(b) Any other violation related to on-site sewage disposal which poses a minor risk of harm to public health, welfare, safety or the environment.~~]

(Statutory Authority: ORS CH 454 & 468B)

SOLID WASTE MANAGEMENT CLASSIFICATION OF VIOLATIONS
340-12-065
Violations pertaining to the management, recovery and disposal of solid waste shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Establishing, expanding, maintaining or operating a disposal site without first obtaining a permit;

(c) Accepting solid waste for disposal in a permitted solid waste unit or facility that has been expanded in area or capacity without first submitting plans to the Department and obtaining Department approval;

(d) [~~(c)~~] Violation of the freeboard limit [~~or~~] which results in the actual overflow of a sewage sludge or leachate lagoon;

(e) [~~(d)~~] Violation of the landfill methane gas concentration standards;

(f) Violation of any federal or state drinking water standard in an aquifer beyond the solid waste boundary of the landfill, or an alternative boundary specified by the Department;

(g) Violation of a permit-specific groundwater concentration limit, as defined in OAR 340-40-030(3) at the permit-specific groundwater concentration compliance point, as defined in OAR 340-40-030(2)(e);

(h) Failure to perform the groundwater monitoring action requirements specified in OAR 340-40-030 (5), when a significant increase (for pH, increase or decrease) in the value of a groundwater monitoring parameter is detected.

(i) [~~(e)~~] Impairment of the beneficial uses(s) of an aquifer beyond the solid waste boundary or an alternative boundary specified by the Department;

(j) [~~(f)~~] Deviation from the approved facility plans which results in an [~~potential or~~] actual safety hazard, public health hazard or damage to the environment;

(k) [~~(g)~~] Failure to properly construct and maintain groundwater, surface water, gas or leachate collection, treatment, disposal and monitoring [~~control~~] facilities in accordance with the facility permit, the facility environmental monitoring plan, or Department rules;

(l) Failure to collect, analyze and report groundwater, surface water or leachate quality data in accordance with the facility permit, the facility environmental monitoring plan, or Department rules;

[~~(h) Failure to comply with the requirements for immediate and final cover;~~]

(m) [~~(i)~~] Violation of a compliance schedule contained in a solid waste disposal or closure permit;

(n) [~~(j)~~] Failure to provide access to premises or records when required by law, rule, permit or order;

(o) Knowingly disposing, or accepting for disposal, used oil, in single quantities exceeding 50 gallons, or lead acid batteries;

(p) Accepting, handling, treating or disposing of clean-up materials contaminated by hazardous substances by a landfill in violation of the facility permit and plans as approved by the Department or the provisions of OAR 340-61-060.

(q) Accepting for disposal infectious waste not treated in accordance with laws and Department rules;

(r) Accepting for treatment, storage or disposal wastes defined as hazardous under ORS 466.005, et seq, or wastes from another state which are hazardous under the laws of that state without specific approval from the Department;

(s) Mixing for disposal or disposing of principal recyclable material that has been properly prepared and source separated for recycling;

(t) [~~(1)~~] Any [~~other~~] violation related to the management, recovery and disposal of solid waste which causes major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

[~~(a) Failure to comply with the required cover schedule;~~

~~(b) Failure to comply with working face size limits;~~

~~(c) Failure to adequately control access;~~

~~(d) Failure to adequately control surface water drainage;~~

~~(e) Failure to adequately protect and maintain monitoring wells;~~

~~(f) Failure to properly collect and analyze required water or gas samples;~~

~~(g) Violation of a condition or term of a Letter of Authorization;~~

~~(h) Any other violation related to the management and disposal of solid waste which poses a moderate risk of harm to public health or the environment.~~]

(a) [~~(g)~~] Violation of a condition or term of a Letter of Authorization;

(b) Knowingly accepting for disposal or disposing of a material banned from land disposal under ORS 459.247, except those materials specified as Class I violations.

(c) Failure of a permitted landfill, solid waste incinerator or a municipal solid waste compost facility operator or a metropolitan service district to report amount of solid waste disposed in accordance with the laws and rules of the Department;

(d) Failure to report weight and type of material recovered or processed from the solid waste stream in accordance with the laws and rules of the Department;

(e) Failure of a disposal site to obtain certification for recycling programs in accordance with the laws and rules of the Department prior to accepting solid waste for disposal;

(f) Acceptance of solid waste by a permitted disposal site from a person that does not have an approved solid waste reduction program in accordance with the laws and rules of the Department;

(g) Failure to comply with any solid waste permit requirement pertaining to permanent household hazardous waste collection facility operations;

(h) Failure to comply with landfill cover requirements, including but not limited to daily, intermediate, and final covers, and limitation of working face size;

(i) Failure to comply with site development and operational plans as approved by the Department;

(j) Failure to submit a permit renewal application prior to the expiration date of the existing permit in accordance with the laws and rules of the Department;

(k) Any violation of a solid waste permit not otherwise classified in these rules.

(3) Class Three:

[~~(a) Failure to submit self monitoring reports in a timely manner;~~

~~(b) Failure to submit a permit renewal application in a timely manner;~~

~~(c) Failure to submit required permit fees in a timely manner;~~]

(a) [~~(d)~~] Failure to post required [or adequate] signs;

(b) [~~(e)~~] Failure to [adequately] control litter;

[~~(g) Any other violation related to the management, recovery, and disposal of solid waste which poses a minor risk of harm to public health or the environment.~~]

(Statutory Authority: ORS CH 459)

SOLID WASTE TIRE MANAGEMENT CLASSIFICATION OF VIOLATIONS
340-12-066
Violations pertaining to the storage, transportation and management of waste tires or tire-derived products shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Disposing of waste tires or tire-derived products at an unauthorized site;

(c) Violation of the compliance schedule or fire safety requirements of a waste tire storage site permit;

(d) Hauling waste tires or advertising or representing one's self as being in the business of a waste tire carrier without first obtaining a waste tire carrier permit as required by laws and rules of the Department;

(e) Hiring or otherwise using an unpermitted waste tire carrier to transport waste tires;

(f) Failure to provide access to premises or records when required by law, rule, permit or order;

(g) Any [~~other~~] violation related to the storage, transportation or management of waste tires or tire-derived products which causes major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violation of a waste tire storage site or waste tire carrier permit other than a specified Class One or Class Three violation;

(b) Establishing, expanding, or operating a waste tire storage site without first obtaining a permit;

(c) Any [~~other~~] violation related to the storage, transportation or management of waste tires or tire-derived products which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

(3) Class Three:

(a) Failure to submit required annual reports in a timely manner;

(b) Failure to keep required records on use of vehicles;

(c) Failure to post required signs;

(d) Failure to submit a permit renewal application in a timely manner;

(e) Failure to submit permit fees in a timely manner;

(f) Failure to maintain written records of waste tire disposal and generation;

[~~(g) Any other violation related to the storage, transportation or management of waste tires which poses a minor risk of harm to public health or the environment.~~]

(Statutory authority: ORS CH 459)

UNDERGROUND STORAGE TANK CLASSIFICATION OF VIOLATIONS
340-12-067

Violations pertaining to Underground Storage Tanks and cleanup of petroleum contaminated soil at heating oil tanks shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Failure to [~~promptly~~] report a release from an underground storage tank [~~which poses a major risk of harm to public health or the environment~~]or a heating oil tank as required by statute, rule or permit;

(c) Failure to initiate and complete the investigation or cleanup of a release from an underground storage tank or a heating oil tank [~~which poses a major risk of harm to public health or the environment~~];

(d) Failure to prevent a release [~~which poses a major risk of harm to public health or the environment~~] from an underground storage tank;

(e) ~~[(i)]~~ Failure to submit required reports from the investigation or cleanup of a release ~~[which poses a major risk of harm to public health or the environment]~~ from an underground storage tank or heating oil tank;

(f) ~~[(j)]~~ Failure to provide access to premises or records when required by law, rule, permit or order;

(g) ~~[(e)]~~ Placement of a regulated material into an unpermitted underground storage tank;

(h) ~~[(f)]~~ Installation of an underground storage tank in violation of the standards or procedures adopted by the Department;

~~[(g) Providing installation, retrofitting, decommissioning or testing services on an underground storage tank without first registering or obtaining an underground storage tank service providers license;]~~

~~[(h) Providing supervision of the installation, retrofitting, decommissioning or testing of an underground storage tank without first obtaining an underground storage tank supervisors license;]~~

(i) Failure to initiate and complete free product removal in accordance with OAR 340-122-235;

(j) Failure to initiate and complete the investigation or cleanup of a release from a heating oil tank;

(k) Providing installation, retrofitting, decommissioning, or testing services on an underground storage tank or providing cleanup of petroleum contaminated soil at an underground storage tank site without first registering or obtaining an underground storage tank service providers license;

(l) Supervising the installation, retrofitting, decommissioning, or testing of an underground storage tank or supervising cleanup of petroleum contaminated soil at an underground storage tank site without first obtaining an underground storage tank supervisors license;

~~[(k)]~~ (m) Any [~~other~~] violation[~~s~~] related to underground storage tanks or heating oil tanks or cleanup of petroleum contaminated soil at heating oil tanks which cause major harm or poses a major risk of harm to public health [~~and~~] or the environment.

(2) Class Two:

~~[(a) Failure to promptly report a release from an underground storage tank which poses a moderate risk of harm to public health or the environment;]~~

~~[(b) Failure to initiate investigation or cleanup of a release which poses a moderate risk of harm to public health or the environment;]~~

~~[(c) Failure to prevent a release which poses a moderate risk of harm to public health or the environment;]~~

~~[(d) Failure to submit required reports from the investigation or cleanup of a release which poses a moderate risk of harm to public health or the environment;]~~

(a) Failure to submit required reports from the investigation or cleanup of a release;

(c) ~~[(e)]~~ Failure to conduct required underground storage tank monitoring and testing activities;

(d) ~~[(f)]~~ Failure to conform to operational standards for underground storage tanks and leak detection systems;

(e) ~~[(g)]~~ Failure to obtain a permit prior to the installation or operation of an underground storage tank;

(f) ~~[h)]~~ Failure to properly decommission an underground storage tank;

(g) ~~[(i)]~~ Providing installation, retrofitting, decommissioning or testing services on an unregulated underground storage tank or providing cleanup of petroleum contaminated soil at a regulated underground storage tank that does not have a permit;

(h) [~~(j)~~] Failure by a seller or distributor to obtain the tank permit number [~~prior to~~] before depositing product into the underground storage tank or failure to maintain a record of the permit numbers;

(i) [~~(k)~~] Allowing the installation, retrofitting, decommissioning, or testing of an underground storage tank or cleanup of petroleum contaminated soil at an underground storage tank by any person not licensed by the department;

(j) Allowing cleanup of petroleum contaminated soil at a heating oil tank by any person not licensed by the Department;

(k) Providing petroleum contaminated soil cleanup services at a heating oil tank without first registering or obtaining a heating oil tank soil matrix cleanup service provider license;

(l) Supervising petroleum contaminated soil cleanup at a heating oil tank without first registering or obtaining a heating oil tank soil matrix cleanup supervisor license;

(m) Failure to submit a corrective action plan (CAP) in accordance with the schedule or format established by the Department pursuant to OAR 340-122-250.

(n) Failure by the tank owner to provide the permit number to persons depositing product into the underground storage tank;

(o) Failure to report a suspected release from an underground storage tank.

(p) [~~(l)~~] Any [~~other~~] violation related to underground storage tanks or heating oil tanks or cleanup of petroleum contaminated soil at a heating oil tank [~~with poses a moderate risk of harm to public health or the environment~~] that is not otherwise classified in these rules.

(3) Class Three:

[~~(a) Failure to promptly report a release from an underground storage tank which poses a minor risk of harm to public health or the environment;~~

~~(b) Failure to initiate investigation or cleanup of a release which poses a minor risk of harm to public health or the environment;~~

~~(c) Failure to prevent a release which poses a minor risk of harm to public health or the environment;~~

~~(d) Failure to submit required reports from the investigation or cleanup or a release which poses a minor risk of harm to public health or the environment;~~]

(a) [~~(e)~~] Failure to submit an application for a new permit when an underground storage tank is acquired by a new owner;

(b) [~~(f)~~] Failure of a tank seller or product distributor to notify a tank owner or operator of the Department's permit requirements;

(c) [~~(g)~~] Decommissioning, installing, or retrofitting an underground storage tank or conducting a soil matrix cleanup without first providing [~~written~~] the required notifications to the Department;

(d) [~~(h)~~] Failure to provide information to the Department regarding the contents of an underground storage tank;

(e) [~~(i)~~] Failure to maintain adequate decommissioning records;

[~~(j) Failure by the tank owner to provide the permit number to persons depositing product into the underground storage tank;~~]

[~~(k) Any other violation related to underground storage tanks which poses a minor risk of harm to public health and the environment.~~]

HAZARDOUS WASTE MANAGEMENT AND DISPOSAL CLASSIFICATION OF VIOLATIONS
340-12-068
Violations pertaining to the management and disposal of hazardous waste shall be classified as follows:

(1) Class One:

(a) Violation of a Department or Commission order;

(b) Failure to carry out waste analysis for a waste stream or to properly apply "knowledge of process";

(c) Operating a [~~storage,~~] treatment, storage or disposal facility (TSD) without a permit or without meeting the requirements of OAR 340-105-010(2)(a);

(d) Failure to comply with the ninety (90) day storage limit by a fully regulated generator or the 180 day storage limit for a small quantity generator where there is a gross deviation from the requirement;

(e) Shipment of hazardous waste without a manifest;

(f) Systematic failure of a generator to comply with the manifest system requirements;

(g) Failure to satisfy manifest discrepancy reporting requirements;

(h) Failure to prevent the unknown entry or prevent the possibility of the unauthorized entry of persons or livestock into the waste management area of a TSD facility;

(i) Failure to properly handle ignitable, reactive, or incompatible wastes as required under 40 CFR Part 264 and 265.17(b)(1), (2), (3), (4) and (5);

(j) Illegal disposal of hazardous waste;

(k) Disposal of waste in violation of the land disposal restrictions;

(l) Mixing, solidifying, or otherwise diluting waste to circumvent land disposal restrictions;

(m) Incorrectly certifying a waste for disposal/treatment in violation of the land disposal restrictions;

(n) Failure to submit notifications/certifications as required by land disposal restrictions;

(o) Failure to comply with the tank integrity assessments and certification requirements;

(p) Failure of an owner/operator of a TSD facility to have closure and/or post closure plan and/or cost estimates;

(q) Failure of an owner/operator of a TSD facility to retain an independent registered professional engineer to oversee closure activities and certify conform[~~ance~~]ity with an approved closure plan;

(r) Failure to establish or maintain financial assurance for closure and/or post closure care;

(s) Systematic failure to conduct unit specific and general inspections as required or to correct hazardous conditions discovered during those inspections;

(t) Failure to follow emergency procedures contained in response plan when failure could result in serious harm;

(u) Storage of hazardous waste in containers which are leaking or present a threat of release;

(v) Systematic failure to follow container labeling requirements or lack of knowledge of container contents;

(w) Failure to label hazardous waste containers where such failure could cause an inappropriate response to a spill or leak and substantial harm to public health or the environment;

(x) Failure to date containers with accumulation date;

(y) Failure to comply with the export requirements;

(z) Violation of [~~a Final Status Hazardous Waste Management~~

~~Permit~~] any TSD facility permit, provided that the violation is equivalent to any Class I violation set forth in these rules;

(aa) Systematic failure to comply with OAR 340-102-041, generator [quarterly] annual reporting requirements and OAR 340-102-012, annual registration information;

(bb) Systematic failure to comply with OAR 340-104-075, Treatment, Storage, Disposal and Recycling facility [~~periodic~~] annual reporting requirements and OAR 340-102-012, annual registration information;

(cc) Construct or operate a new treatment, storage or disposal facility without first obtaining a permit;

(dd) Installation of inadequate groundwater monitoring wells such that detection of hazardous waste or hazardous constituents that migrate from the waste management area cannot be immediately be detected;

(ee) Failure to install any groundwater monitoring wells;

(ff) Failure to develop and follow a groundwater sampling and analysis plan using proper techniques and procedures;

(gg) Failure to provide access to premises or records when required by law, rule, permit or order;

(hh) Any [~~other~~] violation related to the generation, management and disposal of hazardous waste which causes major harm or poses a major risk of harm to public health or the environment.

(2) Any [~~other~~] violation pertaining to the generation, management and disposal of hazardous waste which is [~~either not specifically listed as, or otherwise meets the criteria for, a Class One violation~~] not otherwise classified in these rules is [~~considered~~] a Class Two violation.

(Statutory Authority: ORS CH 466)

OIL AND HAZARDOUS MATERIAL SPILL AND RELEASE CLASSIFICATION OF VIOLATIONS

340-12-069

Violations pertaining to spills or releases of oil or hazardous materials shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Failure to provide access to premises or records when required by law, rule, permit or order;

(c) Failure by any person having ownership or control over oil or hazardous materials to immediately cleanup spills or releases or threatened spills or releases;

(d) Failure by any person having ownership or control over oil or hazardous materials to immediately report all spills or releases or threatened spills or releases in amounts equal to or greater than the reportable quantity;

(e) Any [~~other~~] violation related to the spill or release of oil or hazardous materials which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Any [~~other~~] violation related to the spill or release of oil or hazardous materials which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules is a Class Two violation .

[~~(3) Any other violation related to the spill or release of oil or hazardous materials which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS CH 466)

PCB CLASSIFICATION OF VIOLATIONS
340-12-071
Violations pertaining to the management and disposal of polychlorinated biphenyls (PCB) shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Treating or disposing of PCBs anywhere other than at a permitted PCB disposal facility:

(c) Establishing, constructing or operating a PCB disposal facility without first obtaining a permit;

(d) Failure to provide access to premises or records when required to by law, rule, permit or order;

(e) Any [other] violation related to the management and disposal of PCBs which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violating a condition of a PCB disposal facility permit;

(b) Any [~~other~~] violation related to the management and disposal of PCBs which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

[~~(3) Any other violation related to the management and disposal of PCBs which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS Chapter 466)

[*]USED OIL MANAGEMENT CLASSIFICATION OF VIOLATIONS
340-12-072
Violations pertaining to the management of used oil shall be classified as follows:

(1) Class One:

(a) Using untested used oil as a dust suppressant or pesticide, or otherwise spreading untested used oil directly in the environment, if the quantity of oil spread exceeds 50 gallons per event;

(b) Spreading used oil contaminated with hazardous waste or failing to meet the limits for materials set in OAR 340-111-030;

(c) Any [~~other~~] violation related to the management of used oil which causes major harm or poses a major risk of harm to public health or the environment.

(d) Failure to provide access to premises or records when required to do so by law, rule, permit or order.

(2) Class Two:

(a) Failure to notify the Department of activities relating to spreading used oil;

(b) Any [~~other~~] violation related to the management of used oil which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

[~~(3) Any other violation related to the use of used oil which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS CHS. 466 & 468)
[~~(* effective August 15, 1990)~~]

ENVIRONMENTAL CLEANUP CLASSIFICATION OF VIOLATIONS
340-12-073
Violations of ORS [~~466.540~~] 465.200 through 465.420 [~~466.590~~] and related rules or orders pertaining to environmental cleanup shall be classified as follow:

(1) Class One:

(a) Violation of a Commission or Department order;

(b) Failure to provide access to premises or records when required to do so by law, rule, permit or order;

(c) Any [~~other~~] violation related to environmental investigation or cleanup which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Failure to provide information under ORS [~~466.565(1)~~] 465.250;

(b) Any [~~other~~] violation related to environmental investigation or cleanup which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

[~~(3) Any [other] violation related to environmental cleanup or investigation which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS Chapter 466)

SELECTED MAGNITUDE CATEGORIES
340-12-080

(1) Magnitudes for select violations pertaining to Air Quality may be determined as follows:

(a) Opacity limitation violations:

(i) Major - Opacity measurements or readings of more than 25 percent opacity over the applicable limitation;

(ii) Moderate - Opacity measurements or readings from greater than 10 percent to 25 percent or less opacity over the applicable limitation.

(iii) Minor - Opacity measurements or readings of 10 percent or less opacity over the applicable limitation;

(b) Steaming rates and fuel usage limitations:

(i) Major - Greater than 1.3 times any applicable limitation;

(ii) Moderate - From 1.1 up to and including 1.3 times any applicable limitation;

(iii) Minor - Less than 1.1 times any applicable limitation.

(c) Air Contaminant Discharge Permit emission limitation violations for selected air pollutants:

(i) Magnitude determination shall be made based upon the following Table:

Pollutant	Amount	
Carbon Monoxide	100 tons	
Nitrogen Oxides	40 tons	
Particulate Matter	25 tons	See note
(A) TSP	25 tons	
(B) PM 10	15 tons	
Sulfur Dioxide	40 tons	
Volatile Organic Compounds	40 tons	See note
Lead	1200 lbs.	
Mercury	200 lbs.	
Beryllium	0.8 lbs.	
Asbestos	14 lbs.	
Vinyl Chloride	1 ton	
Fluorides	3 tons	
Sulfuric Acid Mist	7 tons	
Hydrogen Sulfide	10 tons	
Total Reduced Sulfur (including hydrogen sulfide)	10 tons	
Reduced Sulfur Compounds (including hydrogen sulfide)	10 tons	

NOTE: For the nonattainment portions of the Medford-Ashland Air Quality Maintenance Area, and the Klamath Falls Urban Growth Area, the numbers to be used for Particulate Matter (both TSP and PM 10) shall be 5 tons, and for Volatile Organic Compounds shall be 20 tons.

(ii) Major:

(A) Exceeding the annual permitted amount by more than the above amount;

(B) Exceeding the monthly permitted amount by more than 10 percent of the above amount;

(C) Exceeding the daily permitted amount by more than 0.5 percent of the above amount;

(D) Exceeding the hourly permitted amount by more than 0.1 percent of the above amount.

(iii) Moderate:

(A) Exceeding the annual permitted amount by an amount from 50 up to and including 100 percent of the above amount;

(B) Exceeding the monthly permitted amount by an amount from 5 up to and including 10 percent of the above amount;

(C) Exceeding the daily permitted amount by an amount from 0.25 up to and including 0.50 percent of the above amount;

(D) Exceeding the hourly permitted amount by an amount from 0.05 up to and including 0.10 percent of the above amount.

(iv) Minor:

(A) Exceeding the annual permitted amount by an amount less than 50 percent of the above amount;

(B) Exceeding the monthly permitted amount by an amount less than 5 percent of the above amount;

(C) Exceeding the daily permitted amount by an amount less than 0.25 percent of the above amount;

(D) Exceeding the hourly permitted amount by an amount less than 0.05 percent of the above amount.

(d) Asbestos violations:

(i) Major - More than 260 lineal feet or more than 160 square feet or more than 35 cubic feet of asbestos-containing material;

(ii) Moderate - From 40 lineal feet up to and including 260 lineal feet or from 80 square feet up to and including 160 square feet or from 17 cubic feet up to and including 35 cubic feet of asbestos-containing material;

(iii) Minor - Less than 40 lineal feet or 80 square feet or less than 17 cubic feet of asbestos-containing material;

(iv) The magnitude of the asbestos violation may be increased by one level if the material was comprised of more than 5% asbestos.

(e) Asbestos air clearance violations:

(i) Major - More than .1 fibers per cubic centimeter;

(ii) Moderate - More than .05 fibers per cubic centimeter up to and including .1 fibers per cubic centimeter;

(iii) Minor - More than .01 fibers per cubic centimeter up to and including .05 fibers per cubic centimeter.

(f) Open burning violations:

(i) Major - Open burning of material constituting more than five cubic yards in volume;

(ii) Moderate - Open burning of material constituting from 1 up to and including 5 cubic yards in volume;

(iii) Minor - Open burning of material constituting less than one cubic yard in volume.

(iv) For the purposes of determining the magnitude of a violation only, five tires shall be deemed the equivalent in volume to one cubic yard.

(2) Magnitudes for select violations pertaining to Water Quality wastewater discharge limitations may be determined as follows:

(a) Major:

(i) Greater than 1.6 times any applicable maximum flow rate, concentration limitation, or any applicable mass limitation; or

(ii) Greater than 50 percent below any applicable minimum concentration limitation; or

(iii) Greater than 2 pH units above or below any applicable pH range; or

(iv) Greater than 10 percentage points below any applicable removal rate.

(b) Moderate:

(i) From 1.3 up to and including 1.6 times any applicable maximum flow rate, concentration limitation, or any applicable mass limitation; or

(ii) From 25 up to and including 50 percent below any applicable minimum concentration limitation; or

(iii) From 1 up to and including 2 pH units above or below any applicable pH range; or

(iv) From 5 up to and including 10 percentage points below any applicable removal rate.

(c) Minor:

(i) Less than 1.3 times any applicable maximum flow rate, concentration limitation or any applicable mass limitation; or

(ii) Less than 25 percent below any applicable minimum concentration limitation; or

(iii) Less than 1 pH unit above or below any applicable pH range; or

(iv) Less than 5 percentage points below any applicable removal rate.

(3) Magnitudes for select violations pertaining to Hazardous Waste may be determined as follows:

(a) Failure to make a hazardous waste determination:

(i) Major - Failure to make the determination on four or more waste streams;

(ii) Moderate - Failure to make the determination on two or three waste streams;

(iii) Minor - Failure to make the determination on one waste stream.

(iv) The magnitude of the violation may be increased by one level, if more than 1000 gallons of hazardous waste is involved in the violation.

(v) The magnitude of the violation may be decreased by one level, if less than 250 gallons of hazardous waste is involved in the violation.

(b) Operating a hazardous waste storage facility without a permit by failing to meet the 40 CFR 262.34 and OAR Chapter 340, Division 102 generator requirements:

(i) Major - Failure to comply with 5 or more requirements listed in (iv) below, or any mismanagement of hazardous waste when more than 2000 gallons of hazardous waste are on site;

(ii) Moderate - Failure to comply with 3 or 4 requirements listed in (iv) below, or any mismanagement of hazardous waste when from 500 up to and including 2000 gallons of hazardous waste are on site;

(iii) Minor - Failure to comply with 2 or fewer of the requirements listed in (iv) below, or any mismanagement of hazardous waste when less than 500 gallons of hazardous waste are on site.

(iv) Failure to comply with:

(A) 40 CFR 262.34(a)(2) (accumulation date).
(B) 40 CFR 262.34(a)(3) (marked as hazardous waste).
(C) 40 CFR 265.171 (container condition).
(D) 40 CFR 265.173 (container management).
(E) 40 CFR 265.191 (tank system integrity assessment).
(F) 40 CFR 265.196 (tank leak response).
(G) Exceeding the applicable storage time limits.
(I) Non-compliance with three or more 40 CFR 262.34 standards not listed above.

(c) Hazardous Waste disposal violations:

(i) Major - Disposal of more than 150 gallons of hazardous waste, or the disposal of more than 3 gallons of acutely hazardous waste, or the disposal of any amount of hazardous waste or acutely hazardous waste that has a substantial impact on the local environment into which it was placed;

(ii) Moderate - Disposal of 50 to 150 gallons of hazardous waste, or the disposal of 1 to 3 gallons of acutely hazardous waste;

(iii) Minor- Disposal of less than 50 gallons of hazardous waste, or the disposal of less than 1 gallon of acutely hazardous waste.

(Statutory Authority: ORS Chapter 468)

SCOPE OF APPLICABILITY
340-12-[~~080~~]090
Amendments to OAR 340-12-026 to 12-080 shall only apply to formal enforcement actions issued by the Department on or after the effective date of such amendments and not to any contested cases pending or formal enforcement actions issued prior to the effective date of such amendments. Any contested cases pending or formal enforcement actions issued prior to the effective date of any amendments shall be subject to OAR 340-12-026 to 340-12-[~~080~~]090 as prior to amendment. The list of violations classified in these rules is intended to be used only for the purposes of setting penalties for violations of law and for other rules set forth in OAR Chapter 340.

U:\RULES\OAR12DR.FNL

Attachment B
Agenda Item L
July 24, 1992
EQC Meeting

Attachment B

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend rules.

1. Legal Authority

This proposal amends Oregon Administrative Rules (OAR), Chapter 340, Division 11 and Division 12, under authority of Oregon Revised Statutes (ORS) 468.020, 468.996 and 459.995. ORS 468.020 requires the Environmental Quality Commission (EQC) to adopt such rules and standards as it considers necessary and proper in performing the functions vested by law in the EQC.

1991 Oregon Laws, Chapter 650, Section 2, now codified as ORS 468.996(1), requires the EQC to adopt by rule a schedule and the criteria for determining the amount of a civil penalty that may be imposed for an extreme violation.

1991 Oregon Laws; Chapter 650, Section 3(a) amended ORS 459.995(a), and increased the daily maximum civil penalty for solid waste and noise violations from $500 to $10,000.

1991 Oregon Laws, Chapter 385, Section 90(c), now codified in ORS 459.995(c), provides for a $500 daily maximum penalty for a city, county or metropolitan service district that fails to provide the opportunity to recycle as required under ORS 459.165.

2. Need for the Rules

ORS 468.996(1) provides for the imposition of a $100,000 civil penalty for reckless or intentional violations of any provision of ORS 164.785, 459.205 to 459.426, 459.705 to 459.790, ORS Chapters 465, 466 or 467, or 468, 468A and 468B; or any rule or standard or order of the EQC which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment. The EQC is required by this law to adopt by rule a schedule and the criteria for determining the amount of a civil penalty that may be imposed for such violations.

In addition, 1991 Oregon Laws, Chapter 650, Section 9, now codified as ORS 468.126, repealed the former advance notice requirement and provided for a modified advance notice of violation prior to civil penalty assessments for violations of air, water, or solid waste permits.

3. Principal Documents Relied On

- 1991 Oregon Laws, Chapter 650 (House Bill 184-C, Engrossed).
- Oregon Revised Statutes (ORS) Chapters 183, 468, 468A and 468B.
- Oregon Administrative Rules (OAR) Chapter 340, Division 12.

All documents referenced above are available for review at local county courthouses and the Department of Environmental Quality (DEQ), Regional Operations Division, Enforcement Section, 10th Floor, 811 SW 6th Avenue, Portland, Oregon, and all DEQ regional offices during normal business hours (8:00 a.m. to 5:00 p.m., Monday to Friday).

W:\RPT\GB114451.51 (4/92)

Attachment B2

DEQ LAND USE EVALUATION STATEMENT
FOR RULEMAKING

1. Explain the purpose of the proposed rules.

The purposes of these proposed rules include:

(a) implementation of $100,000 civil penalty authority under 1991 Oregon Laws, Chapter 650, Section 2 (now codified as ORS 468.996), for reckless or intentional violations that result in or create the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment;

(b) promulgation of amended rule implementing amended advance notice requirements of 1991 Oregon Laws, Chapter 650, Section 9 (now codified as ORS 468.126), which repealed the former advance notice statute and now requires a modified advance notice of violation prior to civil penalty assessments only for air, water, or solid waste permittees;

(c) revision of the current enforcement rules;

(d) revision of OAR 340-11-132(5) pertaining to contested case proceedings.

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_XX_

2a. If yes, identify existing program/rule/activity.

2b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? yes____no_____ (if no, explain).

2c. If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document 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 proposed rules are not considered actions or programs affecting land use because they are not specifically referenced in the statewide planning goals, nor are they reasonably expected to have significant effects on either:

(a) resources, objectives or areas identified in the statewide planning goals, or
(b) on present or future land uses identified in acknowledged comprehensive plans.

The criteria for this determination are contained in the DEQ SAC Program, approved by the Environmental Quality Commission on August 10, 1990, and certified by the Land Conservation and Development Commission on December 13, 1990. The criteria appear in Section III.2, at pp. 21-22 of the SAC Program document.

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.**

MSD	Robert L. Young	4-6-93
Division	Intergovernmental Coor.	Date

Attachment C
Agenda Item L
July 24, 1992
EQC Meeting

Attachment C

Attachment C

FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED ENFORCEMENT RULES

The proposed rules are amendments to the current enforcement rules which were last amended in 1990. The fiscal and economic impact statement prepared at that time generally still applies. The substantive changes in the proposed 1992 amendments have the following fiscal and economic impacts:

Costs

The proposed enforcement rules would have no significant adverse fiscal or economic effect on state agencies, local governmental bodies, or members of the public, including small businesses, unless the entity or the person is issued a Formal Enforcement Action (as defined in the rules) for a civil violation of state environmental laws or rules. Significant adverse fiscal and economic effects may result from the assessment and imposition of civil penalties or specific Department Orders in accordance with these proposed rules.

The significant adverse fiscal and economic effects to violators that may be expected from these proposed revisions to the current enforcement rules are as follows:

1. Implementation of $100,000 civil penalty authority under 1991 Oregon Laws, Chapter 650, Section 2 (now codified as ORS ORS 468.996), exposes violators to a $100,000 civil penalty liability for reckless or intentional violations that result in extreme harm to the environment. This is an increase over the $10,000 daily maximum that otherwise would have been applied under the existing rules;

2. Implementation of increased civil penalty authority under 1991 Oregon Laws, Chapter 650, Section 3(a) (amending ORS 459.995), from $500 daily maximum to $10,000 daily maximum for violations of laws, rules, permits, or orders pertaining to solid waste as provided by law;

3. Implementation of new $500 daily maximum civil penalty for a city, county, or metropolitan service district that fails to provide the opportunity to recycle as required under ORS 459.165, as set forth in 1991 Oregon Laws, Chapter 385, Section 90(c);

4. Increased civil penalty liability for on-site sewage violations by sewage disposal service providers. Existing law provides $10,000 daily maximum civil penalty authority for violations. Such violations are subject to $500 daily maximum

penalties under current rules. Violations by these persons or entities will be assessed civil penalties in accordance with existing law and subject violators to $10,000 daily maximum civil penalties. This proposed rule change will not apply to homeowners, only to violations by sewage disposal service providers.

5. Increased civil penalty liability for all other on-site sewage disposal violations. Existing law provides $10,000 daily maximum civil penalty authority for violations. Such violations are subject to $500 daily maximum penalties under current rules. Violations (other than those by sewage disposal service providers) will be assessed civil penalties in accordance with existing law and limited to a $2,500 daily maximum per violation, excluding any additional penalty for receipt of economic benefits from noncompliance;

6. As a sanction for those violators who receive an economic benefit ("EB") as a result of noncompliance with environmental laws, rules, etc., we propose to separate this concept from the other economic consideration ("economic and financial condition," also referred to as "inability to pay") by moving the economic benefit calculation to the end of the civil penalty formula. The dollar sum of the "EB" will be added to the civil penalty for a dollar total within the maximum daily limits set by law.

Benefits

The proposed rules provide some fiscal and economic benefits to all affected persons and entities, including small businesses by clarifying several procedural matters.

First, a violator's inability to pay a civil penalty as assessed will be considered by the Department after assessment and prior to imposition of the penalty at the request of the violator. The proposed rules provide the procedure and criteria for the violator to demonstrate to the Department an inability to pay. The proposed "inability to pay" rule sets out the Department or the Commission's options to progress from placing a violator on a payment schedule as a primary option, to reducing the penalty as a second option.

The rule also declares that the Department or Commission may impose a penalty that may force a company to go out of business in appropriate circumstances, including cases where the violator's financial condition poses a serious concern regarding the violator's ability or incentive to remain in compliance. This also may be considered an adverse fiscal and economic effect, depending on the perspective of the observer.

Second, the proposed rules clarify potential ambiguities and provide for a more efficient processing and enforcement of applicable cases by amending certain definitions, specifically classing most potential violations, creating the $2,500 matrix, eliminating case-by-case risk of harm determinations, and listing magnitude determinations for many programs. This will provide substantial resource savings in processing and follow-up enforcement by the Department and in responding to formal enforcement actions by respondents.

Impacts to Small Businesses

The proposed rules generally will have the same impacts to small businesses as all other persons and entities. Small businesses and individuals may derive more benefit from inability to pay considerations than large businesses.

Attachment D
Agenda Item L
July 24, 1992
EQC Meeting

Attachment D

Attachment B

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

PROPOSED AMENDMENTS TO THE DEPARTMENT'S RULES CONCERNING ENFORCEMENT AND CIVIL PENALTY ASSESSMENT PROCEDURES

Hearing Date: 5/18/92
Comments Due: 5/22/92

WHO IS AFFECTED:

Persons who violate Oregon's environmental statutes, rules, permits, or Department orders and who are thereby subject to civil enforcement actions by the Department or the Environmental Quality Commission.

WHAT IS PROPOSED:

DEQ proposes to amend Chapter 340, Divisions 12 and 11, dealing with civil enforcement procedures and penalty assessments and hearing officer's authority in contested cases.

WHAT ARE THE HIGHLIGHTS:

- Rules implementing new statutory authority for a $100,000 maximum civil penalty for intentional or reckless violations which result in or create the imminent likelihood for an extreme hazard to the public health or which cause extensive damage to the environment per ORS 468.996.
- Amendment of advance notice requirements in accordance with new statutory authority under ORS 468.126 pertaining to air, water, or solid waste permittees.
- Revisions which clarify terms and procedures and increase efficiency in enforcement procedures and in contested case proceedings.
- Clarification changes resulting in more violations being specifically classed, thereby reducing case-by-case assessments of "risk of harm".
- New rule listing specific magnitude determinations for selected program areas.
- New $2,500 matrix to be utilized for non-industrial open burning and non-licensee on-site sewage disposal violations.

(over)

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

11/1/86

FOR FURTHER INFORMATION:

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

- Persons who violate solid waste and noise laws and rules, and sewage disposal services who violate the on-site sewage disposal laws and rules, will be liable for a civil penalty of up to $10,000 per day of violation in comparison to the current rule limitation of $500 per day of violation.

- The base penalty for Class I violations (the most serious class of violation) under the $10,000 civil penalty matrix, is being increased from $5,000 to $6,000 for a major magnitude violation, $2,500 to $4,000 for a moderate magnitude violation, and $1,000 to $2,000 for a minor magnitude violation.

- New rules applicable to persons who obtain an economic benefit from noncompliance and to persons who may have some inability to pay civil penalties as assessed.

- Revision to Division 11 rule to clarify the Department's burden of proof at contested case hearings and the hearing officer's standard of review.

HOW TO COMMENT:

Copies of the proposed rule package may be obtained from the Regional Operations Division, Enforcement Section, DEQ, 811 SW Sixth Avenue, Portland, OR 97204-1390, or at any one of DEQ's Regional Offices.

Central Region:	2146 NE 4th Bend, OR 97701
Eastern Region:	700 SE Emigrant, #330 Pendleton, OR 97801
Southwest Region:	201 W Main Street, #2-D Medford, OR 97501
Willamette Valley:	750 Front Street NE, #120 Salem, OR 97310.

Oral and written comments will be accepted by a hearing officer at any one of the public hearings on Monday, May 18, 1992, beginning at 11:00 a.m. and continuing until all testimony is completed at the following places:

Pendleton: County Courthouse, Room 114
216 SE 4th Street
Pendleton, Oregon

(next page)

Portland:	DEQ Conference Room 3A 811 SW Sixth Avenue Portland, Oregon
Medford:	City Hall/City Council Chambers 411 W 8th Street Medford, Oregon
Eugene:	Harris Hall Lane County Courthouse 125 E. 8th Street Eugene, Oregon Entrance on 8th and Oak

Written comments should be sent to the attention of Michael Nixon at the address above. For further information, contact Michael Nixon at (503) 229-5217, or toll-free within Oregon, 1-800-452-4011, ext. 5217.

WHAT IS THE NEXT STEP:

After public hearing, DEQ will evaluate the comments, prepare a response to the comments, and make a recommendation to the Environmental Quality Commission in July 1992. The Commission may adopt the Amendments as proposed, adopt modified amendments as a result of the testimony received, or decline to adopt any amendments.

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Attachment E
Agenda Item L
July 24, 1992
EQC Meeting

Attachment E

1991

OREGON REVISED STATUTES

INCLUDING
All material affected by Acts of the 1990 special session of the Sixty-fifth Legislative Assembly on May 7, 1990; Acts of the 1991 regular session of the Sixty-sixth Legislative Assembly; and Acts approved by the electors at the General Election on November 6, 1990

Volume 8

Containing, with some exceptions, the statute laws of Oregon of a general, public and permanent nature in effect on September 29, 1991, the normal effective date of Acts passed by the regular session of the Sixty-sixth Legislative Assembly, which adjourned June 30, 1991

PUBLISHED PURSUANT TO ORS 171.275
by the
LEGISLATIVE COUNSEL COMMITTEE
of the
LEGISLATIVE ASSEMBLY
of the
STATE OF OREGON

Chapter 459

1991 EDITION

Solid Waste Control

SOLID WASTE MANAGEMENT

(General Provisions)

(State Administration)

(Local Administration)

(Regional Administration)

(Marion County Authority)

(Disposal Sites)

ESTABLISHMENT OF SOLID WASTE DISPOSAL SITE WITHIN CLACKAMAS, MULTNOMAH AND WASHINGTON COUNTIES

(Temporary provisions relating to the establishment of a disposal site within Clackamas, Multnomah and Washington Counties are compiled as a note following ORS 459.790)

PENALTIES

CROSS REFERENCES

Environmental Quality Commission, duties and powers, Ch. 468

Master plans and service facilities for solid waste disposal authorized for certain counties, 451.010

Metropolitan service district control over waste disposal site modification, 268.318

Radioactive waste, 469.530 to 469.559

Reuse and recycling, Ch. 459A

Sludge, use on agricultural, horticultural or silvicultural land, 468B.095

Vehicles used in refuse operations, maximum single axle weight, 818.030

459.205 to 459.426

Civil penalty for intentional or reckless violation, 468.996

459.388

Infectious waste, Public Utility Commission, authority over transport, 767.034

459.705 to 459.790

Civil penalty for intentional or reckless violation, 468.996

be expended to implement the solid waste reduction program submitted under section 8, chapter 679, Oregon Laws 1985. The metropolitan service district shall submit a statement of proposed adjustments and changes in expenditures under this subsection to the department for review. [1985 c.679 §9; 1989 c.763 §17]

Sec. 10. ORS 459.049 does not apply to a disposal site established under this Act other than for the purposes of ORS 215.213 (1)(i). [1985 c.679 §10]

459.810 [1971 c.745 §1; renumbered 459A.700 in 1991]

459.820 [1971 c.745 §2; renumbered 459A.705 in 1991]

459.830 [1971 c.745 §3; 1973 c.758 §1; renumbered 459A.710 in 1991]

459.840 [1971 c.745 §4; 1973 c.758 §2; 1981 c.513 §1; renumbered 459A.715 in 1991]

459.850 [1971 c.745 §5; 1977 c.151 §1; 1977 c.157 §1; 1979 c.188 §1; renumbered 459A.720 in 1991]

459.860 [1971 c.745 §6; 1973 c.693 §1; renumbered 459A.725 in 1991]

459.870 [1971 c.745 §7; renumbered 459A.730 in 1991]

459.880 [1971 c.745 §8; 1973 c.758 §3; renumbered 459A.735 in 1991]

459.890 [1971 c.745 §9; renumbered 459A.740 in 1991]

PENALTIES

459.990 [1967 c.428 §16; 1969 c.593 §48; subsection (2) enacted as 1969 c.509 §6; repealed by 1971 c.648 §33]

459.992 Criminal penalties. (1) The following are Class A misdemeanors:

(a) Violation of rules or ordinances adopted under ORS 459.005 to 459.105, 459.205 to 459.245 and 459.255 to 459.385.

(b) Violation of ORS 459.205.

(c) Violation of ORS 459.270.

(d) Violation of ORS 459A.080.

(2) Each day a violation referred to by subsection (1) of this section continues constitutes a separate offense. Such separate offenses may be joined in one indictment or complaint or information in several counts.

(3) Violation of ORS 459A.705, 459A.710 or 459A.720 is a Class A misdemeanor.

(4) In addition to the penalty prescribed by subsection (3) of this section, the commission or the State Department of Agriculture may revoke or suspend the license of any person who willfully violates ORS 459A.705, 459A.710 or 459A.720, who is required by ORS 474.105 and 474.115 and ORS chapter 471 or 635, respectively, to have a license. [Subsections (1), (2) and (3) enacted as 1971 c.648 §20; subsection (4) enacted as 1971 c.699 §20; subsections (5) and (6) enacted as 1971 c.745 §10; 1973 c.835 §158; 1977 c.867 §22; 1981 c.81 §2; 1981 c.709 §17; 1983 c.729 §17; 1983 c.766 §8; subsections (3) and (4) renumbered 466.995]

459.995 Civil penalties. (1) In addition to any other penalty provided by law:

(a) Any person who violates ORS 459.205, 459.270, 459A.005 to 459A.665 or the provisions of ORS 459.386 to 459.400, 459.434, 459.705 to 459.790, 459A.675 to 459A.685 or any rule or order of the Environmental Quality Commission pertaining to the disposal, collection, storage or reuse or recycling of solid wastes, as defined by ORS 459.005, or any rule or order pertaining to the disposal, storage or transportation of waste tires, as defined by ORS 459.705, shall incur a civil penalty not to exceed $10,000 a day for each day of the violation.

(b) Any person who violates the provisions of ORS 459.420 to 459.426 shall incur a civil penalty not to exceed $500 for each violation. Each battery that is disposed of improperly shall be a separate violation. Each day an establishment fails to post the notice required under ORS 459.426 shall be a separate violation.

(c) For each day a city, county or metropolitan service district fails to provide the opportunity to recycle as required under ORS 459A.005, the city, county or metropolitan service district shall incur a civil penalty not to exceed $500 for each violation.

(2) Any civil penalty authorized by subsection (1) of this section shall be imposed in the manner provided by ORS 468.135. [1973 c.835 §130; 1977 c.317 §1; 1981 c.709 §18; 1983 c.703 §16; 1983 c.729 §18; 1983 c.766 §9; subsections (2) and (3) renumbered 466.880; 1987 c.706 §19; 1989 c.290 §7; 1989 c.763 §14; 1991 c.385 §§14, 90; 1991 c.650 §3; 1991 c.653 §8; 1991 c.734 §32; 1991 c.882 §13]

459.997 Civil and criminal penalties for violation of ORS 459.504 to 459.619. (1) If a person or an officer or employee of a corporation or a member or employee of a partnership violates ORS 459.569 (1)(a) or (b), the Department of Revenue shall assess against the person a civil penalty of not more than $1,000. The penalty shall be recovered as provided in subsection (4) of this section.

(2) A person or an officer or employee of a corporation or a member or employee of a partnership who violates ORS 459.569 (1)(c) or (2), is liable to a penalty of not more than $1,000, to be recovered in the manner provided in subsection (4) of this section.

(3) If any person violates any provision of ORS 459.504 to 459.619 other than ORS 459.569, the department shall assess against the person a civil penalty of not more than $1,000, to be recovered as provided in subsection (4) of this section.

(4) Any person against whom a penalty is assessed under this section may appeal to the director as provided in ORS 305.275. If the penalty is not paid within 10 days after the order of the department becomes final, the department may record the order and collect the amount assessed in the same manner as income tax deficiencies are recorded and collected under ORS 314.430. [1987 c.706 §44]

Note: 459.997 was enacted into law by the Legislative Assembly but was not added to or made a part of

ORS chapter 459 or 459A or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

Note: See note under 459.504.

Chapter 468

1991 EDITION

Environmental Quality Generally

CROSS REFERENCES

Administrative procedures, 183.310 to 183.550

Air pollution generally, Ch. 468A

Air pollution, indoor, 433.502 to 433.526

Civil penalty for intentional or reckless violation, 468.996

Forest practices to comply with pollution laws, 527.724

Global warming, strategy for reducing emission of gases that contribute to, participation by Environmental Quality Commission, 469.060

Health hazard annexation or district formation, facilities and services, boundaries, 431.705 to 431.760

In-stream water right applications, 537.336

Notice to department by Health Division if water sampling detects certain contaminants, 448.150

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GENERAL ADMINISTRATION

468.005 Definitions. As used in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B, unless the context requires otherwise:

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

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

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

(4) "Order" has the same meaning as given in ORS 183.310.

(5) "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the Federal Government and any agencies thereof.

(6) "Rule" has the same meaning as given in ORS 183.310.

(7) "Standard" or "standards" means such measure of quality or purity for air or for any waters in relation to their reasonable or necessary use as may be established by the commission pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B. [Formerly 449.001]

468.010 Environmental Quality Commission; appointment; confirmation; term; compensation and expenses. (1) There is created an Environmental Quality Commission. The commission shall consist of five members, appointed by the Governor, subject to confirmation by the Senate as provided in ORS 171.562 and 171.565.

(2) The term of office of a member shall be four years, but the members of the commission may be removed by the Governor. Before the expiration of the term of a member, the Governor shall appoint a successor to assume the duties of the member on July 1 next following. A member shall be eligible for reappointment, but no member shall serve more than two consecutive terms. In case of a vacancy for any cause, the Governor shall make an appointment to become immediately effective for the unexpired term.

(3) A member of the commission is entitled to compensation and expenses as provided in ORS 292.495. [Formerly 449.016]

468.015 Functions of commission. It is the function of the commission to establish the policies for the operation of the department in a manner consistent with the policies and purposes of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B. In addition, the commission shall perform any other duty vested in it by law. [1973 c.835 §4]

468.020 Rules and standards. (1) In accordance with the applicable provisions of ORS 183.310 to 183.550, the commission shall adopt such rules and standards as it considers necessary and proper in performing the functions vested by law in the commission.

(2) Except as provided in ORS 183.335 (5), the commission shall cause a public hearing to be held on any proposed rule or standard prior to its adoption. The hearing may be before the commission, any designated member thereof or any person designated by and acting for the commission. [Formerly 449.173; 1977 c.38 §1]

468.030 Department of Environmental Quality. There is hereby established in the executive-administrative branch of the government of the state under the Environmental Quality Commission a department to be known as the Department of Environmental Quality. The department shall consist of the director of the department and all personnel employed in the department. [Formerly 449.032]

468.035 Functions of department. (1) Subject to policy direction by the commission, the department:

(a) Shall encourage voluntary cooperation by the people, municipalities, counties, industries, agriculture, and other pursuits, in restoring and preserving the quality and purity of the air and the waters of the state in accordance with rules and standards established by the commission.

(b) May conduct and prepare, independently or in cooperation with others, studies, investigations, research and programs pertaining to the quality and purity of the air or the waters of the state and to the treatment and disposal of wastes.

(c) Shall advise, consult, and cooperate with other agencies of the state, political subdivisions, other states or the Federal Government, in respect to any proceedings and all matters pertaining to control of air or water pollution or for the formation and submission to the legislature of interstate pollution control compacts or agreements.

(d) May employ personnel, including specialists, consultants and hearing officers, purchase materials and supplies, and enter into contracts necessary to carry out the purposes set forth in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B.

(e) Shall conduct and supervise programs of air and water pollution control education, including the preparation and distribution of information regarding air and water pollution sources and control.

(f) Shall provide advisory technical consultation and services to units of local government and to state agencies.

(g) Shall develop and conduct demonstration programs in cooperation with units of local government.

(h) Shall serve as the agency of the state for receipt of moneys from the Federal Government or other public or private agencies for the purposes of air and water pollution control, studies or research and to expend moneys after appropriation thereof for the purposes given.

(i) Shall make such determination of priority of air or water pollution control projects as may be necessary under terms of statutes enacted by the Congress of the United States.

(j) Shall seek enforcement of the air and water pollution laws of the state.

(k) Shall institute or cause to be instituted in a court of competent jurisdiction, proceedings to compel compliance with any rule or standard adopted or any order or permit, or condition thereof, issued pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B.

(L) Shall encourage the formulation and execution of plans in conjunction with air and water pollution control agencies or with associations of counties, cities, industries and other persons who severally or jointly are or may be the source of air or water pollution, for the prevention and abatement of pollution.

(m) May determine, by means of field studies and sampling, the degree of air or water pollution in various regions of the state.

(n) May perform such other and further acts as may be necessary, proper or desirable to carry out effectively the duties, powers and responsibilities of the department as set forth in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B.

(o) Shall coordinate any activities of the department related to a watershed enhancement project approved by the Governor's Watershed Enhancement Board under ORS 541.375 with activities of other cooperating state and federal agencies participating in the project.

(2) Nothing in this section shall affect the authority of the Health Division to make and enforce rules:

(a) Regarding the quality of water for human or animal consumption pursuant to ORS 448.115 to 448.325, 624.010 to 624.120 and 624.310 to 624.440; and

(b) Regarding the quality of water for public swimming places pursuant to ORS 431.110. [Formerly 449.082; 1983 c.740 §181; 1987 c.734 §11]

468.040 Director; salary. The commission shall appoint a director who shall hold office at the pleasure of the commission. The salary of the director shall be fixed by the commission unless otherwise provided by law. [Formerly 449.026]

468.045 Functions of director; delegation. (1) Subject to policy direction by the commission, the director shall:

(a) Be administrative head of the department;

(b) Have power, within applicable budgetary limitations, and in accordance with ORS chapter 240, to hire, assign, reassign, and coordinate personnel of the department;

(c) Administer and enforce the laws of the state concerning environmental quality; and

(d) Be authorized to participate in any proceeding before any public officer, commission or body of the United States or any state for the purpose of representing the citizens of Oregon concerning environmental quality.

(2) In addition to duties otherwise required by law, the director shall prescribe regulations for the government of the department, the conduct of its employees, the assignment and performance of its business and the custody, use and preservation of its records, papers and property in a manner consistent with applicable law.

(3) The director may delegate to any of the employees of the department the exercise or discharge in the director's name of any power, duty or function of whatever character, vested in or imposed by law upon the director. The official act of any such person so acting in the director's name and by the authority of the director shall be considered to be an official act of the director. [Formerly 449.028]

468.050 Deputy director. (1) With the approval of the commission, the director may appoint a deputy director in the unclassified service who shall serve at the pleasure of the director. The deputy director shall have full authority to act for the director, subject to directions of the director. The appointment

of the deputy director shall be by written order, filed with the Secretary of State.

(2) The deputy director shall receive such salary as may be provided by law or, if not so provided, as may be fixed by the director, and shall be reimbursed for all expenses actually and necessarily incurred by the deputy director in the performance of the official duties of the deputy director. [1973 c.291 §2]

Note: 468.050 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

468.055 Contracts with Health Division. In addition to the authority granted under ORS 190.003 to 190.110, when authorized by the commission and the Health Division, the director and the Assistant Director for Health may contract on behalf of their respective agencies for the purposes of carrying out the functions of either agency, defining areas of responsibility, furnishing services or employees by one to the other and generally providing cooperative action in the interests of public health and the quality of the environment in Oregon. Each contracting agency is directed to maintain liaison with the other and to cooperate with the other in all matters of joint concern or interest. [Formerly 449.062]

468.060 Enforcement of rules by health agencies. On its own motion after public hearing, the commission may grant specific authorization to the Health Division or to any county, district or city board of health to enforce any rule of the commission relating to air or water pollution or solid wastes. [Formerly 449.064]

468.065 Issuance of permits; content; fees; use. Subject to any specific requirements imposed by ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B:

(1) Applications for all permits authorized or required by ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B shall be made in a form prescribed by the department. Any permit issued by the department shall specify its duration, and the conditions for compliance with the rules and standards, if any, adopted by the commission pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B.

(2) By rule and after hearing, the commission may establish a schedule of fees for permits issued pursuant to ORS 468A.040, 468A.045, 468A.155 and 468B.050. Except as provided in ORS 468A.315, the fees contained in the schedule shall be based upon the anticipated cost of filing and investigating the application, of issuing or denying the requested permit, and of an inspection program to determine compliance or noncompliance with the permit. The fee shall accompany the application for the permit. The fees for a permit issued under ORS 468B.050 may be imposed on an annual basis.

(3) An applicant for certification of a project under ORS 468B.040 or 468B.045 shall pay as a fee all expenses incurred by the commission and department related to the review and decision of the director and commission. These expenses may include legal expenses, expenses incurred in processing and evaluating the application, issuing or denying certification and expenses of commissioning an independent study by a contractor of any aspect of the proposed project. These expenses shall not include the costs incurred in defending a decision of either the director or the commission against appeals or legal challenges. Every applicant for certification shall submit to the department a fee at the same time as the application for certification is filed. The fee for a new project shall be $5,000, and the fee for an existing project needing relicense shall be $3,000. To the extent possible, the full cost of the investigation shall be paid from the application fee paid under this section. However, if the costs exceed the fee, the applicant shall pay any excess costs shown in an itemized statement prepared by the department. In no event shall the department incur expenses to be borne by the applicant in excess of 110 percent of the fee initially paid without prior notification to the applicant. In no event shall the total fee exceed $40,000 for a new project or $30,000 for an existing project needing relicense. If the costs are less than the initial fee paid, the excess shall be refunded to the applicant.

(4) The department may require the submission of plans, specifications and corrections and revisions thereto and such other reasonable information as it considers necessary to determine the eligibility of the applicant for the permit.

(5) The department may require periodic reports from persons who hold permits under ORS 448.305, 454.010 to 454.040, 454.205 to 454.225, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B. The report shall be in a form prescribed by the department and shall contain such information as to the amount and nature or common description of the pollutant, contaminant or waste and such other information as the department may require.

(6) Any fee collected under this section or ORS 468A.315 shall be deposited in the State Treasury to the credit of an account of the department. Such fees are continuously appropriated to meet the administrative expenses of the program for which they are collected. Any fees collected under ORS 468A.315 in any biennium that exceed the legislatively approved budget, including amounts authorized by the Emergency Board for the federal operating permit program for such biennium, shall be credited toward the federal operating permit program budget for the following biennium. The fees collected under this section or ORS 468A.315 by a regional air pollution control authority pursuant to a permit program authorized by the commission shall be retained by and shall be income to the regional authority. Such fees shall be accounted for and expended in the same manner as are other funds of the regional authority. However, if the department finds after hearing that the permit program administered by the regional authority does not conform to the requirements of the permit program approved by the commission pursuant to ORS 468A.155, such fees shall be deposited and expended as are permit fees submitted to the department. [Formerly 449.733; 1975 c.445 §7; 1983 c.144 §2; 1983 c.740 §182; 1989 c.199 §1; 1989 c.833 §77; 1991 c.723 §1; 1991 c.752 §15]

468.070 Denial, modification, suspension or revocation of permits. (1) At any time, the department may refuse to issue, modify, suspend, revoke or refuse to renew any permit issued pursuant to ORS 468.065 if it finds:

(a) A material misrepresentation or false statement in the application for the permit.

(b) Failure to comply with the conditions of the permit.

(c) Violation of any applicable provisions of ORS 466.605 to 466.680, 466.880 (3) and (4) and 466.995 (3) or ORS chapters 468, 468A and 468B.

(d) Violation of any applicable rule, standard or order of the commission.

(2) The department may modify any permit issued pursuant to ORS 468.065 if it finds that modification is necessary for the proper administration, implementation or enforcement of the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, 466.605 to 466.690 and ORS chapters 468, 468A and 468B.

(3) The procedure for modification, suspension, revocation or refusal to issue or renew shall be the procedure for a contested case as provided in ORS 183.310 to 183.550. [1973 c.835 §14; 1979 c.184 §1; 1985 c.733 §22]

468.075 Revolving fund; uses. (1) On written request of the director of the department or the authorized representative of the director, the Executive Department shall draw warrants on amounts appropriated to the department for operating expenses for use by the department as a revolving fund. The revolving fund shall not exceed the aggregate sum of $10,000 including unreimbursed advances. The revolving fund shall be deposited with the State Treasurer to be held in a special account against which the department may draw checks.

(2) The revolving fund may be used by the department to pay for travel expenses, or advances therefor, for employees of the department and for any consultants or advisers for whom payment of travel expenses is authorized by law or for purchases required from time to time or for receipt or disbursement of federal funds available under federal law.

(3) All claims for reimbursement of amounts paid from the revolving fund shall be approved by the department and by the Executive Department. When such claims have been approved, a warrant covering them shall be drawn in favor of the department and charged against the appropriate fund or account, and shall be used to reimburse the revolving fund. [Formerly 449.034; 1977 c.704 §7]

UNIFORM TRANSBOUNDARY POLLUTION RECIPROCAL ACCESS ACT

468.076 Definitions for ORS 468.076 to 468.089. As used in ORS 468.076 to 468.089:

(1) "Person" means an individual, corporation, business trust, estate, trust, partnership, association, joint venture, government in its private or public capacity, governmental subdivision or agency, or any other legal entity.

(2) "Reciprocating jurisdiction" means a state of the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States of America or a province or territory of Canada, that has enacted an Act to provide substantially equivalent access to its courts and administrative agencies as provided in ORS 468.076 to 468.087. [1991 c.826 §2]

Note: 468.076 to 468.089 were enacted into law by the Legislative Assembly but were not added to or made a part of ORS chapters 468, 468A and 468B or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

468.078 Action for pollution originating in Oregon. Any person in a reciprocating jurisdiction may bring an action or other proceeding in Oregon for in-

jury or threatened injury to property or person in the reciprocating jurisdiction caused by pollution originating, or that may originate, in Oregon. [1991 c.826 §3]

Note: See note under 468.076.

468.079 Action for pollution originating in reciprocating jurisdiction. A person who suffers, or is threatened with, injury to the person or property in a reciprocating jurisdiction caused by pollution originating, or that may originate, in Oregon, has the same rights to relief with respect to the injury or threatened injury, and may enforce those rights in Oregon as if the injury or threatened injury occurred in Oregon. [1991 c.826 §4]

Note: See note under 468.076.

468.080 Applicability of Oregon law. The law to be applied in an action or other proceeding brought under ORS 468.076 to 468.087, including what constitutes "pollution," is the law of Oregon excluding Oregon's choice of law rules. Nothing in ORS 468.076 to 468.087 restricts the applicability of federal law in actions in which federal law is preemptive. Nothing in ORS 468.076 to 468.087 determines whether state law or federal law applies in any particular legal action. [1991 c.826 §5]

Note: See note under 468.076.

468.081 Rights of injured person. ORS 468.076 to 468.087 do not accord a person injured or threatened with injury in another jurisdiction any rights superior to those that the person would have if injured or threatened with injury in Oregon. [1991 c.826 §6]

Note: See note under 468.076.

468.083 Right conferred under ORS 468.076 to 468.087 in addition to other rights. The right provided in ORS 468.076 to 468.087 is in addition to, and not in derogation of, any other right. [1991 c.826 §7]

Note: See note under 468.076.

468.085 Sovereign immunity defense. The defense of sovereign immunity is applicable in any action or other proceeding brought under ORS 468.076 to 468.087 only to the extent that it would apply to a person injured or threatened with injury in Oregon. [1991 c.826 §8]

Note: See note under 468.076.

468.087 Application and construction of ORS 468.076 to 468.087. ORS 468.076 to 468.087 shall be applied and construed to carry out the general purpose of ORS 468.076 to 468.089 to make uniform the law with respect to the subject of ORS 468.076 to 468.089 among the jurisdictions enacting it. [1991 c.826 §9]

Note: See note under 468.076.

468.089 Short title. ORS 468.076 to 468.087 shall be known and may be cited as the "Uniform Transboundary Pollution Reciprocal Access Act." [1991 c.826 §1]

Note: See note under 468.076.

ENFORCEMENT

468.090 Complaint procedure. (1) In case any written substantiated complaint is filed with the department which it has cause to believe, or in case the department itself has cause to believe, that any person is violating any rule or standard adopted by the commission or any permit issued by the department by causing or permitting water pollution or air pollution or air contamination, the department shall cause an investigation thereof to be made. If it finds after such investigation that such a violation of any rule or standard of the commission or of any permit issued by the department exists, it shall by conference, conciliation and persuasion endeavor to eliminate the source or cause of the pollution or contamination which resulted in such violation.

(2) In case of failure to remedy the violation, the department shall commence enforcement proceedings pursuant to the procedures set forth in ORS 183.310 to 183.550 for a contested case. [Formerly 449.815]

468.095 Investigatory authority; entry on premises; status of records. (1) The department shall have the power to enter upon and inspect, at any reasonable time, any public or private property, premises or place for the purpose of investigating either an actual or suspected source of water pollution or air pollution or air contamination or to ascertain compliance or noncompliance with any rule or standard adopted or order or permit issued pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B. The commission shall also have access to any pertinent records relating to such property, including but not limited to blueprints, operation and maintenance records and logs, operating rules and procedures.

(2) Unless classified by the director as confidential, any records, reports or information obtained under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B shall be available to the public. Upon a showing satisfactory to the director by any person that records, reports or information, or particular parts thereof, other than emission data, if made public, would divulge a secret process, device or method of manufacturing or production entitled to protection as trade secrets of such person, the director shall classify such record, report or information,

or particular part thereof, other than emission data, confidential and such confidential record, report or information, or particular part thereof, other than emission data, shall not be made a part of any public record or used in any public hearing unless it is determined by a circuit court that evidence thereof is necessary to the determination of an issue or issues being decided at a public hearing. [Formerly 449.169; 1975 c.173 §1]

468.100 Enforcement procedures; powers of regional authorities; status of procedures. (1) Whenever the commission has good cause to believe that any person is engaged or is about to engage in any acts or practices which constitute a violation of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B, or any rule, standard or order adopted or entered pursuant thereto, or of any permit issued pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B, the commission may institute actions or proceedings for legal or equitable remedies to enforce compliance thereto or to restrain further violations.

(2) The proceedings authorized by subsection (1) of this section may be instituted without the necessity of prior agency notice, hearing and order, or during said agency hearing if it has been initially commenced by the commission.

(3) A regional authority formed under ORS 468A.105 may exercise the same functions as are vested in the commission by this section in so far as such functions relate to air pollution control and are applicable to the conditions and situations of the territory within the regional authority. The regional authority shall carry out these functions in the manner provided for the commission to carry out the same functions.

(4) The provisions of this section are in addition to and not in substitution of any other civil or criminal enforcement provisions available to the commission or a regional authority. The provisions of this section shall not prevent the maintenance of actions for legal or equitable remedies relating to private or public nuisances brought by any other person, or by the state on relation of any person without prior order of the commission. [1973 c.826 §2; 1979 c.284 §155]

468.105 [Repealed by 1974 s.s. c.36 §28]

468.110 Appeal; power of court to stay enforcement. Any person adversely affected or aggrieved by any order of the commission may appeal from such order in accordance with the provisions of ORS 183.310 to 183.550. However, notwithstanding ORS 183.480 (3), relating to a stay of enforcement of an agency order and the giving of bond or other undertaking related thereto, any reviewing court before it may stay an order of the commission shall give due consideration to the public interest in the continued enforcement of the commission's order, and may take testimony thereon. [Formerly 449.090]

468.115 Enforcement in cases of emergency. (1) Whenever it appears to the department that water pollution or air pollution or air contamination is presenting an imminent and substantial endangerment to the health of persons, at the direction of the Governor the department shall, without the necessity of prior administrative procedures or hearing, enter an order against the person or persons responsible for the pollution or contamination requiring the person or persons to cease and desist from the action causing the pollution or contamination. Such order shall be effective for a period not to exceed 10 days and may be renewed thereafter by order of the Governor.

(2) The state and local police shall cooperate in the enforcement of any order issued pursuant to subsection (1) of this section and shall require no further authority or warrant in executing and enforcing such an order.

(3) If any person fails to comply with an order issued pursuant to subsection (1) of this section, the circuit court in which the source of water pollution or air pollution or air contamination is located shall compel compliance with the order in the same manner as with an order of that court. [Formerly 449.980]

468.120 Public hearings; subpoenas, oaths, depositions. (1) The commission, its members or a person designated by and acting for the commission may:

(a) Conduct public hearings.

(b) Issue subpoenas for the attendance of witnesses and the production of books, records and documents relating to matters before the commission.

(c) Administer oaths.

(d) Take or cause to be taken depositions and receive such pertinent and relevant proof as may be considered necessary or proper to carry out duties of the commission and department pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B.

(2) Subpoenas authorized by this section may be served by any person authorized by the person issuing the subpoena. Witnesses who are subpoenaed shall receive the fees

and mileage provided in ORS 44.415 (2). [Formerly 449.048; 1989 c.980 §14b]

468.125 [Formerly 449.967; 1977 c.317 §2; 1983 c.703 §17; 1985 c.735 §3; 1987 c.741 §19; repealed by 1991 c.650 §8 (468.126 enacted in lieu of 468.125)]

468.126 Advance notice. (1) No civil penalty prescribed under ORS 468.140 shall be imposed for a violation of an air, water or solid waste permit issued by the department until the permittee has received five days' advance warning in writing from the department, specifying the violation and stating that a penalty will be imposed for the violation unless the permittee submits the following to the department in writing within five working days after receipt of the advance warning:

(a) A response certifying that the permitted facility is complying with applicable law; or

(b) A proposal to bring the facility into compliance with applicable law that is acceptable to the department and that includes but is not limited to proposed compliance dates.

(2) No advance notice shall be required under subsection (1) of this section if:

(a) The violation is intentional;

(b) The water or air violation would not normally occur for five consecutive days; or

(c) The permittee has received prior advance warning of any violation of the permit within the 36 months immediately preceding the violation. [1991 c.650 §9 (enacted in lieu of 468.125)]

468.130 Schedule of civil penalties; factors to be considered in imposing civil penalties. (1) The commission shall adopt by rule a schedule or schedules establishing the amount of civil penalty that may be imposed for a particular violation. Except as provided in ORS 468.140 (3), no civil penalty shall exceed $10,000 per day. Where the classification involves air pollution, the commission shall consult with the regional air quality control authorities before adopting any classification or schedule.

(2) In imposing a penalty pursuant to the schedule or schedules authorized by this section, the commission and regional air quality control authorities shall consider the following factors:

(a) The past history of the person incurring a penalty in taking all feasible steps or procedures necessary or appropriate to correct any violation.

(b) Any prior violations of statutes, rules, orders and permits pertaining to water or air pollution or air contamination or solid waste disposal.

(c) The economic and financial conditions of the person incurring a penalty.

(d) The gravity and magnitude of the violation.

(e) Whether the violation was repeated or continuous.

(f) Whether the cause of the violation was an unavoidable accident, negligence or an intentional act.

(g) The violator's cooperativeness and efforts to correct the violation.

(h) Any relevant rule of the commission.

(3) The penalty imposed under this section may be remitted or mitigated upon such terms and conditions as the commission or regional authority considers proper and consistent with the public health and safety.

(4) The commission may by rule delegate to the department, upon such conditions as deemed necessary, all or part of the authority of the commission provided in subsection (3) of this section to remit or mitigate civil penalties. [Formerly 449.970; 1977 c.317 §3; 1987 c.266 §2; 1991 c.650 §4]

468.135 Imposition of civil penalties. (1) Any civil penalty under ORS 468.140 shall be imposed in the manner provided in ORS 183.090.

(2) All penalties recovered under ORS 468.140 shall be paid into the State Treasury and credited to the General Fund, or in the event the penalty is recovered by a regional air quality control authority, it shall be paid into the county treasury of the county in which the violation occurred. [Formerly 449.973; 1989 c.706 §17; 1991 c.650 §6; 1991 c.734 §37]

468.140 Civil penalties for specified violations. (1) In addition to any other penalty provided by law, any person who violates any of the following shall incur a civil penalty for each day of violation in the amount prescribed by the schedule adopted under ORS 468.130:

(a) The terms or conditions of any permit required or authorized by law and issued by the department or a regional air quality control authority.

(b) Any provision of ORS 164.785, 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, ORS chapter 467 and ORS chapters 468, 468A and 468B.

(c) Any rule or standard or order of the commission adopted or issued pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, ORS chapter 467 and ORS chapters 468, 468A and 468B.

(d) Any term or condition of a variance granted by the commission or department pursuant to ORS 467.060.

(e) Any rule or standard or order of a regional authority adopted or issued under authority of ORS 468A.135.

(f) The financial assurance requirement under ORS 468B.480 and 468B.485 or any rule related to the financial assurance requirement under ORS 468B.480.

(2) Each day of violation under subsection (1) of this section constitutes a separate offense.

(3)(a) In addition to any other penalty provided by law, any person who intentionally or negligently causes or permits the discharge of oil into the waters of the state shall incur a civil penalty not to exceed the amount of $20,000 for each violation.

(b) In addition to any other penalty provided by law, the following persons shall incur a civil penalty not to exceed the amount of $10,000 for each day of violation:

(A) Any person who violates the terms or conditions of a permit authorizing waste discharge into the air or waters of the state.

(B) Any person who violates any law, rule, order or standard in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B relating to air or water pollution.

(C) Any person who violates the provisions of a rule adopted or an order issued under ORS 468.869.

(4) In addition to any other penalty provided by law, any person who violates the provisions of ORS 468B.130 shall incur a civil penalty not to exceed the amount of $500 for each day of violation.

(5) Paragraphs (c) and (e) of subsection (1) of this section do not apply to violations of motor vehicle emission standards which are not violations of standards for control of noise emissions.

(6) Notwithstanding the limits of ORS 468.130 (1) and in addition to any other penalty provided by law, any person who intentionally or negligently causes or permits open field burning contrary to the provisions of ORS 468A.555 to 468A.620, 476.380 and 478.960 shall be assessed by the department a civil penalty of at least $20 but not more than $40 for each acre so burned. Any fines collected by the department pursuant to this subsection shall be deposited with the State Treasurer to the credit of the General Fund and shall be available for general governmental expense. [Formerly 449.993; 1975 c.559 §14; 1977 c.511 §5; 1979 c.353 §1; 1987 c.513 §1; 1989 c.268 §4; 1989 c.1042 §7; 1991 c.764 §6]

POLLUTION CONTROL FACILITIES TAX CREDIT

468.150 Field sanitation and straw utilization and disposal methods as "pollution control facilities." After alternative methods for field sanitation and straw utilization and disposal are approved by the committee and the department, "pollution control facility," as defined in ORS 468.155, shall include such approved alternative methods and persons purchasing and utilizing such methods shall be eligible for the benefits allowed by ORS 468.155 to 468.190. [1975 c.559 §15]

Note: 468.150 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

468.155 Definitions for ORS 468.155 to 468.190. (1)(a) As used in ORS 468.155 to 468.190, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if:

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

(B) The sole purpose of such use, erection, construction or installation is to prevent, control or reduce a substantial quantity of air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil.

(b) Such prevention, control or reduction required by this subsection shall be accomplished by:

(A) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468B.005;

(B) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468A.005;

(C) The substantial reduction or elimination of or redesign to eliminate noise pol-

manufacturing process for which the investment is made is used to convert reclaimed plastic into a salable or usable commodity.

(b) Any other factors which are relevant in establishing the portion of the actual cost of the investment except return on the investment properly allocable to the process that allows a person to collect, transport or process reclaimed plastic or to manufacture a reclaimed plastic product.

(2) The portion of actual costs properly allocable shall be from zero to 100 percent in increments of one percent. If zero percent the commission shall issue an order denying certification.

(3) The commission may adopt rules establishing methods to be used to determine the portion of costs properly allocable to the collection, transportation or processing of reclaimed plastic or to the manufacture of a reclaimed plastic product. [1985 c.684 §9; 1989 c.958 §8]

468.965 Limit on costs certified by commission for tax credit. (1) The total of all costs of investments that receive a preliminary certification from the commission for tax credits in any calendar year shall not exceed $1,500,000. If the applications exceed the $1,500,000 limit, the commission, in the commission's discretion, shall determine the dollar amount certified for any investments and the priority between applications for certification based upon the criteria contained in ORS 468.925 to 468.965.

(2) Not less than $500,000 of the $1,500,000 annual certification limit shall be allocated to investments having a certified cost of $100,000 or less for any qualifying business.

(3) With respect to the balance of the annual certification limit, the maximum cost certified for any investments shall not exceed $500,000. However, if the applications certified in any calendar year do not total $1,000,000, the commission may increase the certified costs above the $500,000 maximum for previously certified investments. The increases shall be allocated according to the commission's determination of how the previously certified investments meet the criteria of ORS 468.925 to 468.965. The increased allocation to previously certified investments under this subsection shall not include any of the $500,000 reserved under subsection (2) of this section. [1985 c.684 §10; 1989 c.958 §9]

468.967 [1989 c.1072 §1; renumbered 459A.775 in 1991]

468.968 [1989 c.1072 §§2, 3, 4; renumbered 459A.780 in 1991]

468.969 [1989 c.1072 §5; renumbered 459A.785 in 1991]

468.970 [1987 c.695 §1; 1989 c.958 §9; renumbered 454.430 in 1989]

468.973 [1987 c.695 §2; renumbered 454.433 in 1989]

468.975 [1987 c.695 §§3, 11; renumbered 454.436 in 1989]

468.977 [1987 c.695 §§4, 5, 8; renumbered 454.439 in 1989]

468.980 [1987 c.695 §6; renumbered 454.442 in 1989]

468.983 [1987 c.695 §7; renumbered 454.445 in 1989]

PENALTIES

468.990 [1973 c.835 §28; subsection (5) formerly part of 448.990, enacted as 1973 c.835 §177a; 1989 c.859 §6; 1991 c.764 §7; renumbered 468B.990 in 1991]

468.992 Penalties for pollution offenses. (1) Willful or negligent violation of any rule, standard or order of the commission relating to water pollution is a misdemeanor and a person convicted thereof shall be punishable by a fine of not more than $25,000 or by imprisonment in the county jail for not more than one year, or by both. Each day of violation constitutes a separate offense.

(2) Refusal to produce books, papers or information subpoenaed by the commission or the regional air quality control authority or any report required by law or by the department or a regional authority pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B is a Class A misdemeanor.

(3) Violation of the terms of any permit issued pursuant to ORS 468.065 is a Class A misdemeanor. Each day of violation constitutes a separate offense. [1973 c.835 §26]

468.995 [1973 c.835 §27; subsection (6) enacted as 1975 c.366 §3; 1983 c.338 §938; 1991 c.920 §20; renumbered 468A.990 in 1991]

468.996 Civil penalty for intentional or reckless violation. (1) In addition to any other penalty provided by law, any person who intentionally or recklessly violates any provision of ORS 164.785, 459.205 to 459.426, 459.705 to 459.790, ORS chapters 465, 466 or 467 or 468, 468A and 468B or any rule or standard or order of the commission adopted or issued pursuant to ORS 459.205 to 459.426, 459.705 to 459.790, ORS chapters 465, 466 or 467 or 468, 468A and 468B, which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment shall incur a civil penalty not to exceed $100,000. The Environmental Quality Commission shall adopt by rule a schedule and the criteria for determining the amount of a civil penalty that may be imposed for an extreme violation.

(2) As used in this section:

(a) "Intentionally" means conduct by a person with a conscious objective to cause the result of the conduct.

(b) "Recklessly" means conduct by a person who is aware of and consciously disregards a substantial and unjustifiable risk that the result will occur or that the circumstance exists. The risk must be of such nature and degree that disregard thereof constitutes a gross deviation from the standard of care a reasonable person would observe in that situation. [1991 c.650 §2]

468.997 Joinder of certain offenses. Where any provision of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapters 468, 468A and 468B provides that each day of violation of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 or a section of ORS chapters 468, 468A and 468B constitutes a separate offense, violations of that section that occur within the same court jurisdiction may be joined in one indictment, or complaint, or information, in several counts. [Formerly 449.992]

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CHAPTERS 319 to 453

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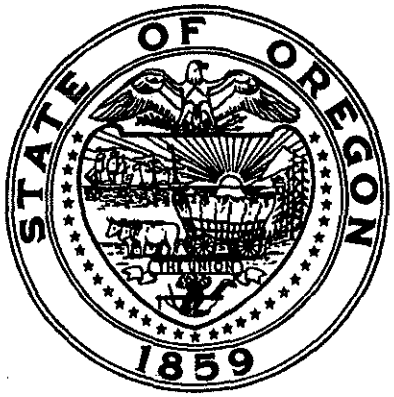

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(8) Vehicles that are proportionally registered under ORS 768.007 and 768.009 in accordance with agreements established under ORS 768.005.

(9) Electric motor vehicles.

(10) First response rescue units operated by political subdivisions of this state that are not used to transport persons suffering from illness, injury or disability.

(11) A vehicle that is currently registered in Oregon at the time application for new registration is received by the division if the new registration is a result of a change in the registration or plate type and the application is received at least four months prior to the expiration of the existing registration.

Approved by the Governor June 27, 1991
Filed in the office of Secretary of State June 27, 1991

CHAPTER 384

AN ACT HB 3424

Relating to report on status of wild fish by State Fish and Wildlife Commission.

Whereas it is the policy of this state to manage indigenous fish stocks for the maximum benefit of present and future generations and to prevent the serious depletion of any such species; and

Whereas petitions for federal endangered species classification for various salmon species, the identification by the American Fisheries Society of 52 "threatened" anadromous populations on the Oregon coast and 76 such populations in the Columbia River Basin and the listing by the State Department of Fish and Wildlife of 30 species of native fish as "sensitive" and 95 species of native fish as "special concern" indicate the need for better management of these stocks; and

Whereas the Legislative Assembly wishes to avoid the trauma of listing these fish under the federal Threatened and Endangered Species Act, it is essential to the proper management of these stocks that the location and status of indigenous wild fish stocks be known; now, therefore,

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

SECTION 1. Section 2 of this Act is added to and made a part of ORS chapter 496.

SECTION 2. The State Fish and Wildlife Commission shall submit to the Sixty-seventh Legislative Assembly a report that documents the status, location and health of wild fish stocks of this state, the status and health of the watersheds they inhabit and the primary causes of their decline.

Approved by the Governor June 27, 1991
Filed in the office of Secretary of State June 27, 1991

CHAPTER 385

AN ACT SB 66

Relating to solid waste; creating new provisions; amending ORS 182.375, 279.731, 279.733, 279.739, 459.005, 459.015, 459.165, 459.175, 459.180, 459.185, 459.190, 459.235, 459.294 and 459.995; appropriating money; limiting expenditures; and declaring an emergency.

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

SECTION 1. ORS 459.292, 459.293, 459.294 and 459.295 and sections 2, 4, 5 and 13a of this Act are added to and made a part of ORS 459.165 to 459.200.

SECTION 2. (1) It is the goal of the State of Oregon that by January 1, 2000, the amount of recovery from the general solid waste stream shall be at least 50 percent.

(2) In addition to the requirements of ORS 459.165, the "opportunity to recycle" shall include the requirements of subsection (3) of this section, which shall be implemented on or before July 1, 1992, by using the following program elements:

(a) Provision of at least one durable recycling container to each residential service customer by not later than January 1, 1993.

(b) On-route collection at least once each week of source separated recyclable material to residential customers, provided on the same day that solid waste is collected from each customer.

(c) An expanded education and promotion program conducted to inform citizens of the manner and benefits of reducing, reusing and recycling material. The program shall include:

(A) Provision of recycling notification and education packets to all new residential, commercial and institutional collection service customers that includes at a minimum the materials collected, the schedule for collection, the way to prepare materials for collection and reasons that persons should separate their material for recycling;

(B) Provision of quarterly recycling information to residential, commercial and institutional collection service customers that includes at a minimum the materials collected, the schedule for collection and at least annually includes additional information including the procedure for preparing materials for collection; and

(C) Targeting of community and media events to promote recycling.

(d) Collection of at least four principal recyclable materials or the number of materials required to be collected under the residential on-route collection program, whichever is less, from each multifamily dwelling complex having five or more units. The multifamily collection program shall include promotion and education directed to the residents of the multifamily dwelling units.

(e) An effective residential yard debris collection and composting program that includes the promotion

short gap separating the pointer from the base of the adjacent arrow. The triangle, formed by the three arrows curved at their midpoints, shall depict a clockwise path around the code number. The numbers and letters used shall be as follows:

(a) 1 = PETE (polyethylene terephthalate);
(b) 2 = HDPE (high density polyethylene);
(c) 3 = V (vinyl);
(d) 4 = LDPE (low density polyethylene);
(e) 5 = PP (polypropylene);
(f) 6 = PS (polystyrene); and
(g) 7 = OTHER.

(2) On and after January 1, 1992, the Department of Environmental Quality shall maintain a list of abbreviations used on labels under subsection (1) of this section and shall provide a copy of that list to any person upon request.

SECTION 88. No person shall manufacture for use in this state any rigid plastic container or rigid plastic bottle that is not labeled in accordance with section 87 of this Act.

SECTION 89. ORS 182.375 is amended to read:

182.375. (1) There is created in the State Treasury, separate and distinct from the General Fund, an Oregon State Productivity Improvement Revolving Fund. All moneys in the Oregon State Productivity Improvement Revolving Fund are appropriated continuously to the Executive Department for making loans, grants, matching funds or cash awards available to state agencies or employees for implementation of employee suggestions and productivity improvement projects upon authorization of the Employe Suggestions Awards and Productivity Improvement Commission. Interest on earnings of the fund shall be credited to the fund.

(2) The Oregon State Productivity Improvement Revolving Fund shall consist of:

(a) Moneys transferred from the Executive Department's Personnel Account, as provided in ORS 240.170, in a sum not to exceed $500,000 to establish the fund.

(b) Executive Department savings realized from implementation of employee suggestions and productivity improvement projects which may include existing and future projects such as travel management services and recycling efforts.

(c) Any unexpended revenues transferred in accordance with section 78 (2) of this 1991 Act.

(3) Thirty percent of the agency or unit budget savings resulting from improved efficiency shall be credited to the Oregon State Productivity Improvement Revolving Fund to be used for program improvement by the agency or unit. If not used in the biennium in which the savings occur, the amount of credit to an agency or unit may be treated as if it were continuously appropriated to the agency or unit and may be expended in following biennia without resulting in any budget justification for the agency or unit. Expenditures from the fund are not subject to allotment or other budgetary procedures.

(4) None of the expenditures in a biennium by the agency or unit under this section shall be considered to be within any appropriation or expenditure limitation in the agency's base budget for the biennium.

SECTION 90. ORS 459.995, as amended by section 14 of this Act, is further amended to read:

459.995. (1) In addition to any other penalty provided by law:

(a) Any person who violates ORS 459.165 to 459.200, 459.205, 459.270 or the provisions of ORS 459.180, 459.188, 459.190, 459.195, 459.710, [*or*] 459.715 **or sections 86 to 88 of this 1991 Act** or the provisions of ORS 459.386 to 459.400 or any rule or order of the Environmental Quality Commission pertaining to the disposal, collection, storage or reuse or recycling of solid wastes, as defined by ORS 459.005, shall incur a civil penalty not to exceed $500 a day for each day of the violation.

(b) Any person who violates the provisions of ORS 459.420 to 459.426 shall incur a civil penalty not to exceed $500 for each violation. Each battery that is disposed of improperly shall be a separate violation. Each day an establishment fails to post the notice required under ORS 459.426 shall be a separate violation.

(c) For each day a city, county or metropolitan service district fails to provide the opportunity to recycle as required under ORS 459.165, the city, county or metropolitan service district shall incur a civil penalty not to exceed $500 for each violation.

(2) The civil penalty authorized by subsection (1) of this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed and collected under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapter 468.

SECTION 91. If, after final appeal, the surcharge established by the Environmental Quality Commission under ORS 459.297 is held to be valid and the state is able to collect the surcharge, ORS 459.294, as amended by section 13 of this Act, is further amended to read:

459.294. (1) In addition to the permit fees provided in ORS 459.235, the commission shall establish a schedule of fees for all disposal sites that receive domestic solid waste except transfer stations. The schedule shall be based on the estimated tonnage or the actual tonnage, if known, received at the site and any other similar or related factors the commission finds appropriate. The fees collected pursuant to the schedule shall be sufficient to assist in the funding of programs to reduce the amount of domestic solid waste generated in Oregon and to reduce environmental risks at domestic waste disposal sites.

(2) For solid waste delivered to disposal facilities owned or operated by a metropolitan service district, the schedule of fees, but not the permit fees provided

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CHAPTERS 473 to 653

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discontinue the loss reserve account. The city or county shall advise the director of the city's or county's plans to submit the surety deposits required in subsection (2) of this section, or obtain coverage as a carrier-insured employer prior to the date the loss reserve account ceases to exist. If the city or county elects to discontinue self-insurance, it shall submit such surety as the director may require to insure payment of all compensation and amounts due the director for the period the city or county was self-insured.

(d) In order to requalify as a self-insured employer, the city or county must deposit prior to discontinuance of the loss reserve account such surety as is required by the director pursuant to subsection (2).

(e) Notwithstanding ORS 656.440, if prior to the date of discontinuance of the loss reserve account the director has not received the surety deposits required in subsection (2) of this section, the city's or county's certificate of self-insurance is automatically revoked as of that date.

SECTION 2. This Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this Act takes effect July 1, 1991.

Approved by the Governor July 22, 1991
Filed in the office of Secretary of State July 22, 1991

CHAPTER 649

AN ACT HB 2211

Relating to insurance.

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

SECTION 1. (1) The Director of the Department of Insurance and Finance shall engage in a study to evaluate the relationship between investments by insurers transacting life insurance in Oregon and premium income received from Oregonians for life insurance products. For purposes of the study, the director shall perform one or more surveys of insurers to determine the dollar amount of investments made in Oregon and the different kinds of investments, including such categories as real property and mortgages and stocks and bonds. The surveys shall require such information and comprise such a period or periods of time as the director determines necessary for obtaining useful, accurate and comprehensive information for the study.

(2) The director shall submit to the Speaker of the House of Representatives and the President of the Senate, not later than January 15, 1993, a report of the study conducted under subsection (1) of this section. The report shall include the results of the surveys and a summary of the relationship of premium income received from Oregon residents to the dollar amount invested in Oregon, and shall present options and recommendations for encouraging investments by such insurers in Oregon. The report may include any other information or analysis that the director determines to be useful to the Legislative Assembly.

(3) Insurers shall cooperate with the director in the development of the study and preparation of the report and shall provide information required by the director for purposes of this section.

Approved by the Governor July 22, 1991
Filed in the office of Secretary of State July 22, 1991

CHAPTER 650

AN ACT SB 184

Relating to environmental enforcement; creating new provisions; amending ORS 459.995, 466.645, 468.130, 468.135 and 468.893; and repealing ORS 468.125.

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

SECTION 1. Section 2 of this Act is added to and made a part of ORS chapter 468.

SECTION 2. (1) In addition to any other penalty provided by law, any person who intentionally or recklessly violates any provision of ORS 164.785, 459.205 to 459.426, 459.705 to 459.790, ORS chapters 465, 466 or 467 or this chapter or any rule or standard or order of the commission adopted or issued pursuant to ORS 459.205 to 459.426, 459.705 to 459.790, ORS chapters 465, 466 or 467 or this chapter, which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment shall incur a civil penalty not to exceed $100,000. The Environmental Quality Commission shall adopt by rule a schedule and the criteria for determining the amount of a civil penalty that may be imposed for an extreme violation.

(2) As used in this section:

(a) "Intentionally" means conduct by a person with a conscious objective to cause the result of the conduct.

(b) "Recklessly" means conduct by a person who is aware of and consciously disregards a substantial and unjustifiable risk that the result will occur or that the circumstance exists. The risk must be of such nature and degree that disregard thereof constitutes a gross deviation from the standard of care a reasonable person would observe in that situation.

SECTION 3. ORS 459.995 is amended to read:

459.995. (1) In addition to any other penalty provided by law:

(a) Any person who violates ORS 459.205, 459.270 or the provisions of ORS 459.180, 459.188, 459.190, 459.195, 459.710 or 459.715 or the provisions of ORS 459.386 to 459.400 or any rule or order of the Envi-

ronmental Quality Commission pertaining to the disposal, collection, storage or reuse or recycling of solid wastes, as defined by ORS 459.005, shall incur a civil penalty not to exceed [*$500*] **$10,000** a day for each day of the violation.

(b) Any person who violates the provisions of ORS 459.420 to 459.426 shall incur a civil penalty not to exceed $500 for each violation. Each battery that is disposed of improperly shall be a separate violation. Each day an establishment fails to post the notice required under ORS 459.426 shall be a separate violation.

(2) The civil penalty authorized by subsection (1) of this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed and collected under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapter 468.

SECTION 4. ORS 468.130 is amended to read:

468.130. (1) The commission shall adopt by rule a schedule or schedules establishing the amount of civil penalty that may be imposed for a particular violation. Except as provided in ORS 468.140 (3), no civil penalty shall exceed [*$500*] **$10,000** per day. Where the classification involves air pollution, the commission shall consult with the regional air quality control authorities before adopting any classification or schedule.

(2) In imposing a penalty pursuant to the schedule or schedules authorized by this section, the commission and regional air quality control authorities shall consider the following factors:

(a) The past history of the person incurring a penalty in taking all feasible steps or procedures necessary or appropriate to correct any violation.

(b) Any prior violations of statutes, rules, orders and permits pertaining to water or air pollution or air contamination or solid waste disposal.

(c) The economic and financial conditions of the person incurring a penalty.

(d) The gravity and magnitude of the violation.

(e) Whether the violation was repeated or continuous.

(f) Whether the cause of the violation was an unavoidable accident, negligence or an intentional act.

(g) The violator's cooperativeness and efforts to correct the violation.

(h) Any relevant rule of the commission.

(3) The penalty imposed under this section may be remitted or mitigated upon such terms and conditions as the commission or regional authority considers proper and consistent with the public health and safety.

(4) The commission may by rule delegate to the department, upon such conditions as deemed necessary, all or part of the authority of the commission provided in subsection (3) of this section to remit or mitigate civil penalties.

SECTION 5. ORS 466.645 is amended to read:

466.645. (1) Any person liable for a spill or release or threatened spill or release under ORS 466.640 shall immediately clean up the spill or release under the direction of the department. **Any person liable for a spill or release or a threatened spill or release shall immediately initiate cleanup, whether or not the department has directed the cleanup.** The department may require the responsible person to undertake such investigations, monitoring, surveys, testing and other information gathering as the department considers necessary or appropriate to:

(a) Identify the existence and extent of the spill or release;

(b) Identify the source and nature of oil or hazardous material involved; and

(c) Evaluate the extent of danger to the public health, safety, welfare or the environment.

(2) If any person liable under ORS 466.640 does not immediately commence and promptly and adequately complete the cleanup, the department may clean up, or contract for the cleanup of the spill or release or the threatened spill or release.

(3) Whenever the department is authorized to act under subsection (2) of this section, the department directly or by contract may undertake such investigations, monitoring, surveys, testing and other information gathering as it may deem appropriate to identify the existence and extent of the spill or release, the source and nature of oil or hazardous material involved and the extent of danger to the public health, safety, welfare or the environment. In addition, the department directly or by contract may undertake such planning, fiscal, economic, engineering and other studies and investigations it may deem appropriate to plan and direct clean up actions, to recover the costs thereof and legal costs and to enforce the provisions of ORS 466.605 to 466.680.

SECTION 6. ORS 468.135 is amended to read:

468.135. (1) [*Subject to the advance notice provisions of ORS 468.125,*] Any civil penalty imposed under ORS 468.140 shall become due and payable when the person incurring the penalty receives a notice in writing from the director of the department, or from the director of a regional air quality control authority, if the violation occurs within its territory. The notice referred to in this section shall be sent by registered or certified mail and shall include:

(a) A reference to the particular sections of the statute, rule, standard, order or permit involved;

(b) A short and plain statement of the matters asserted or charged;

(c) A statement of the amount of the penalty or penalties imposed; and

(d) A statement of the party's right to request a hearing.

(2) The person to whom the notice is addressed shall have 20 days from the date of mailing of the notice in which to make written application for a hearing before the commission or before the board

Attachment F
Agenda Item L
July 24, 1992
EQC Meeting

Attachment F

Lewis & Clark College

NORTHWESTERN SCHOOL OF LAW

April 20, 1992

Fred Hansen, Director
Oregon Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

Re: Recommendations of the Environmental Enforcement Advisory Committee

Dear Mr. Hansen:

It is with great pleasure that I write to summarize for you the work of the Environmental Enforcement Advisory Committee. I believe that the Committee achieved a remarkable amount in a short period of time. Our undertakings can be divided into two groups of activities. First, we reviewed the Department's proposed rule changes that were designed to implement Senate Bill 184. These revisions addressed both the new "Notice of Permit Violation" provisions (codified at ORS 468.126) and the $100,000 penalty authority (codified at ORS 468.996). Additionally, we reviewed the Department's penalty rules (OAR 340, Division 12) generally to determine whether changes could be made that would improve the penalty assessment process.

As is further explained below, the Committee achieved consensus on all but two issues. The Committee formally voted on numerous issues and those are discussed in this letter. On other issues, I have provided what I believe to be the Committee's consensus views. I also have circulated this letter to the members of the Committee and provided them with a brief opportunity for comment.

In general, the Committee believes that the Department is heading in the right direction on penalty assessment issues. Significant strides have been made in this regard in the past few years and we trust this trend will continue. The Committee believes that a vital enforcement program is an essential component of the Department's overall compliance assurance strategy.

In the space below I will attempt to summarize the major issues considered by the Committee and the results of that consideration. Unfortunately, due to the shortness of the Committee's tenure, there were several issues that the Committee identified but did not have time to address. For these issues, I will summarize the Committee's views regarding how they should be addressed by the Department in the future.

I. Senate Bill 184 Issues

A. Notice of Permit Violation

The Committee crafted proposed language to implement the new advance warning requirements. The new statutory language requires that under some circumstances, before assessing a civil penalty for violations of air, water, or solid waste permits, the Department must provide the permittee with a notice indicating that a penalty will be imposed unless the permittee submits within five days either a certification of compliance or a proposed compliance schedule acceptable to the Department. No penalty is to be imposed if the violator satisfies the requirements specified in this notice, referred to as a Notice of Permit Violation ("NPV"). No prior notice is required if the violation is intentional, if the violation would not normally occur for five consecutive days, or if the permittee has received notice of any permit violation within the preceding three years.

The proposed language codifies this statutory scheme, while at the same time clarifying several points and adding at least one substantive requirement. The most noteworthy features of the Committee's recommendations include the following:

1. The Committee recommends that NPVs be mandatory for all Class I violations and "repeated or continuous" Class II or III violations where a Notice of Noncompliance ("NON") has failed to achieve compliance or satisfactory progress toward compliance. The Committee determined this to be necessary for two reasons: first, because it ensures that serious or repeated violations are treated through a more formal process; and second, because the Committee determined the legislative intent of the statute is that only NPVs (not NONs) may qualify as the prior notice necessary to enable the Department to seek penalties without prior notice for any future violations.

2. Given the statutory five-day deadline for the achievement of compliance or the submission of a compliance schedule, the Committee strongly recommends that, in

appropriate cases, the Department inform the permittee in the NON that it has documented a permit violation and will be issuing an NPV that will require response within five days. The Committee further recommends that the Department provide permittees with clear direction and guidance in any NPVs on the Department's expectations for compliance therewith.

3. The proposed language makes clear that any compliance certification submitted under this Section must include a sufficient description of the information on which the permittee is certifying compliance to enable the Department to determine that compliance has been achieved.

4. The proposed language also requires that any compliance schedules extending over more than six months be incorporated into an order providing for stipulated penalties in the event of any noncompliance therewith (absent a force majeure). The Committee's concern on this point was that, in such cases, the very fact that a prolonged compliance schedule is necessary indicates that the violator must be in serious noncompliance with the permit at issue. If the violator is going to be the beneficiary of an extended "grace period" during which it is immune from penalties for violation of its permit, the Committee believes that the violator should, at a minimum, be required to submit to an enforceable compliance schedule providing sanctions for non-compliance.

B. $100,000 Penalty Authority

Section 2 of SB 184 (codified at 468.996) requires the Environmental Quality Commission to adopt a schedule and criteria for determining the penalties to be imposed under the new $100,000 penalty authority. The Committee is recommending rules providing for three tiers of base penalties that vary based upon the violator's degree of culpability. These are: $50,000 for reckless violations, $75,000 for intentional violations, and $100,000 for flagrant violations. These violations are then subject to being adjusted up or down according to the standard adjustment factors (although under no circumstances may the penalty exceed the $100,000 statutory cap).

The Committee also is recommending new definitions of "intentional," "reckless," and "flagrant." The first two of these, which will apply only under the $100,000 schedule and criteria, are consistent with the statutory definitions and clarify that the Department need only show that the violator intentionally or recklessly violated the law at issue, not that it intentionally or recklessly caused the resulting environmental harm. The Committee recommends that violations be classified as

flagrant where the individual performing or directing the act had actual knowledge of the law and consciously set out to commit the violation.

II. Other Division 12 Recommendations

A. Burden of Proof Issues in Contested Case Hearings

This was the most controversial topic addressed by the Committee. The Department staff expressed its concern to the Committee about several recent decisions in which the Department's proposed penalties had been reduced substantially through the contested case hearing process. The Committee was unanimous in agreeing both that this was a problem and that part of the problem was inherent in the current definition of the phrase "Magnitude of Violation." This definition does not indicate clearly that the Department, at least initially, is to consider all of the specified factors in determining the magnitude of any violation. The Committee recommends that this definition be amended to make this obligation clear. At the same time, however, the Committee recommends that the new definition make clear that any one factor (e.g. toxicity) may be dispositive in a particular case. In the hazardous waste context, for example, the Committee believes that, under some circumstances, an illegal release of extremely toxic waste need not be of large volume or lengthy duration in order to justify a determination that the violation qualifies as a major deviation.

While a new definition of magnitude should help, the Committee was concerned that this step alone will not solve the fundamental uncertainty regarding the standard of review that the hearings officer should apply to the Department's penalty determinations. While the entire Committee recognized this as a serious issue, the Committee was divided on what further steps should be taken to address the standard of review issue. First, the entire Committee felt that the Department should continue to focus on and refine, as feasible and appropriate, its methodology for categorizing particular violations for purposes of the penalty assessment process. In this regard, the Committee notes that the Department has made significant strides in this area and that, in its view, several recent case summaries reviewed by the Committee provided satisfactory connections between the facts presented and the selected penalty classifications.

The Committee split, however, on how the standard of review issue should best be addressed. A majority of the Committee members (by a six to two vote) determined that the Division 12 rules should specifically address the standard of review question. The majority's view was that the rulemaking process is best-suited to addressing the conceptual issues

involved in allocating penalty decision-making authorities between the Director and the hearings officer. The two Committee members in the minority on this issue believed no rule changes were needed. These members determined that the Department had used adverse hearing decisions to provide insight on the nature of the Department's burden and that the Department's connection of the facts of a particular case to the penalty assessed had become much more detailed. These members believed that future adverse decisions, if any, could be appealed, if the Department believes they are incorrect, to the Environmental Quality Commission for a final decision for the Department on whether a particular penalty was correctly assessed.

At a subsequent meeting, the Committee (this time by a four to two vote) approved specific rule language that it recommends for adoption. This language has two key components. First, with regard to factual findings, the Department bears the burden of proof by a preponderance of the evidence standard. With regard to discretionary matters, however, the Department need only explain its determination and establish a rational basis for its exercise of judgment. An example of a situation calling for the exercise of discretion, which is specifically mentioned in the proposed language, would be the determination of whether, in the absence of predetermined criteria, the magnitude of a particular violation was major, moderate, or minor. Once the Department establishes a rational relationship between the facts and its exercise of judgment on this issue, the hearings officer would be required to uphold that decision.

In the majority's view, the above scheme is necessary because, at least until the Department generates a much more extensive enforcement history, the case-by-case decisions that are made regarding the classification of particular violations must be viewed as inherently judgmental. Some of the hearings officer's recent opinions appear to hold the Department to a test that requires it to anticipate, in advance, the myriad of unique circumstances that may be presented in particular cases in an effort to ensure absolute consistency. While the Committee is unanimous in its view that such a requirement would be unworkable, the two factions within the Committee split on how the issue should be resolved. The majority felt that the judgmental nature of the decision-making process should be acknowledged in the rules, with a provision that the Department's exercise of judgment is to be upheld so long as it has established a rational basis therefor. The majority also noted that this scheme appears to constitute only a clarification of what is already implicit in OAR 340-11-132, which provides that the hearings officer shall reduce the amount of any civil penalty

assessed by the Director unless either the Department fails to establish the underlying facts or new evidence is introduced regarding aggravating or mitigating factors. In the majority's view, this language already contemplates that the Director is not to be overturned regarding his exercise of judgment as it relates to established facts. The minority felt that the burden-allocating process has evolved and that, to the extent that these issues remain controversial, they should be worked out through contested cases and appeal to the Commission, if necessary. The minority also pointed out that a deferential standard at the hearings officer stage might result in more appeals to the Commission by respondents because of the different standard of review available in that forum.

B. Economic Benefit

The Committee agreed that the Department always should seek to recoup the full economic benefit gained by a violator through noncompliance. To the extent allowed within the relevant statutory maximums, the Department should seek to recoup the full economic benefit in addition to the gravity-based penalty amount. In this vein, the Committee recommends two major changes to the present scheme.

First, the Committee recommends that the economic benefit component be removed from the gravity-based portion of the civil penalty calculation and be reinserted at the end of the formula. This would clarify that the economic benefit is to be added, in full, to the gravity-based portion of the penalty in determining the final penalty amount.

Secondly, while the Committee recognizes that the Department's penalty authority on a per-violation basis is limited by the statutory maximums, the Committee recommends that the rules be revised to clarify the Department's authority to impose multi-day penalties, where applicable, in order to ensure that it recoups the full economic benefit gained by the violator. In such situations (i.e., where the purpose of assessing a multi-day penalty is to recoup the full economic benefit), the Committee recommends that the rules make explicit that the Department need not impose a gravity-based amount for more than one day.

The Committee recognizes, of course, that the Department already has the authority to seek multi-day penalties, which could include multiple gravity-based components, whenever a violation continues for more than one day. The Committee, however, seeks to encourage the Department to utilize its multi-day authority even where the gravity of the offense otherwise

might not warrant it, in situations where this step is necessary to raise the statutory maximum to an amount that allows the Department to recoup the full economic benefit. The majority of the Committee, however, by a four to three vote, determined that the Department should retain the discretion not to move to multi-day penalties for purposes of recouping the full economic benefit if it deems it to be inequitable or otherwise inappropriate in a particular case.

Two other points relating to economic benefit deserve mention. First, the Committee recognizes that the task of determining the economic benefit gained through noncompliance is complex. While the Committee feels that the conceptual framework can be laid out at this time (see the recommended language for OAR 340-12-045(1)(d)), it recommends that the Department request a work session with the Commission to determine with more precision the approach the Department should take to the actual calculation of this amount. This is discussed further below. The second - related - point is that, due to the complexity of the task, the Committee recommends that the Department not be required to calculate the economic benefit where it is deemed to be de minimis as compared to the gravity-based penalty amount.

C. Inability to Pay

The Committee recommends several changes relating to how the Department should address inability-to-pay issues. First, the Committee believes that, as with economic benefit, the inability-to-pay component should be removed from the gravity-based penalty calculation and be factored in at the end of the process. This is in accordance with the general principle, preserved in the Committee's proposal, that the Respondent clearly bears the burden of proof in seeking a penalty reduction based upon its inability to pay. As a practical matter, the Committee therefore feels that the Department should generally leave this component out of the analysis until the Respondent comes forward with information in its attempt to justify a reduction based upon these grounds.

Removing this component from the gravity-based calculation solves a second problem currently posed by OAR 340-12-045(1)(c) in that it gives the Department the flexibility to make inability-to-pay adjustments larger than the 40% maximum adjustment currently allowed. In many instances, respondents may not be able to afford even 60% of the base penalty (which, at this point, would include both the gravity-based and economic benefit components). While the Committee feels that the Department should have the discretion to impose a penalty that may force a company to go out of business, the Committee also

feels that the Department should have the discretion to reduce a penalty so as to avoid such a result in most cases. Situations where the Department may want to deny an inability-to-pay adjustment might include those where the violation was intentional or flagrant or where the Respondent's financial condition is such that it poses a serious concern regarding its ability or incentive to remain in compliance. The proposed rule language embodies these points.

The Committee also recommends that, prior to reducing a penalty based upon inability-to-pay concerns, the Department's first option should be to place the Respondent on a payment schedule with interest on the unpaid balance for any delayed payments. The proposed language provides that the Department should agree to a permanent reduction only where it determines that the Respondent is unable to meet such a payment schedule.

Finally, as with economic benefit, the Committee recognizes that the calculation of a given respondent's ability to pay a penalty is a complex matter. Here also, the Committee recommends that the Department request a work session with the Commission to determine with more precision the approach the Department should take to the actual calculation of this amount.

III. Unresolved Issues

A. Deficiencies in the Division 12 Matrices

Many members of the Committee were concerned that the $10,000 matrix established at 340-12-045(1) establishes penalty amounts that are too low in several of the boxes. Most notably, even a violation of major magnitude that results in a major risk to public health or the environment generates a base penalty of the matrix of only $5,000, which is only 50% of the statutory maximum. Although this penalty would be susceptible to being increased due to aggravating factors, such as prior significant violations, these members were concerned that, in general, the penalties for such violations are likely to be too low. We note that the highest bracket of both the $2,500 and $500 matrices call for penalties of at least 80% of the applicable statutory maximums (100% under the $2,500 matrix). These members urge the Department to reconsider the amounts in all of the boxes of the $10,000 matrix with a view toward readjusting them upwards.

Other members of the Committee expressed their view that it was premature to conclude that the penalty amounts in the $10,000 matrix were too low until the Department's staff had reviewed penalties assessed under that matrix and the nature of

the violations for which the penalties were assessed. They urged that such a review would provide a better basis for determining whether the matrix amounts were too low, too high, or satisfactory.

Members of the Committee were also concerned that the extent of harm caused by a particular violation seems to be double-counted under the current matrices; it appears to be considered in determining both the class (risk of harm) and the magnitude of violation. At this time, however, the Committee was unwilling to delete the extent of harm from consideration in determining the magnitude of violation because to do so would result in penalties that are simply too small under the current matrices. Part of the problem appears to be that, under all of the matrices, a finding of only a minor extent of deviation results in penalties that are too low in instances where the harm is significant.

Quite frankly, the Committee seized on these issues too late in the process to achieve a clear consensus of their scope or seriousness, let alone address them productively. We urge the Department to consider them as soon as possible, even in this rulemaking process if it can be accomplished. Members expressed concern that these issues should not be put on a "back-burner" to be addressed in sometime off in the future.

B. Environmental Credit Projects

The Committee recommends that the Department, in conjunction with the Department of Justice, explore the idea of applying funds that would otherwise be spent on environmental penalties in ways that will confer direct environmental benefits - so-called "environmental credit" projects. At the national level, this is a growing trend. The Committee urges the Department to give it serious consideration.

The Division 12 rules currently do not take a position on the issue of whether "environmental credits" might ever be appropriate. OAR 340-12-047, which deals with settlement, is silent on this point. Although, by statute, all civil penalties collected by the Department must go into the General Fund, there is significant federal court precedent indicating that funds derived through settlements need not be characterized as penalties and therefore may be devoted to credit projects. Additionally, EPA independently has determined that it has this discretion in settling cases under the federal environmental programs.

The Committee is of the view that environmental credit projects can be an important element of the positive resolution of many enforcement cases. The Committee recognizes that, if this trend is pursued, steps must be taken to ensure that the deterrent effect of the Department's enforcement cases remains significant. These steps might include, for example, a clear requirement that the tax advantages of spending funds on a credit project instead of a penalty be taken fully into account. Additionally, the Department might want to ensure that the credit project was not legally required or even, perhaps, that it was not something the company was intending to do irrespective of the enforcement action.

Notwithstanding these complicating elements, the Committee considers the credit project idea to be worthy of full exploration. We hope the Department will consider both whether it wishes to pursue this path and, if so, whether legislative change is necessary in order to effectuate it. If the Department decides to pursue this option, the Committee would be happy to be involved in the process of determining the appropriate framework for the program.

C. Calculation of Economic Benefit and Inability to Pay

As previously mentioned, the Committee recommends that the Department request a work session with the Commission to determine with more precision the approaches the Department should take in addressing both the economic benefit and inability-to-pay issues. The Committee further recommends that the Department consider seeking assistance from accountants and others who may have more expertise than the Committee members in these matters. Some Committee members may also be interested in participating in this process.

The Committee took no position on the issue of whether the results of any such efforts should be implemented through guidance or further rulemaking. We leave that decision to the discretion of the Department and the Commission.

In closing, I would like to reiterate the Committee's overall impression that the Department is on the right course with respect to the changes that it has made in its enforcement program over the past few years. Please feel free to contact me if you have any questions about the Committee's work.

Sincerely,

Craig N. Johnston
Assistant Professor of Law

cc: Committee Members
Tom Bispham
Van Kollias
Holly Duncan

Attachment G
Agenda Item L
July 24, 1992
EQC Meeting

Attachment G

State of Oregon
Department of Environmental Quality **Memorandum**

Date: June 23, 1992

To: Environmental Quality Commission

From: Michael V. Nixon, Enforcement Section

Subject: Reports on public hearings held on May 18, 1992, in Portland, Eugene, Medford and Pendleton, Oregon, concerning the proposed amendments to OAR Chapter 340, Division 12

Four hearings were held simultaneously around the state in Portland, Eugene, Medford and Pendleton on Monday, May 18, 1992, at 11:00 a.m., until all testimony was completed, to provide the public an opportunity to provide oral and written testimony on the proposed amendments to the Department's Enforcement and Civil Penalty Assessment Procedures. The Hearing Officers for each location were the following members of the Enforcement Section:

Portland - Melinda Bruce; Eugene - Linda Rober;
Medford - Nancy Hogan; Pendleton - Van Kollias, Mgr.

Only one person provided testimony at any of the hearings. Mr. Kenneth Hobach provided oral testimony at the Medford hearing on behalf of the Josephine County School District. Mr. Hobach's testimony is transcribed and attached to this memorandum. The Department's response to Mr. Hobach's comments are included in the summary of comments and responses contained in Attachment I.

List of Witnesses

Portland: Craig Smith, N.W. Food Processors Association;
Diana Godwin, Esq.
D. Jones, Northwest Region Office, DEQ

Medford: Kenneth Hobach, Josephine County School Dist.
Mike Andrew, Royal Oak;
Daniel B. Wheaton, City of Grants Pass;
George A. Geer, City of Grants Pass

Eugene: James Ollerenshaw, City of Eugene

No one attended the hearing in Pendleton.

ORAL COMMENT PRESENTED
TO THE ENVIRONMENTAL QUALITY COMMISSION'S HEARING OFFICER

RE: PROPOSED AMENDMENTS TO OAR, CHAPTER 340, DIVISIONS 11 AND 12.

PLACE: CITY COUNCIL CHAMBERS
MEDFORD, OREGON

DATE: MAY 18, 1992

TIME: 11:00 A.M.

TRANSCRIPT OF TESTIMONY

OF KENNETH HOBACH

JOSEPHINE COUNTY SCHOOL DISTRICT

<11:36 a.m.>

This is Kenneth Hobach, I'm from Josephine County School District. I have a concern about the Senate Bill 184, Section 9, codified as ORS 468.126 - the Advance Notice statute.

The new law apparently requires that a five-day advance notice be given one time within 36 months. This seems to be an extreme to me, in the fact that small companies or school districts such as ours, one person may hold the keys to a lot of different departments, and if you have a staff turnover, you may -- the 36 months -- seems like three years is a long time that you're only going get one warning, so to speak, and then the next time you could be hit with a penalty. This just doesn't seem quite right and also I'm not clear as to whether this would be any area that you hold a permit you get one five-day notice so if our sewer -- if we have a problem with one of our sewer disposals and one site with -- if -- and we have another problem at another

site, would that -- would that then be that we've already had our five-day advance notice, or does that mean that we'd get a five-day advance notice at site number two? Does this mean that we get a five-day advance notice for sewer disposal, but if we have a water violation that's already -- we've already have our five-day notice, so we'd be subject to penalty immediately for having a water violation. Not clear to me, but I do believe that one we'd be subject to penalty immediately. One five-day advance notice every three years is not adequate and I don't think that seems to be fair. Thank you.

<end>

THE HEARING WAS ADJOURNED AT 1:30 P.M. WITHOUT FURTHER TESTIMONY.

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Attachment H
Agenda Item L
July 24, 1992
EQC Meeting

Attachment H

Attachment H
Agenda Item L
July 24, 1992
EQC Meeting

SUMMARY AND RESPONSE TO WRITTEN COMMENTS
AND COMMENTS RECEIVED AT THE PUBLIC HEARING

The comments are addressed below in the order of appearance of the issue within the proposed rules

OAR 340-12-030 DEFINITIONS

Comment: The definition of "flagrant" is probably void for vagueness. James M. Whitty, Legislative Counsel for Associated Oregon Industries, commented that the amended definition of "flagrant" creates a standard of culpability that departs from any established legal theory of imputed knowledge. Mr. Whitty explains that this definition indicates that a respondent may be held to have been flagrant as a result of the knowledge and intent of an individual that actually performed the act in question or directed it, while the definition does not indicate the relationship between the respondent and the person with the requisite knowledge and intent.

Response: The Department has consulted with the Attorney General's Office and decided not to amend the definition of "flagrant" as was suggested by the 1992 Environmental Enforcement Advisory Committee because of the ambiguity pointed out by Mr. Whitty. The current definition will continue.

Comment: The definition of "intentional" is from ORS 468.996(2)(a) and should only be applied to $100,000 penalty cases under that law. Laurie Aunan of Oregon State Public Interest and Research Group (OSPIRG) commented that DEQ should keep current definition for violations other than violations of ORS 468.996 because it is less stringent. The ORS 468.996 language is purposely more stringent due to the potential for such a high civil penalty.

Response: While understanding OSPRIG's rationale, the Department considered that approach early in the drafting stages of the proposed amendments and consulted with the Attorney General's office on the matter. The Department and the Attorney General's office prefer the clarity and efficiency of using one definition for all cases.

Comment: "Intentional" changes the statutory definition considerably and negatively. Katherine Schacht of the Metropolitan Wastewater Management Commission (MWMC) commented that the proposed rule broadens the scope of the term "result" and goes beyond the statute.

Response: The Department recognizes that the draft rule language does not satisfactorily clarify the statutory definitions, so the Department will adopt the statutory definition verbatim and refrain from any attempts to interpret legislative intent by rule.

Comment: The definition of "magnitude" is clarified now. Ann Wheeler of the Oregon Environmental Council (OEC) commented that the new definition should help in the hearing process.

Response: The Department agrees that this amendment does clarify what is meant by "magnitude" and it should have positive effects in the contested case hearing process.

Comment: The definitions of "negligence/negligent" and "reckless/recklessly" are too vague. Jim Hill of the City of Medford's Wastewater Reclamation Division (WRD) commented that the definitions are too open to interpretation.

Response: Recklessness is defined by ORS 468.996(2)(b). The Legislature adopted this definition from other statutes which have been long-established and applied successfully. The Department agrees with Mr. Hill's comments on the negligence definition and consulted with the Attorney General's office on the matter. The negligence definition will be further defined to read: "failure to take reasonable care to avoid a foreseeable risk of committing an act or omission that constitutes a violation."

OAR 340-12-040 NOTICE OF PERMIT VIOLATION ("NPV")

Comment: Ann Wheeler of OEC commented that the language in 040(1)(c) is necessary to hold a permittee to the compliance schedule within an order by requiring sanctions for noncompliance.

Response: The Department appreciates OEC's comment and agrees that the rule language is necessary.

Comment: The five-day deadlines for responses to an NPV are too strict. Don Arkell, Lane Regional Air Pollution Authority (LRAPA) commented that LRAPA does not have a process that issues Notice(s) of Noncompliance (NON's) prior to issuing formal enforcement actions (FEA's). The result is that respondents may not have forewarning of a pending NPV, and five days is unreasonable amount of time for respondents to comply with the statutory deadline.

Response: ORS 468.126(1) mandates the five-day limit. The Department believes that the statute provides for the exercise of discretion by LRAPA in determining the acceptability of a permittee's initial response or proposal under this law.

Comment: Allow local variation of acceptance criteria for permittee responses and proposals, where appropriate. Don Arkell of LRAPA suggested that rule language be added to OAR 340-12-040(1)(e) as follows:

> "For purposes of this section, [when] a regional authority issues a NPV, different acceptability criteria in (a) and (b) may apply."

Response: The Department recognizes the practical necessity for providing for individual regional authority acceptability criteria pertaining to NPV's that authorities such as LRAPA may issue. The Department will recommend adoption of rule language as suggested.

Comment: Any water quality violation could be subject to an NPV. Jim Hill of the City of Medford WRD commented that violations such as weekly mass limit could be subject to an NPV.

Response: That is correct. All permit conditions are covered under the NPV law, regardless of the severity of the violation.

Comment: The 36-month lifespan of the NPV seems too long and therefore, unfair. Kenneth Hobach of the Josephine County School District commented that three years is a long time for one

warning to have such an effect that a civil penalty may issue almost three years after the first permit violation occurred, especially considering turn-over in personnel that small companies or school districts often experience.

Response: The 36-month lifespan of the NPV is mandated by law. It basically states the permittee will get only one warning notice before a civil penalty may be imposed for any permit violation occurring in the next three-year period.

Comment: After issuance of an NPV at site #1, does the sanction for a subsequent violation apply if that subsequent violation occurs at a different facility, or site #2? Mr. Hobach posed the above question in oral testimony presented to the Hearing Officer at the public hearing in Medford.

Response: NPV's are permit-specific and subsequent sanctions (such as civil penalties) would only be issued for subsequent violations of that particular permit, regardless of any other permits or facilities that the person or entity might have.

OAR 340-12-042 CIVIL PENALTY MATRICES

Comment: The fines are too high. Various individuals, including Bill W. Lee of Bill W. Lee & Son Construction, Jennie Otley, Ethel I. Smith, Thom Seal of Eastern Oregon Mining Association, and the Honorable Walt Schroeder, Oregon State Representative, District 48, commented that the civil penalty increases from $500 to $10,000 are exorbitant.

Response: The increases of maximum daily civil penalties have been authorized by the Legislature. Most recently, the maximum daily civil penalty for solid wastes and noise were increased from $500 to $10,000 by the Legislature in 1991 Oregon Laws, Chapter 650, Section 3. The statutory maximum of $10,000 for air and water violations has been in effect since the early 1970's, and for hazardous waste violations since the early 1980's.

Comment: Justify increase in Class I, $10,000 base penalties ("BP"). Jim Craven of the American Electronics Association (AEA) commented that there is no apparent justification for increasing the base penalties for Class I violations in the $10,000 matrix.

Response: The 1992 Division 12 Amendments include increases for Class I major and moderate magnitude violations from $5,000 and $2,500 to $6,000 and $3,000, respectively. Some increase in civil penalty amounts was made at the suggestion of some members of the 1992 Enforcement Advisory Committee. After three years of using the current base penalties, the Department believes that the most serious violations, with Class I major and moderate base penalties, should be increased so that the calculated penalty will be closer to the statutory $10,000 maximum. The Department has decided not to amend the base penalty for a minor violation, which is currently $1,000.

Comment: Recommendation of further increases in base penalties. Janet Tobkin commented that the Department should further increase base penalties because the penalties are too "affordable."

Response: The Department believes that the proposed amendments, with the increased base penalties for violations subject to the $10,000 daily maximum, provide for civil penalties commensurate with the seriousness of the violations.

OAR 340-12-045 CIVIL PENALTY DETERMINATION

For reference, the civil penalty formula used in the determination procedure is based on factors that the Department must consider in accordance with ORS 468.130(2), and appears in the proposed rules as follows:

$$BP + [(.1 \times BP)(P + H + O + R + C)] + EB$$

Where "BP" is the base penalty;
"P" is for prior significant actions (as defined in OAR 340-12-030);
"H" is the respondent's past history;
"O" is whether the violation is repeated or continuous;
"R" is the cause of the violation;
"C" is the respondent's cooperativeness and efforts to correct the violation; and
"EB" is the approximate dollar sum of the economic benefit that the respondent gained through noncompliance.

Comment: "Prior Significant Actions" ("P") factor and "Past History" ("H") factor adjustments are illogical. Jim Whitty for AOI comments that this subparagraph should be revised to simply convert both the H and P factors to zero when their sum would otherwise be a negative numeral in order to prevent violators from unfairly benefitting from the applications of these rules.

Response: The Department appreciates Mr. Whitty's comment and suggestion. The final rule as proposed for adoption reflects a change as Mr. Whitty suggested to address this apparent problem.

Comment: The rules appear to have become complex and confusing, especially civil penalty determinations. Don Haagensen, Esq., for Chemical Waste Management of the Northwest, Inc., and Western Compliance Services, Inc., and a member of the Enforcement Advisory Committee, commented that DEQ should make an effort to simplify and streamline the formula for determining the civil penalty. As an example, Mr. Haagensen stated that "H" and "C" ("Cooperativeness and Efforts to Correct the Violation") appear to overlap to some degree. Mr. Haagensen suggested that to encourage utmost cooperation and responsibility, "H" ("Past History") and "C" should be set up so that "H" and "C" can cancel out "P" ("Prior Significant Actions").

Response: The proposed amendments do actually simplify the process of determining civil penalty assessments, and are also intended to clarify the relationships of the various rules as applied together in various cases. "H" and "C" do contain a common concept, cooperation, but pertain to different violations and different formal enforcement actions. "H" relates to the Respondent's cooperativeness in a prior case (as characterized by "P" factor), while "C" relates to the Respondent's cooperativeness in the case at hand. This should foster utmost cooperation and responsibility, aside from recognition of any civic, legal, or moral responsibility, because a credit for present cooperation remains a credit for future cases, should another case ever arise.

Comment: "P" factor ("Prior Significant Actions"). Mr. Haagensen also commented that it is unclear what is meant by "the first original Division 12 rules." Also, because the civil penalty system changed so significantly in March of 1989, it is neither fair nor equitable to use enforcement actions that occurred before that time under completely different rules and

circumstances in computing current penalties. The Department and the Environmental Quality Commission recognized the significance of the change in civil penalty rules that took place in March 1989 by specifically providing that the rules were prospective only.

Response: The Department has clarified this rule by stating that any violations that occurred prior to the adoption of the 1992 amendments will be classified in accordance with the current classification system as created by the adoption of the Division 12 amendments of March 1989. The purpose of this new rule is to avoid treating older priors more harshly than priors issued between March 1989 and the effective date of the 1992 amendments. Under the 1992 amendments, several violations have been upgraded in class. Therefore, all priors will be evaluated on the same scale in order for all respondents to be treated equitably.

This rule amendment was reviewed and approved by the Attorney General's Office in consultation with Department staff after receipt of Mr. Haagensen's comment. Mr. Haagensen's interpretation of current OAR 340-12-080 (OAR 340-12-090, as proposed), is inconsistent with the historical intent and application of the rule. The purpose and intent of the current OAR 340-12-080 was to point out that any active, unresolved contested cases that were pending at the time of the adoption of those rules (March 1989) would not be modified as a result of the adoption of those rule amendments. Current OAR 340-12-080 was never meant to apply to the "P" factor in the civil penalty determination formula. The Department's application of the rule shall continue as intended.

Comment: "Past History" ("H") factor - Add +2 if violator took no action to correct. Laurie Aunan of OSPIRG, who was a member of the 1992 Enforcement Advisory Committee, commented that the Advisory Committee had recommended that, in order to balance the availability of -2 if violator took some action, the Department should assess a +2 if the violator did not take action to correct the violation.

Response: If a violator took no action to correct, then possibly they could be sanctioned with another formal enforcement action. Further, if a violator took no efforts to correct a past violation, that fact would have been penalized at that time in determining the prior penalty sum. The effect of this rule is to give credit for corrective efforts for any past violation. The

Department believes that this is the intention of the statute and fosters voluntary remediation efforts by violators.

Comment: "Cause of the Violation" ("R") factor - add +4 for reckless/grossly negligent violations. Ms. Aunan suggested that the Department keep the current provision for adding a +4 for violations caused by grossly negligent acts.

Response: The Attorney General's Office discouraged this for a variety of reasons, and the Department agrees. It is undesirable to be spending resources, especially in contested case situations, discerning the fine lines between negligence and gross negligence, unless required by law, since most environmental laws and rules are based on a strict liability scheme.

Comment: Economic Benefit of Noncompliance ("EB") - OSPIRG urges the Department to adopt language that EB "shall increase" by the dollar sum of EB instead of "may increase."

Response: Where the Department can determine the EB value, it will, but it is not always cost effective to investigate and calculate the economic benefic of noncompliance. In some instances, there is no reliable means to do so. The Department intends to develop formula(s) and policies for institution in such cases and present to the Environmental Quality Commission for consideration and guidance at a future EQC work session. Many violations are single occurrences that do not result in any economic benefit to the violator.

Comment: "EB"/"Inability to Pay" - OSPIRG supports the innovation of EB as proposed and Ann Wheeler of OEC, also a member of the Advisory Committee, also supports the removal of the inability to pay from the civil penalty calculation and supports the consideration of that issue separately as proposed.

Response: The Department plans to bring specific methods of calculating "EB" and "inability to pay" to the Commission as work session items in the near future.

Comment: Jim Whitty, Legislative Counsel for Associated Oregon Industries (AOI), who was also a member of the Advisory

Committee, expressed a concern that the Department would treat a violation as a continuing one in order to recover the economic benefit, even if the actual duration of the violation was shorter.

Response: The Department points out that when multi-day violations also result in an economic benefit to a violator, DEQ may assess multi-day penalties to equal the dollar sum value of the sum of the economic benefit, but only up to the maximum amount authorized by law (e.g., $10,000 per day, per violation).

In other words, if a violation occurs for an extended period of time and provided an economic benefit to the violator, then the Department has the option to cite the violator for a violation at a daily penalty sum and multiply that sum times the number of days that the violation occurred, at least equivalent to the dollar sum of the economic benefit that the violator received. Such a civil penalty calculation is consistent with the Department's legal authority and has been done for some cases in the past when appropriate.

OAR 340-12-050 AIR QUALITY CLASSIFICATIONS

Comment: January 1992 amendments to Division 12 made by the Air Quality Division related to interim emission fees were omitted. Jim Craven of the American Electronics Association (AEA) commented that the January 1992 line item additions to Division 12 air quality classifications of violations related to interim emission fees were omitted.

Response: The Department agrees and has included those amendments in this rulemaking proposal.

OAR 340-12-055 WATER QUALITY CLASSIFICATIONS

Comment: New OAR 340-12-055(1)(c) is too broad. James Hill of the City of Medford WRD commented that the rule is too broad because any discharge that doesn't meet NPDES permit requirements would be sanctionable under this rule as partially treated waste.

In addition, Katherine Schacht of MWMC commented that while such violations justify more than treatment as Class III violations,

it hardly seems to merit designation as Class I given the significantly higher penalty attached to Class I.

Response: The Department agrees that the rule needs to be clarified and has revised it to cover:

1. Discharges of waste without a permit; and
2. Discharges of waste from a discharge point not authorized by a waste discharge permit (e.g., raw sewage by-passing from a sewage pumping station).

The Department believes that any of the above types of discharges are serious violations and are appropriately classified as Class I violations.

Comment: New OAR 340-12-055(1)(g) language ambiguous. Gareth S. Ott, Sanitary Engineer of the City of Gresham, commented that the rule seems to imply that the operator of the municipal treatment works is liable under this rule for violations of pretreatment standards that either impair or damage the treatment works, or cause a major harm or pose a major risk of harm to public health or the environment.

Response: The rule does not apply to operators. The rule applies to users of municipal treatment works.

Comment: New OAR 340-12-055(2)(d) is too broad. Mr. Hill of the City of Medford WRD also commented that the term, "by any means," as contained in the proposed rule is too broad.

Response: The addition of this rule contains the language of the water quality statute, ORS 468B.025(1)(a), which states:

> "no person shall...Cause pollution of any waters of the state or place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means."

Violations of this law will be specifically classified as Class II violations, unless they cause major harm or pose a major risk of harm, in which case they will be Class I violations under OAR 340-12-055(1)(j).

Comment: Subsections 2(b), (f) and 3(a) combine to lead to anomalous results for relatively minor paperwork violations. Ms. Schacht of MWMC commented that subsection 3(a) makes failure to submit a discharge monitoring report (DMR) on time a Class III violation, but does not cover the classification of the late submittal of various other reports which are otherwise also required by rule, permit or license, and presently classed in subsection 2(b). Further, that any other remaining "paper violations" would be classified as Class II by operation of the catch-all provision in subsection 2(f).

Response: The intent of the exception of timely submittal of DMR's is clear. Violation of this rule is properly classified as a Class III within the scheme of water quality permit violation classifications because it is, as Ms. Schacht states, a relatively minor paperwork violation. The new subsection was created in recognition of that fact. However, the current classification of all other timely submittal requirements as Class II violations shall continue as currently classed because the Department considers the timely submission of all other reports important in order to maintain the integrity of the reporting system required by air, water and solid waste permits.

Comment: Subsection 3(c) does not contain equivalent minor violations related to removal efficiency that should be included as Class III violations along with those proposed that are related to minor permit limitation exceedences. Ms. Schacht of MWMC points out this apparent inconsistency, noting that under the proposed rules, achieving 84% removal would be at least a Class II violation, while exceeding a summertime concentration limit for the same pollutant by 20% would only be a Class III violation under subsection 3(c).

Response: The Department appreciates Ms. Schacht's point and recognizes the inconsistency that appeared in the proposed rules that were subject to public comment. As a result, the Department has further amended subsection 3 to provide for equivalent removal efficiency violations as described by Ms. Schacht, as well as for minor pH limitation violations.

OAR 340-12-065 SOLID WASTE MANAGEMENT CLASSIFICATIONS

Comment: "Knowingly" should be added to proposed OAR 340-12-065(1)(p)-(r). Max Brittingham, Executive Director of the Oregon Sanitary Service Institute (OSSI), commented that the term "knowingly" should be added to subsections 1(p) through 1(r), inclusive, "to prevent a steep fine for a possible inadvertent violation that may often be impossible to detect." Mr. Brittingham referred to the inclusion of "knowingly" in the preceding subsection 1(o), relating to the disposal of lead acid batteries and single quantities of used oil greater than 50 gallons.

Response: These proposed rules were reviewed by the 1991 DEQ Solid Waste Advisory Committee which was included members from the regulated community. The rules contained in Division 12 do not create violations, they only classify violations as set forth in the respective divisions of OAR Chapter 340, or set forth otherwise in federal or state law. The inclusion of "knowingly" in subsection 1(o) is required as a result of the language contained in the underlying statute that prohibits the conduct as described in subsection 1(o). The statute and the rule(s) are directed at the person who violates the prohibition by disposing such materials in the purposeful manner described in subsection 1(o) ("knowingly").

The other three subsections are directed at the operators of permitted facilities who have an obligation to actively monitor what is being disposed of at their facilities in order to safeguard against the subversion of the solid waste management regulatory program as created in the public interest by the legislature and the Environmental Quality Commission, in consultation with the regulated community. Violations of subsections 1(p) through 1(r) will be evaluated for formal enforcement action on a case-by-case basis. If a permittee is asserting an "inadvertent violation," the case may require the exercise of the civil equivalent of prosecutorial discretion. In any event, the violations at issue here, like the majority of environmental laws and rules, assign liability without regard to fault.

Comment: OAR 340-12-065(1)(s) should be a Class II violation and should also include the term "knowingly." Mr. Brittingham suggested that this rule classifying the mixing for disposal or the disposing of principal recycled material that has been

properly prepared and source separated for recycling should be a Class II violation rather than a Class I and/or include the term "knowingly" as mentioned above. Mr. Brittingham commented that such violations do not represent a major risk of harm to the public health or the environment.

Response: The response above applies here as well. In addition, while some violations may or may not actually pose a major risk of harm to public health or the environment, there are several other considerations, consistent with the goals of the enforcement program, that justify classifying those violations as Class I violations, such as obtaining and maintaining compliance, and the deterrence of future violations. This protects the integrity of the system of environmental protection as embodied in Oregon's environmental laws, rules and permits.

Comment: Some of the listed violations seem to overstate the underlying regulation. Does this mean that the rule revision creates a new, broader obligation on facility operators? James Whitty of AOI commented that some of the violations listed in Division 12 seem to overstate the underlying regulations. Mr. Whitty cited proposed solid waste classification rules, OAR 340-12-065(1)(f) and (g), as examples in support of his comment. OAR 340-12-065(1)(f) classifies a violation of any federal or state drinking water standard in an aquifer beyond the solid waste boundary of a landfill or beyond an alternative boundary otherwise specified by the Department. OAR 340-12-065(1)(g) classifies a violation of a permit-specific groundwater concentration limit.

Response: The proposed rules referred to by Mr. Whitty are specific classifications of violations of the Department's groundwater quality and solid waste management rules. The particular rules that underlie the Division 12, Section 065 rules cited above are Department water quality rules, OAR 340-40-030, and solid waste management and disposal rules, OAR 340-61-040(4), respectively. For example, the concentration limit referred to in Division 12, Section 065(1)(g) is required to be specified in the permit by the Department's water quality rules (OAR 340-40-030). The violation of that permit condition is what is sanctionable as a Class I violation by operation of the proposed Division 12 rule. No new or broader obligations are created by the proposed classification rules.

Comment: If DEQ desires to list more particular violations, it should include citations to the underlying regulations. Mr. Whitty made the above comment and suggested that the proposed rules include a statement to make it clear that the list of classified violations set forth in OAR 340-12-050 to 340-12-071 are intended to be used only for the purposes of determining penalties for violations of other regulations.

Response: The Department agrees and accepts Mr. Whitty's suggestion. A statement as suggested by Mr. Whitty has been added at the end of the Scope of Applicability section in proposed OAR 340-12-090.

OAR 340-12-067 UNDERGROUND STORAGE TANK AND HEATING OIL TANK CLASSIFICATIONS

Comment: DEQ does not regulate heating oil tanks and there is no requirement that one must prevent releases from underground storage tanks (UST's). Mr. Whitty commented that OAR 340-12-067(1)(d) would impose a penalty for failing to prevent a release from an underground storage tank or heating oil tank and stated that DEQ does not even impose operating requirements on heating oil tanks. Moreover, Mr. Whitty adds, there is no requirement that one must prevent releases.

Response: Mr. Whitty is correct in stating that DEQ does not currently regulate heating oil tanks, in so far as release prevention is concerned; however, the Department's Division 122 Hazardous Substance Remedial Action Rules may apply to spills from heating oil tanks. As for release prevention requirements, owners and operators of UST's have an affirmative duty to prevent releases for the storage life of UST's as provided by the US rules set forth in OAR Chapter 340, Division 150. Those rules specifically incorporate the federal UST release prevention requirements contained in 40 C.F.R. 280.20. The reference to heating oil tanks in the proposed rule amendment to OAR 340-12-067(1)(d) has been deleted.

Comment: The reference to "unregulated" UST's in OAR 340-12-067(2)(g) is clearly wrong. Mr. Whitty also commented that tanks that are unregulated are exempt from all the UST requirements, so that the reference to "unregulated" UST's in OAR 340-12-067(2)(g) is clearly wrong.

Response: Mr. Whitty is correct. The proposed rule amendment has been further amended to clearly refer to nonpermitted regulated tanks, as was originally intended by the use of the term "unregulated."

OAR 340-12-068 HAZARDOUS WASTE MANAGEMENT CLASSIFICATIONS

Comment: The classification of violations for hazardous waste management and disposal should be revised. Don Haagensen, Esq., suggested that the classification of violations for hazardous waste management and disposal should be revised, including consideration of listing specific Class III violations for certain types of violations that would be appropriate for Class III. Mr. Haagensen explained the rationale for revising many of the class items and included some specific suggestions for reclassification.

Response: The Department will consider a revision of the hazardous waste management violation classification list in consultation with the U.S. Environmental Protection Agency in the near future. The kinds of amendments suggested by Mr. Haagensen require a thorough analysis because of the complexity of federal and state hazardous waste management regulations and their interrelationships. The Department needs to deliberate over any such changes and specifically discuss them with program staff at EPA prior to making any such revisions.

OAR 340-12-080 SELECTED MAGNITUDE CATEGORIES

Comment: How were the percentage points and pollutant amounts determined and assigned to major, moderate and minor magnitudes? Laurie Aunan of OSPIRG asked for an explanation of how those magnitudes were chosen.

Response: As for all of the magnitudes selected for inclusion in this new section of Division 12, the quantitative information underlying each of these proposed items was obtained from a review of past enforcement cases and hearing officer decisions and consultations with Department staff in each of the relevant program areas.

Comment: Categorize an emissions limit magnitude depending on the level of harm that occurred or could have occurred. Ms.

Aunan also suggested that the selected magnitudes include selecting magnitudes depending on the level of harm that occurred or could have occurred.

Response: The level of actual harm or potential harm is properly considered in determining the class of the violation. Magnitude, by definition, is determined by the extent of the respondent's deviation from the law or Department rules that occurred as a result of the violation.

Comment: Burning a highly toxic material in a sensitive location should be a "major" magnitude violation. Ms. Aunan commented that open burning of less than one cubic yard of material is automatically a minor magnitude in the proposed rules and the magnitude should instead be determined considering where the violation occurred, such as a "sensitive location."

Response: The location of a violation is a proper consideration in determining the class of the violation. Violations in "sensitive" locations necessarily require consideration of the actual harm or potential harm posed by the occurrence of the violation. Class is a qualitative concept (e.g., "how dangerous was it?") whereas magnitude address quantities (e.g., "how much?"; "how far?"; "how long?").

Comment: The proposed rules provide that failure to meet one requirement of an Order is automatically "minor." This may or may not be true. Ms. Aunan also commented that in regard to violations of Department Orders, there may be cases where failure to meet one requirement is major depending on the circumstances and the rule should allow for this.

Response: The Department recognizes the point made by Ms. Aunan and has deleted any subsection for selected magnitudes for violations of Department Orders. Instead, such magnitudes will be determined on a case-by-case basis as required by the particular facts of each case.

Comment: James Whitty for AOI commented that the list of hazardous waste violations set forth in 340-12-080(3)(b) appear to be an attempt to change the law consistent with a hearings officer decision earlier this year, thereby rewriting 40 CFR 262.34 as incorporated by OAR Chapter 340, Division 102.

Response: As mentioned above, the rules contained in Division 12, such as those referred to by Mr. Whitty, do not create violations. The rules contained in Section 080 are rules to assist in the quantification of the magnitude of the underlying violations cited in the formal enforcement action.

OAR 340-11-132(5) In Re Hearing Officer's Authority

The proposed rule package that was submitted for public comment included a proposed amendment to the beginning of OAR 340-11-132(5) which was drafted and recommended by members of the Enforcement Advisory Committee. The proposed amendment read:

> "In proceedings before the Hearing Officer regarding the assessment of civil penalties under OAR Chapter 340, Division 12, the Department has the burden of explaining how it calculated the relevant penalties according to the principles set forth in...Division [12]. The department has the burden of proving each factual finding by a preponderance of the evidence. With respect to determinations that call for the exercise of judgment (e.g., whether, in the absence of predetermined criteria, the magnitude of a particular violation was major, moderate, or minor), the Hearing Officer shall uphold the Director's decision if the department demonstrates a rational relationship between the facts and the decision."

The Department received several comments on this proposal. The comments are presented together below, with the Department's response reserved until the end.

Comment: The principal reason DEQ staff is seeking a change in the standard of review is a disagreement with recent rulings of the hearings officer. James Whitty of AOI commented that AOI views a change in the burden of proof and standard of review as unnecessary in solving whatever problems the Department has with the hearings officer. If the Department is unsatisfied with a ruling in a particular case, the solution is an appeal to the Environmental Quality Commission (EQC). This avenue for addressing Department grievances on hearings officer rulings should be attempted before a fundamental change is made in the relationship between the hearings officer and the Department.

Mr. Whitty suggested that a second avenue the Department can pursue is rulemaking to further clarify rule language found troublesome by either the hearings officer or the Department in a particular case. Making the standard of review for the hearings officer more deferential to the Department from that of the EQC will either increase the amount of work for the EQC by increasing the number of appeals or, because of the increased cost, produce a chilling effect on bringing or appealing legitimate contested case actions.

Comment: Ann Wheeler of OEC commented that the proposal is necessary to clarify the Department's burden and the degree of discretion of the Hearing Officer.

Comment: Max Brittingham of the Oregon Sanitary Service Institute (OSSI) commented that there is no reason to believe that changing the standard of review will decrease the amount of appeals for the EQC, decrease the cost of the contested case process or not have a chilling effect on bringing or appealing legitimate contested case action[s].

Comment: James Hill of the City of Medford commented that the proposal essentially would allow DEQ to arbitrarily determine the magnitude of the violation as well as to make any other "judgment" decisions, since the concept of "rational relationship" is very broad and difficult to disprove. It essentially removes the Hearing Officer from several important decisions.

Comment: Katherine Schacht of MWMC commented that the proposal introduces an unduly deferential standard of review at the hearings official level which would lead to additional appeals to the EQC, and that DEQ should not rush to insulate its decisions from thorough review at the administrative level.

Response: The Department has decided to not recommend any amendment to the rule regarding the Hearing Officer's authority. This decision was made after thorough review of all the proposed rule amendments and public comments, as well as after deliberations on this particular proposal by the Director and the Department's Division Administrators. The Department expects

that adoption of the Division 12 amendments as proposed will resolve many of the difficulties presented in contested case proceedings under the current rules.

Attachment I
Agenda Item L
July 24, 1992
EQC Meeting

Attachment I

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY — INTEROFFICE MEMORANDUM

DATE: May 1, 1992

TO: Interested persons

FROM: Fred Hansen, Director
Tom Bispham for FH

SUBJECT: Public comments on proposed 1992 amendments to Oregon Administrative Rules (OAR) 340-12-045(1)(c)(F) and 340-12-045(3)(Economic Considerations); and OAR 340-11-132(5) (Hearing Officer's Scope of Review)

The Department is proceeding to rulemaking on proposed amendments to the current OAR Chapter 340, Division 12 rules on Enforcement Procedure and Civil Penalties. Several of the amendments were made necessary as a result of various new laws passed by the Oregon legislature in 1991. Other amendments to Division 12 are being proposed as a result of a comprehensive internal review by the Department conducted over the past year.

To assist in the rulemaking, the Department formed an advisory committee comprised of representatives from the legal, public interest, municipal, and industry communities, in order to advise the Department on implementing the rules mandated by the 1991 laws, and the other rule amendments contemplated by the Department as a result of the past year's internal review. The Enforcement Advisory Committee reviewed the new laws and the Department's draft proposed rule amendments and conducted four meetings during January and February, 1992. In a letter dated April 20, 1992, the Committee made a report with several recommendations.

ECONOMIC BENEFIT OF NONCOMPLIANCE & INABILITY TO PAY

The Committee's report included a recommendation that the Department continue with its development of a procedure for including a sanction for violators who obtain economic benefits as a result of noncompliance. The Committee also encouraged the Department to develop a clearer process for considering a respondent's inability to pay a civil penalty. The Committee further recommended that the Department adopt a specific formula for determining the dollar value of the economic benefit. The Department intends to research both matters fully and present proposals to the Environmental Quality Commission (EQC) as work session items, and welcomes any public comments on those matters at this time.

HEARING OFFICER'S SCOPE OF REVIEW

THE DEPARTMENT IS PARTICULARLY INTERESTED IN RECEIVING PUBLIC COMMENT ON A RULE AMENDMENT RECOMMENDED BY THE COMMITTEE THAT WOULD SET FORTH THE DEPARTMENT'S BURDEN OF PROOF IN CONTESTED CASE HEARINGS AND DEFINE THE HEARING OFFICER'S SCOPE OF REVIEW. THE DEPARTMENT BELIEVES THAT SEVERAL OPTIONS COULD BE CONSIDERED, SUCH AS THE RECOMMENDATION BY THE COMMITTEE, AS WELL AS MAKING NO CHANGE AND APPEALING ADVERSE DECISIONS TO THE EQC.

RULEMAKING HEARING AUTHORIZATION CLEARANCE

Title: Enforcement Procedure and Civil Penalty Rules

Purpose: Amend Division 12 to comply with 1991 Oregon Laws, Chapters 385 and 650, and to improve and clarify existing rules, including OAR 340-11-132(5).

Clearance Signatures: The following have reviewed and concur with the rulemaking proposal and the package of materials intended for distribution to the public with the public notice:

Author: Michael V. Nixon

Section Manager: Van A. Kollias
Van A. Kollias

Division Administrator: Tom Bispham
Thomas R. Bispham

Land Use Statement: Roberta Young

Fiscal & Economic Impact Statement: Noam Stampfer

Designated Reviewers:

Pete Dalke

Mike Downs

Will seek DA review on rules this week.
JRB
4.13.92

Steve Greenwood

Stephanie Hallock

Al Hose

Hal Sawyer

Lydia Taylor

Director's Authorization to Proceed to Hearing: Fred Hansen
Fred Hansen

REQUEST FOR HEARING AUTHORIZATION

SUBJECT: Request for authorization to conduct public hearings on amending Oregon Administrative Rules (OAR) pertaining to enforcement procedure and civil penalties, and agency burden of proof and hearing officer standard of review in contested case proceedings.

RULES AFFECTED: Department of Environmental Quality rules, OAR Chapter 340, Division 12, and OAR 340-11-132(5).

STATUTORY AUTHORITY: Oregon Revised Statutes (ORS) 468.020, 468.996, and 459.995.

TIME CONSTRAINTS: To present final proposed rules for adoption by the Environmental Quality Commission (EQC) at the earliest possible EQC meeting date (July 24, 1992), this request must be granted no later than **Wednesday, April 15, 1992,** in order for the necessary materials to be provided to the Office of the Oregon Secretary of State in time for publication of the public notice on May 1, 1992.

ATTACHMENTS:

Statement of Need for Rulemaking	Attachment A
Public Notice	Attachment B
Statement of Fiscal and Economic Impact	Attachment C
Land Use Evaluation Statement	Attachment D
Proposed Rule Amendments	Attachments E & F

SUMMARY OF ISSUES:

Enforcement Procedures and Civil Penalties

The proposed amendments to Division 12 rules incorporate new statutory authority/mandate providing for three significant changes. First, the adoption of a schedule and criteria for determining the amount of civil penalty that may be imposed for a $100,000 maximum civil penalty for reckless or intentional violations which result in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment.

Second, requirement of advance notice of violation prior to civil penalty assessments only for air, water, or solid waste permittees. Other advance notice requirements contained in former statute were repealed. Third, increased maximum daily civil penalty authority for solid waste and noise violations from $500 to $10,000;

In addition to providing for new statutory changes, the Enforcement Section has completed an extensive evaluation and review of the current enforcement rules and the Hearing Officer's case decisions applying those rules. This process has resulted in many other amendments. We have consulted with our counsel in the Attorney General's Office and with program and regional staff and incorporated their suggestions along with those of the 1992 Enforcement Advisory Committee which was convened to advise on the integration of the new statutes into Department rules. The Advisory Committee also necessarily conducted a general review of a draft of the rules currently proposed and made recommendations accordingly. Below is a list of the significant changes contained in the proposed Division 12 revisions to make the enforcement and contested case processes more efficient and effective and to add the new statutory changes:

1. $100,000 PENALTY -- SB 184, Section 2 (codified as ORS 468.996) - $100,000 maximum civil penalty for intentional or reckless violations which result in or create the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment. The Enforcement Advisory Committee has made recommendations on the implementation of this new law within the Division 12, providing for base penalties of $50,000 for reckless, $75,000 for intentional, and $100,000 for flagrant violations.

2. NOTICE OF PERMIT VIOLATION (NPV) -- SB 184, Section 9 (codified as ORS 468.126) - The former advance notice statute (former ORS 468.125) was repealed. The new law requires 5-day advance notice before assessing a civil penalty only if the violator is an air, water, or solid waste permittee. Advance notice is not required if the violation was intentional, the water or air violation would not exist for five consecutive days, or if the permittee has received a prior advance warning within the preceding 36 months. The Enforcement Advisory Committee has made recommendations on the implementation of this provision, including specific language to be contained in the NPV document.

3. DEFINITION CHANGES -- Several definition changes are proposed. Most changes are the result of our own evaluation of case weaknesses observed over time and noted by the hearing officer in contested case decisions. Other changes are the result of recommendations from our Advisory Committee in the integration of SB 184 into Division 12.

4. CLASSIFICATION CHANGES - Current classifications have been reviewed in consultation with program and regional managers. Many more violations have been specifically classed, especially the violations that occur frequently. This proposal will reduce the resource and time intensive burden on DEQ to prove case-by-case risk assessment determinations that are often required under the current Division 12 rules. Specific risk of harm determinations will only be required in exceptional cases where it can be shown that a violation was more likely than not a major risk of harm to public health or the environment. Otherwise, if a violation is not specifically classed as a Class I or Class III, it will be a Class II by rule.

5. SELECTED MAGNITUDE CATEGORIES - This was also put together in consultation with program and regional managers. It is desirable to specifically list some magnitude parameters by rule for the same case-by-case efficiency reasons stated for the specific classification of more violations. The selected magnitudes are set forth in amended OAR 340-12-080. Programs/areas being considered include: open burning, asbestos, air and water discharge dimitations, and hazardous waste.

6. NEW $2,500 MATRIX - This is proposed for open burning and most on-site sewage cases and should result in more straightforward and equitable civil penalty determinations. Use of this matrix is also expected to reduce the number of contested cases in these programs, especially in conjunction with the body of other proposed rule amendments regarding classification and magnitude.

7. ECONOMIC BENEFIT/INABILITY TO PAY - As a sanction for those violators who receive an economic benefit ("EB") as a result of noncompliance with environmental laws, rules, etc., we propose to separate this concept from the other economic consideration ("economic and financial condition," also known as "inability to pay") by moving the economic benefit calculation to the end of the civil penalty formula. The dollar sum of the "EB" will be added to the civil penalty for a final dollar total within the maximum daily limits set by law. A respondent's inability to pay will be addressed in accordance with the proposal suggested by the Advisory Committee. Both "EB" and "inability to pay" provisions are set forth in new subsections of the civil penalty determination formula (OAR 340-12-045).

Rules of Practice and Procedure

DEQ's BURDEN OF PROOF AT CCH and HEARING OFFICER STANDARD OF REVIEW - The Enforcement Advisory Committee, by a 4-2 vote, has suggested that it may be beneficial for the Department to set forth in rule the current Oregon administrative law requirements regarding the agency's burden of proof and the review standard to be applied by the Hearing Officer in contested cases. The potential benefit is derived from the utility of referring to a clear and easily accessible statement of the current administrative law principles that apply in this regard. The Advisory Committee majority recommended that this be presented to the EQC for consideration. Since this was a product of the deliberations of the Enforcement Advisory Committee, this matter is being presented along with the proposed Division 12 revisions and the proposed amendment to OAR 340-11-132(5) is included.

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend rules.

1. Legal Authority

This proposal amends Oregon Administrative Rules (OAR), Chapter 340, Division 11 and Division 12, under authority of Oregon Revised Statutes (ORS) 468.020, 468.996 and 459.995. ORS 468.020 requires the Environmental Quality Commission (EQC) to adopt such rules and standards as it considers necessary and proper in performing the functions vested by law in the EQC.

1991 Oregon Laws, Chapter 650, Section 2, now codified as ORS 468.996(1), requires the EQC to adopt by rule a schedule and the criteria for determining the amount of a civil penalty that may be imposed for an extreme violation.

1991 Oregon Laws; Chapter 650, Section 3(a) amended ORS 459.995(a), and increased the daily maximum civil penalty for solid waste and noise violations from $500 to $10,000.

1991 Oregon Laws, Chapter 385, Section 90(c), now codified in ORS 459.995(c), provides for a $500 daily maximum penalty for a city, county or metropolitan service district that fails to provide the opportunity to recycle as required under ORS 459.165.

2. Need for the Rules

ORS 468.996(1) provides for the imposition of a $100,000 civil penalty for reckless or intentional violations of any provision of ORS 164.785, 459.205 to 459.426, 459.705 to 459.790, ORS Chapters 465, 466 or 467, or 468, 468A and 468B; or any rule or standard or order of the EQC which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment. The EQC is required by this law to adopt by rule a schedule and the criteria for determining the amount of a civil penalty that may be imposed for such violations.

In addition, 1991 Oregon Laws, Chapter 650, Section 9, now codified as ORS 468.126, repealed the former advance notice requirement and provided for a modified advance notice of violation prior to civil penalty assessments for violations of air, water, or solid waste permits.

3. Principal Documents Relied On

- 1991 Oregon Laws, Chapter 650 (House Bill 184-C, Engrossed).
- Oregon Revised Statutes (ORS) Chapters 183, 468, 468A and 468B.
- Oregon Administrative Rules (OAR) Chapter 340, Division 12.

All documents referenced above are available for review at local county courthouses and the Department of Environmental Quality (DEQ), Regional Operations Division, Enforcement Section, 10th Floor, 811 SW 6th Avenue, Portland, Oregon, and all DEQ regional offices during normal business hours (8:00 a.m. to 5:00 p.m., Monday to Friday).

W:\RPT\GB114451.51 (4/92)

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

PROPOSED AMENDMENTS TO THE DEPARTMENT'S RULES CONCERNING ENFORCEMENT AND CIVIL PENALTY ASSESSMENT PROCEDURES

Hearing Date: 5/18/92
Comments Due: 5/22/92

WHO IS AFFECTED:

Persons who violate Oregon's environmental statutes, rules, permits, or Department orders and who are thereby subject to civil enforcement actions by the Department or the Environmental Quality Commission.

WHAT IS PROPOSED:

DEQ proposes to amend Chapter 340, Divisions 12 and 11, dealing with civil enforcement procedures and penalty assessments and hearing officer's authority in contested cases.

WHAT ARE THE HIGHLIGHTS:

- Rules implementing new statutory authority for a $100,000 maximum civil penalty for intentional or reckless violations which result in or create the imminent likelihood for an extreme hazard to the public health or which cause extensive damage to the environment per ORS 468.996.
- Amendment of advance notice requirements in accordance with new statutory authority under ORS 468.126 pertaining to air, water, or solid waste permittees.
- Revisions which clarify terms and procedures and increase efficiency in enforcement procedures and in contested case proceedings.
- Clarification changes resulting in more violations being specifically classed, thereby reducing case-by-case assessments of "risk of harm".
- New rule listing specific magnitude determinations for selected program areas.
- New $2,500 matrix to be utilized for non-industrial open burning and non-licensee on-site sewage disposal violations.

(over)

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

FOR FURTHER INFORMATION:

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

11/1/86

- Persons who violate solid waste and noise laws and rules, and sewage disposal services who violate the on-site sewage disposal laws and rules, will be liable for a civil penalty of up to $10,000 per day of violation in comparison to the current rule limitation of $500 per day of violation.

- The base penalty for Class I violations (the most serious class of violation) under the $10,000 civil penalty matrix, is being increased from $5,000 to $6,000 for a major magnitude violation, $2,500 to $4,000 for a moderate magnitude violation, and $1,000 to $2,000 for a minor magnitude violation.

- New rules applicable to persons who obtain an economic benefit from noncompliance and to persons who may have some inability to pay civil penalties as assessed.

- Revision to Division 11 rule to clarify the Department's burden of proof at contested case hearings and the hearing officer's standard of review.

HOW TO COMMENT:

Copies of the proposed rule package may be obtained from the Regional Operations Division, Enforcement Section, DEQ, 811 SW Sixth Avenue, Portland, OR 97204-1390, or at any one of DEQ's Regional Offices.

Central Region:	2146 NE 4th Bend, OR 97701
Eastern Region:	700 SE Emigrant, #330 Pendleton, OR 97801
Southwest Region:	201 W Main Street, #2-D Medford, OR 97501
Willamette Valley:	750 Front Street NE, #120 Salem, OR 97310.

Oral and written comments will be accepted by a hearing officer at any one of the public hearings on Monday, May 18, 1992, beginning at 11:00 a.m. and continuing until all testimony is completed at the following places:

Pendleton: County Courthouse, Room 114
216 SE 4th Street
Pendleton, Oregon

(next page)

Portland:	DEQ Conference Room 3A 811 SW Sixth Avenue Portland, Oregon
Medford:	City Hall/City Council Chambers 411 W 8th Street Medford, Oregon
Eugene:	Harris Hall Lane County Courthouse 125 E. 8th Street Eugene, Oregon Entrance on 8th and Oak

Written comments should be sent to the attention of Michael Nixon at the address above. For further information, contact Michael Nixon at (503) 229-5217, or toll-free within Oregon, 1-800-452-4011, ext. 5217.

WHAT IS THE NEXT STEP:

After public hearing, DEQ will evaluate the comments, prepare a response to the comments, and make a recommendation to the Environmental Quality Commission in July 1992. The Commission may adopt the Amendments as proposed, adopt modified amendments as a result of the testimony received, or decline to adopt any amendments.

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FISCAL AND ECONOMIC IMPACT STATEMENT FOR PROPOSED ENFORCEMENT RULES

The proposed rules are amendments to the current enforcement rules which were last amended in 1990. The fiscal and economic impact statement prepared at that time generally still applies. The substantive changes in the proposed 1992 amendments have the following fiscal and economic impacts:

Costs

The proposed enforcement rules would have no significant adverse fiscal or economic effect on state agencies, local governmental bodies, or members of the public, including small businesses, unless the entity or the person is issued a Formal Enforcement Action (as defined in the rules) for a civil violation of state environmental laws or rules. Significant adverse fiscal and economic effects may result from the assessment and imposition of civil penalties or specific Department Orders in accordance with these proposed rules.

The significant adverse fiscal and economic effects to violators that may be expected from these proposed revisions to the current enforcement rules are as follows:

1. Implementation of $100,000 civil penalty authority under 1991 Oregon Laws, Chapter 650, Section 2 (now codified as ORS ORS 468.996), exposes violators to a $100,000 civil penalty liability for reckless or intentional violations that result in extreme harm to the environment. This is an increase over the $10,000 daily maximum that otherwise would have been applied under the existing rules;

2. Implementation of increased civil penalty authority under 1991 Oregon Laws, Chapter 650, Section 3(a) (amending ORS 459.995), from $500 daily maximum to $10,000 daily maximum for violations of laws, rules, permits, or orders pertaining to solid waste as provided by law;

3. Implementation of new $500 daily maximum civil penalty for a city, county, or metropolitan service district that fails to provide the opportunity to recycle as required under ORS 459.165, as set forth in 1991 Oregon Laws, Chapter 385, Section 90(c);

4. Increased civil penalty liability for on-site sewage violations by sewage disposal service providers. Existing law provides $10,000 daily maximum civil penalty authority for violations. Such violations are subject to $500 daily maximum

penalties under current rules. Violations by these persons or entities will be assessed civil penalties in accordance with existing law and subject violators to $10,000 daily maximum civil penalties. This proposed rule change will not apply to homeowners, only to violations by sewage disposal service providers.

5. Increased civil penalty liability for all other on-site sewage disposal violations. Existing law provides $10,000 daily maximum civil penalty authority for violations. Such violations are subject to $500 daily maximum penalties under current rules. Violations (other than those by sewage disposal service providers) will be assessed civil penalties in accordance with existing law and limited to a $2,500 daily maximum per violation, excluding any additional penalty for receipt of economic benefits from noncompliance;

6. As a sanction for those violators who receive an economic benefit ("EB") as a result of noncompliance with environmental laws, rules, etc., we propose to separate this concept from the other economic consideration ("economic and financial condition," also referred to as "inability to pay") by moving the economic benefit calculation to the end of the civil penalty formula. The dollar sum of the "EB" will be added to the civil penalty for a dollar total within the maximum daily limits set by law.

Benefits

The proposed rules provide some fiscal and economic benefits to all affected persons and entities, including small businesses by clarifying several procedural matters.

First, a violator's inability to pay a civil penalty as assessed will be considered by the Department after assessment and prior to imposition of the penalty at the request of the violator. The proposed rules provide the procedure and criteria for the violator to demonstrate to the Department an inability to pay. The proposed "inability to pay" rule sets out the Department or the Commission's options to progress from placing a violator on a payment schedule as a primary option, to reducing the penalty as a second option.

The rule also declares that the Department or Commission may impose a penalty that may force a company to go out of business in appropriate circumstances, including cases where the violator's financial condition poses a serious concern regarding the violator's ability or incentive to remain in compliance. This also may be considered an adverse fiscal and economic effect, depending on the perspective of the observer.

Second, the proposed rules clarify potential ambiguities and provide for a more efficient processing and enforcement of applicable cases by amending certain definitions, specifically classing most potential violations, creating the $2,500 matrix, eliminating case-by-case risk of harm determinations, and listing magnitude determinations for many programs. This will provide substantial resource savings in processing and follow-up enforcement by the Department and in responding to formal enforcement actions by respondents.

Impacts to Small Businesses

The proposed rules generally will have the same impacts to small businesses as all other persons and entities. Small businesses and individuals may derive more benefit from inability to pay considerations than large businesses.

Attachment D

DEQ LAND USE EVALUATION STATEMENT
FOR RULEMAKING

1. Explain the purpose of the proposed rules.

The purposes of these proposed rules include:

(a) implementation of $100,000 civil penalty authority under 1991 Oregon Laws, Chapter 650, Section 2 (now codified as ORS 468.996), for reckless or intentional violations that result in or create the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment;

(b) promulgation of amended rule implementing amended advance notice requirements of 1991 Oregon Laws, Chapter 650, Section 9 (now codified as ORS 468.126), which repealed the former advance notice statute and now requires a modified advance notice of violation prior to civil penalty assessments only for air, water, or solid waste permittees;

(c) revision of the current enforcement rules;

(d) revision of OAR 340-11-132(5) pertaining to contested case proceedings.

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_XX_

2a. If yes, identify existing program/rule/activity.

2b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? yes____no_____ (if no, explain).

2c. If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document 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 proposed rules are not considered actions or programs affecting land use because they are not specifically referenced in the statewide planning goals, nor are they reasonably expected to have significant effects on either:

(a) resources, objectives or areas identified in the statewide planning goals, or
(b) on present or future land uses identified in acknowledged comprehensive plans.

The criteria for this determination are contained in the DEQ SAC Program, approved by the Environmental Quality Commission on August 10, 1990, and certified by the Land Conservation and Development Commission on December 13, 1990. The criteria appear in Section III.2, at pp. 21-22 of the SAC Program document.

3. **If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.**

Division	Intergovernmental Coor.	Date
WMSD	Robert L. Haskins	4-6-92

CHAPTER 340, DIVISION 12

ENFORCEMENT PROCEDURE AND CIVIL PENALTIES

POLICY
340-12-026

(1) The goal of enforcement is to:

(a) Obtain and maintain compliance with the Department's statutes, rules, permits and orders;

(b) Protect the public health and the environment;

(c) Deter future violators and violations; and

(d) Ensure an appropriate and consistent statewide enforcement program.

(2) [~~Except as provided by 340-12-040(3), t~~] The Department shall endeavor by conference, conciliation and persuasion to solicit compliance.

[~~(3) Subject to subsection (2) of this section, t~~] The Department shall address all documented violations in order of seriousness at the most appropriate level of enforcement necessary to achieve the goals set forth in subsection (1) of this section under the particular circumstances of each violation.

[~~(4)~~] (3) Violators who do not comply with an initial enforcement action shall be subject to increasing levels of enforcement until compliance is achieved.

(Statutory Authority: ORS CH 468, 468A, 468B)

DEFINITIONS
340-12-030

Unless otherwise required by context, as used in this Division:

(1) "Class One Equivalent" or "Equivalent", which is used only for the purposes of determining the value of the "P" factor for the civil penalty formula, means two Class Two violations, [~~or~~] one Class Two and two Class Three violations, or three Class Three violations.

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

(3) "Compliance" means meeting the requirements of the Commission's and Department's statutes, rules, permits or orders.

(4) "Director" means the Director of the Department or the Director's authorized deputies or officers.

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

(6) "Documented Violation" means any violation which the Department or other government agency [~~verifies through~~] records by observation, investigation or data collection.

(7) [~~"Enforcement" means any documented action taken to address a violation.~~]

[~~(8)~~] "Flagrant" means any documented violation where the [~~r~~]Respondent or the individual performing or directing the conduct had actual knowledge of the law and had consciously set out to commit the violation.

[~~(9)~~] (8) "Formal Enforcement Action" means an [~~administrative~~] action signed by the Director or Regional Operations Administrator or authorized representatives or deputies which is issued to a Respondent for[~~on the basis that~~] a documented violation[~~has been documented~~], and may require[~~s~~] the Respondent to take [~~specific~~] action within a specified time frame, and/or states consequences for the violation or continued noncompliance.

[~~(10)~~](9) "Intentional", [~~Respondent consciously and voluntarily took an action or omitted to take action and knew the probable consequences of so acting or omitting to act.~~] means conduct by a person with a conscious

objective to cause the result of the conduct (i.e., the release of contaminants to the environment or other activity constituting the violation), but does not require a showing that the person intended to cause any harm to public health or the environment.

[~~(11)~~](10) "Magnitude of the Violation" means the extent of a violator's deviation from the Commission's and Department's statutes, rules, standards, permits or orders[~~,~~]. [~~taking into account such factors as, but not limited to, concentration, volume, percentage, or duration, toxicity, or proximity to number of human or environmental receptors.~~] In determining magnitude, the Department shall consider such factors as concentration, volume, percentage, duration, toxicity, and the extent of the effects of the violation. In any case, the Department may consider any single factor to be conclusive. Deviations shall be categorized as major, moderate or minor.

(11) "Negligence" or "Negligent" means failure to take reasonable care to avoid a foreseeable risk of a violation.

(12) "Order" means:

(a) Any action satisfying the definition given in ORS Chapter 183; or

(b) Any other action so designated in ORS Chapter 454, 459, 465, 466, 467, [~~or~~] 468, 468A, or 468B.

(13) "Person" includes, but is not limited to, individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, [~~the~~] states and [~~any~~] their agencies [~~thereof~~], and the Federal Government and [~~any~~] its agencies [~~thereof~~].

(14) "Prior Significant Action" means any violation [~~proven pursuant to a contested case hearing, or~~] established either with or without admission of a violation by payment of a civil penalty, [~~by an order of default,~~] or by a [~~stipulated or~~] final order of the Commission or the Department.

(15) "Reckless" or "recklessly" means conduct by a person who is aware of and consciously disregards a substantial and unjustifiable risk that the result (i.e., the release of contaminants to the environment or other activity constituting the violation) will occur or that the circumstance exists. The risk must be of such a nature and degree that disregard thereof constitutes a gross deviation from the standard of care a reasonable person would observe in that situation.

[~~(15)~~] (16) "Residential Opening Burning" means the open burning of any domestic wastes [~~, except rubber and petroleum based products prohibited by OAR 340-23-042(2),~~] generated by a single family dwelling and conducted by an occupant of the dwelling. This does not include the open burning of materials prohibited by OAR 340-23-042(2).

[~~(16)~~] (17) "Respondent" means the person to whom a formal enforcement action is issued.

[~~(17)~~] (18) "Risk of Harm" means the individual or cumulative [~~level of risk~~] possibility of harm to public health or the environment caused by a violation or violations. [~~created by the likelihood of exposure, either individual or cumulative, or the actual damage, either individual or cumulative, caused by a violation to public health or the environment.~~] Risk of harm shall be categorized as major, moderate or minor.

[~~(18)~~] (19) "Systematic" means any documented violation which occurs on a regular basis.

[~~(19)~~] (20) "Violation" means a transgression of any statute, rule, order, license, permit, or any part thereof and includes both acts and omissions. Violations shall be categorized as Class One, Class Two or Class Three, with Class One designating the most serious class of violation. [~~follows:~~

~~(a) "Class One or I" means any violation which causes major harm or poses a major risk of harm to public health or the environment, or~~

~~violation [of any compliance schedule contained in a Department permit or a Department or Commission order];~~

~~(b) "Class Two or II" means any violation which causes moderate harm or poses a moderate risk of harm to public health or the environment;~~

~~(c) "Class Three or III" means any violation which poses a minor risk of harm to public health or the environment classed as such by Department rule.~~]

(Statutory Authority: ORS CH 468)

CONSOLIDATION OF PROCEEDINGS

340-12-035

Notwithstanding that each and every violation is a separate and distinct offense, and in cases of continuing violations, that each day's continuance is a separate and distinct violation, proceedings for the assessment of multiple civil penalties for multiple violations may be consolidated into a single proceeding.

(Statutory Authority: ORS CH 468)

[~~PRIOR~~] NOTICE OF PERMIT VIOLATIONS AND EXCEPTIONS

340-12-040

[~~(1) Except as provided in subsection (3) of this section, prior to the assessment of any civil penalty the Department shall serve a Notice of Violation upon the respondent. Service shall be in accordance with rule 340-11-097.~~

~~(2) A Notice shall be in writing, specify the violation and state that the Department will assess a civil penalty if a violation continues or occurs after five days following receipt of the notice.~~

~~(3) (a) The above Notice shall not be required where the respondent has otherwise received actual notice of the violation not less than five days prior to the violation for which a penalty is assessed.~~

~~(b) No advanced notice, written or actual, shall be required under subsections (1) and (2) of this section if:~~

~~(A) The act or omission constituting the violation is intentional;~~

~~(B) The violation consists of disposing of solid waste or sewage at an unauthorized disposal site;~~

~~(C) The violation consists of constructing a sewage disposal system without the Department's permit;~~

~~(D) The water pollution, air pollution, or air contamination source would normally not be in existence for five days;~~

~~(E) The water pollution, air pollution, or air contamination source might leave or be removed from the jurisdiction of the Department;~~

~~(F) The penalty to be imposed is for a violation of ORS 466.005 to 466.385 relating to the management and disposal of hazardous waste or polychlorinated biphenyls, or rules adopted or orders or permits issued pursuant thereto.; or~~

~~(G) The penalty to be imposed is for a violation of ORS 468.893(8) relating to the control of asbestos fiber releases into the environment, or rules adopted thereunder.~~]

[~~(Statutory Authority: ORS CH 459, 466 & 468)~~]

(1) Prior to assessment of a civil penalty for a violation of the terms or conditions of an Air Contaminant Discharge Permit, National Pollutant Discharge Elimination System Permit, Water Pollution Control Facilities Permit, or Solid Waste Disposal Permit, the Department shall provide a Notice of Permit Violation to the permittee. The Notice of Permit Violation shall be in writing, specifying the violation and stating that a civil

penalty will be imposed for the permit violation unless the permittee submits one of the following to the Department within five working days of receipt of the Notice of Permit Violation:

(a) A written response from the permittee acceptable to the Department certifying that the permitted facility is complying with all terms of the permit from which the violation is cited. The certification shall include a sufficient description of the information on which the permittee is certifying compliance to enable the Department to determine that compliance has been achieved; or,

(b) A written proposal, acceptable to the Department, to bring the facility into compliance with the permit. An acceptable proposal under this rule shall include at least the following:

1) A detailed plan and time schedule for achieving compliance in the shortest practicable time;

2) A description of the interim steps that will be taken to reduce the impact of the permit violation until the permitted facility is in compliance with the permit;

3) A statement that the permittee has reviewed all other conditions and limitations of the permit and no other violations of the permit were discovered.

(c) In the event that any compliance schedule to be approved the Department pursuant to subsection 1(b) of this section provides for a compliance period of greater than six months, the Department shall incorporate the compliance schedule into an Order described in OAR 340-12-041(4)(b)(C) which shall provide for stipulated penalties in the event of any noncompliance therewith. The stipulated penalties shall not apply to circumstances beyond the reasonable control of the permittee. The stipulated penalties shall be set at amounts consistent with those established under OAR 340-12-048.

(d) The certification allowed in subsection (1)(a) of this section shall be signed by a Responsible Official based on information and belief after making reasonable inquiry. For purposes of this rule "Responsible Official" of the permitted facility means one of the following:

1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or the manager of one of more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2) For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

3) For a municipality, State, Federal, or other public agency, either a principal executive officer or appropriate elected official.

(2) No advance notice prior to assessment of a civil penalty shall be required under subsection (1) of this section and the Department may issue a Notice of Civil Penalty Assessment if:

(a) The violation is intentional;

(b) The water or air violation would not normally occur for five consecutive days; or

(c) The permittee has received a Notice of Permit Violation with respect to any violation of the permit within 36 months immediately preceding the violation.

(d) For purposes of this section, "permit" includes permit renewals and modifications and no such renewal or modification shall result in the requirement that the Department provide the permittee with an additional advance warning if the permittee has received a Notice of Permit Violation within 36 months.

(Statutory Authority: ORS CH 468)

(1) Notice of Noncompliance (NON) [~~.--An enforcement action which~~]:

(a) Informs a person of the existence of a violation, the actions required to resolve the violation[~~s~~] and the consequences of the violation or continued noncompliance. The notice may specify a time by which compliance is to be achieved and that the need for formal enforcement action will be evaluated;

(b) Shall be issued under the direction of [~~the appropriate Regional Manager, or Section M~~] a manager or authorized representative;

(c) Shall be issued for all classes of documented violations.

~~(d) Satisfies the requirements of OAR 340-12-026(2).~~

(2) Notice of Permit Violation (NPV) [~~and Intent to Assess a Civil Penalty.--A formal enforcement action which~~]:

(a) Is issued pursuant to OAR 340-12-040;

[~~(b) May include a time schedule by which compliance is to be achieved;~~]

[~~(c)~~](b) Shall be issued by the Regional Operations Administrator or authorized representative[~~;~~].

(c) Shall be issued for the first occurrence of a documented Class One violation which is not excepted under OAR 340-12-040(2), or the repeated or continuing occurrence of documented Class II or III violations where a NON has failed to achieve compliance or satisfactory progress toward compliance. A permittee shall not receive more than three NONs for Class II violations of the same permit within a 36 month period without being issued a NPV.

~~[(d) Shall be issued for the first occurrence of a documented Class One violation which is not excepted under OAR 340-12-040(3)(b), or the repeated or continuing occurrence of documented Class Two or Three violations where a Notice of Noncompliance has failed to achieve compliance or satisfactory progress toward compliance.]~~

~~[(3) Notice of Violation and Compliance Order.--A formal enforcement action which:~~

~~(a) Is issued pursuant to ORS 466.190 for violations related to the management and disposal of hazardous waste;~~

~~(b) Includes a time schedule by which compliance is to be achieved;~~

~~(c) Shall be issued by the Director;~~

~~(d) May be issued for documented violations related to hazardous waste.]~~

(3)~~[(4)]~~ Notice of Civil Penalty Assessment (CPA) [~~.--A formal enforcement action which~~]:

(a) Is issued pursuant to ORS 468.13[5] 0, and OAR 340-12-042 and 340-12-045;

(b) Shall be issued by the Director or authorized representative;

(c) May be issued for the occurrence of any Class of documented violation [~~excepted by OAR 340-12-040(3), for any class of repeated or continuing documented violations or where a person has failed to comply with a Notice of Violation and Intent to Assess a Civil Penalty or Order~~] that is not limited by the NPV requirement of OAR 340-12-040(2).

(4)~~[(5) Enforcement]~~Order[~~.--A formal enforcement action which~~]:

(a) Is issued pursuant to ORS Chapters 183, 454, 459, 465, 466, 467, 468, 468A, or 468B;

(b) May be in the form of a Commission or Department Order, or a Stipulat~~[ed]~~ion and Final Order (SFO);

(A) Commission Orders shall be issued by the Commission, or the Director on behalf of the Commission;

(B) Department Orders shall be issued by the Director or authorized representative;

(C) [~~Stipulated Final~~] All other Orders:

(i) May be negotiated [~~between the Department and the subject party~~];

(ii) Shall be signed by the Director [~~on behalf of the Department~~] and the authorized representative of [~~the subject~~] each other party[~~; and~~]

[~~(iii) Shall be approved by the Commission or by the Director on behalf of the Commission~~].

(c) May be issued for[~~, but is not limited to, Class One or Two violations~~] any Class of violation.

(6) The [~~formal~~] enforcement actions described in subsection (1) through (5) of this section in no way limits the Department or Commission from seeking legal or equitable remedies [~~in the proper court~~] as provided by ORS Chapters 454, 459, 465, 466, 467, [~~and~~] 468, 468A, and 468B. (Statutory Authority: ORS CHS 454, 459, 465, 466, 467, [~~and~~] 468, 468A and 468B)

CIVIL PENALTY SCHEDULE MATRICES

340-12-042

In addition to any liability, duty, or other penalty provided by law, the Director may assess a civil penalty for any violation pertaining to the Commission's or Department's statutes, [~~regulations~~]rules, permits or orders by service of a written notice of assessment of civil penalty upon the [~~r~~]Respondent. Except for civil penalties assessed under OAR 340-12-048 and 340-12-049, [~~T~~] the amount of any civil penalty shall be determined through the use of the following matrices in conjunction with the formula contained in OAR 340-12-045:

(1) $10,000 Matrix

<——————— Magnitude of Violation

Class of Violation	Major	Moderate	Minor
Class I	~~[$5,000]~~ $6,000	~~[$2,500]~~ $4,000	~~[$1,000]~~ $2,000
Class II	$2,000	$1,000	$500
Class III	$500	$250	$100

No civil penalty issued by the Director pursuant to this matrix shall be less than fifty dollars ($50) or more than ten thousand dollars ($10,000) for each day of each violation. This matrix shall apply to the following types of violations:

(a) Any violation related to ~~[air quality statutes]~~ORS Chapter 468A and air quality, rules, permits or orders, ~~[except for residential open burning]~~ except for the selected open burning violations listed in section (3) below;

~~[(b) Any violation related to of ORS 468.875 to 468.899 relating to asbestos abatement projects;]~~

(b) ~~[(c)]~~ Any violation related to ORS 164.785 and ORS Chapter 468B, water quality ~~[statutes]~~, rules, permits or orders, ~~[except for violations of ORS 164.785(1) relating to the placement of offensive substances into waters of the state,]~~ violations of ORS Chapter 454 and on-site sewage disposal rules by a person performing sewage disposal services; ~~[, and violations of ORS 468.825 and 468.827 and rules adopted thereunder relating to the financial assurance requirements for ships transporting hazardous materials and oil;]~~

(c) ~~[(d)]~~ Any violation related to underground storage tanks statutes, rules, permits or orders, except for failure to pay a fee due and owing under ORS 466.785 and 466.795;

(d) ~~[(e)]~~ Any violation related to hazardous waste management statutes, rules, permits or orders, except for violations of ORS 466.890 related to damage to wildlife;

(e) ~~[(f)]~~ Any violation related to oil and hazardous material spill and release statutes, rules ~~[and]~~ , or orders, except for negligent or intentional oil spills;

(f) ~~[(g)]~~ Any violation related to polychlorinated biphenyls management and disposal statutes;

(g) ~~[(h)]~~ Any violation of ORS ~~[466.540 to 466.590]~~ Chapter 465 ~~[related to]~~ or environmental cleanup ~~[statutes,]~~ rules ~~[, agreements]~~ or orders; ~~[and]~~

~~[*]~~ ~~[(i) Any violation related to used oil management statutes, rules and, or orders under ORS 468.869.;]~~

(h) ~~[(j)]~~ Any violation of ORS Chapter 467 or any violation related to noise control rules or orders;

(i) [~~(k)~~] Any violation of ORS Chapter 459 or any violation related to solid waste statutes, rules, permits, or orders, except any violation by a city, county or metropolitan service district of failing to provide the opportunity to recycle as required by law ; and

[~~(l) Any violation related to waste tire statutes, rules, permits, or orders;~~]

(2) In addition to any other penalty provided by law, any [~~P~~] person[~~s~~] causing oil spills through an intentional or negligent act shall incur a civil penalty of not less then one hundred dollars ($100) or more than twenty thousand dollars ($20,000). The amount of the penalty shall be determined by doubling the values contained in the matrix in subsection [~~(a)~~] (1) of this rule in conjunction with the formula contained in 340-12-045. [~~This limitation shall not apply in cases where a violation results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment.~~]

(3) $2,500 Matrix

<——————Magnitude of Violation

Class of Violation	Major	Moderate	Minor
Class I	$2,500	$1,000	$500
Class II	$ 750	$500	$200
Class III	$250	$100	$50

No civil penalty issued by the Director pursuant to this matrix shall be less than $50. The total civil penalty may exceed $2,500 for each day of each violation, but shall not exceed $10,000 for each day of each violation.

This matrix shall be applied to any violation related to on-site sewage statutes, rules, permits, or orders, other than violations by a person performing sewage disposal services; and for violations of the Department's Division 23 open burning rules, excluding all industrial open burning violations, and violations of OAR 340-23-042(2) where the volume of the materials burned is greater than or equal to three cubic yards. In cases of the open burning of tires, this matrix shall apply only if the number of tires burned is less than fifteen. The matrix set forth in section (1) above shall be applied to the open burning violations excluded from this section.

(4) [~~(3)~~]

$500 Matrix

<——————Magnitude of Violation

Class of Violation	Major	Moderate	Minor
Class I	$400	$300	$200
Class II	$300	$200	$100
Class III	$200	$100	$50

No civil penalty issued by the Director pursuant to this matrix shall be less than fifty dollars ($50) or more than five hundred dollars ($500) for each day of each violation. This matrix shall apply to the following types of violations:

(a) [~~Any violation related to residential open burning;~~]

[~~(b) Any violation related to noise control statutes, rules, permits and orders;~~]

[~~(c) Any violation related to on-site sewage disposal statutes, rules, permits, licenses and orders;~~]

[~~(d) Any violation related to solid waste statutes, rules, permits and orders; and~~]

[~~(e) Any violation related to waste tire statutes, rules, permits and orders;~~]

[~~(f) Any violation of ORS 164.785 relating to the placement of offensive substances into the waters of the state or on to land; and~~]

[~~(e)~~] Any violation of [~~laws~~]statutes, rules, or permits relating to woodstoves, except violations relating to the sale of new woodstoves;

(b) Any violation by a city, county or metropolitan service district of failing to provide the opportunity to recycle as required by law; and

(c) [~~(g)~~] Any violation of ORS [~~468.825 and 468.827~~] 468B.480 and 468B.485 and rules adopted thereunder relating to the financial assurance requirements for ships transporting hazardous materials and oil.

(Statutory Authority: ORS Ch. 454, 459, 456, 466, 467, 468, 468A & 468B & ~~468~~)

[~~(* effective August 15, 1990)~~]

CIVIL PENALTY DETERMINATION PROCEDURE

340-12-045

(1) When determining the amount of civil penalty to be assessed for any violation, other than violations of ORS 468.996, which are determined according to the procedure set forth below in OAR 340-12-049(8), the Director shall apply the following procedures:

(a) Determine the class [~~of violation~~] and the magnitude of each violation;

(b) Choose the appropriate base penalty (BP) established by the

matrices of 340-12-042 [~~based upon the above finding~~] after determining the class and magnitude of each violation;

(c) Starting with the base penalty [~~(BP)~~], determine the amount of penalty through application of the formula:

BP + [(.1 x BP)(P + H + [~~E~~] + O + R + C)] + EB where:

(A) "P" is whether the [~~r~~] Respondent has any prior significant actions relating to statutes, rules, orders and permits pertaining to environmental quality or pollution control. For the purposes of this determination, any violations that were the subject of any prior significant actions that were issued prior to the effective date of the first original Division 12 rules shall be classified in accordance with the classifications set forth in those rules to ensure equity. The values for "P" and the finding which supports each are as follows:

(i) 0 if no prior significant actions or there is insufficient information on which to base a finding;

(ii) 1 if the prior significant action is one Class Two or two Class Threes;

(iii) 2 if the prior significant action(s) is one Class One or equivalent;

(iv) 3 if the prior significant actions are two Class One or equivalents;

(v) 4 if the prior significant actions are three Class Ones or equivalents;

(vi) 5 if the prior significant actions are four Class Ones or equivalents;

(vii) 6 if the prior significant actions are five Class Ones or equivalents;

(viii) 7 if the prior significant actions are six Class Ones or equivalents;

(ix) 8 if the prior significant actions are seven Class Ones or equivalents;

(x) 9 if the prior violations significant actions are eight Class Ones or equivalents;

(xi) 10 if the prior significant actions are nine Class Ones or equivalents, or if any of the prior significant actions were issued for any violation of ORS 468.996.

(xii) In determining the appropriate value for prior significant actions as listed above, the Department shall reduce the appropriate factor by:

(I) A value of two (2) if all the prior significant actions are greater than three years old but less than five years old;

(II) A value of four (4) if all the prior significant actions are greater than five years old;

(III) In making the above reductions, no finding shall be less than 0.

(xiii) Any prior significant action which is greater than ten years old shall not be included in the above determination.

(B) "H" is past history of the [~~r~~] Respondent in taking all feasible steps or procedures necessary or appropriate to correct any violation cited in any prior significant actions. In no case shall the combination of the "P" factor and the "H" factor be a value less than zero. In such cases where the sum of the "P" and "H" values is a negative numeral (i.e., (-1) or (-2)), "H" shall be assigned a value equal to "P". The values for "H" and the finding which supports each are as follows:

(i) -2 if [~~violator~~] Respondent took all feasible

steps to correct [~~any violations~~] each violation contained in any prior significant action;

(ii) 0 if there is no prior history or if there is insufficient information on which to base a finding;

[~~(iii) 1 if violator took some, but not all, feasible steps to correct a Class Two or Three violation;~~

~~(iv) 2 if violator took some, but not all, feasible steps to correct a Class One violation;~~

~~(v) 3 if violator took no action to correct prior significant actions.~~]

(C) [~~"E" is the economic condition of the respondent. The values for "E" and the finding which supports each are as follows:~~

~~(i) 0 to 4 if economic~~ and financial hardship ~~is condition is poor, subject to subsection (4) of this section;~~

~~(ii) 0 if there is insufficient information on which to base a finding, the respondent gained no economic benefit through noncompliance, or the respondent is economically sound;~~

~~(iii) 2 if the respondent gained a minor to moderate economic benefit through noncompliance;~~

~~(iv) 4 if the respondent gained a significant economic benefit through noncompliance.~~]

[~~(D)~~] "O" is whether the violation was [~~a single occurrence or was~~] repeated or continuous [~~during the period resulting in the civil penalty assessment~~]. The values for "O" and the finding which supports each are as follows:

(i) 0 if [~~single occurrence~~] the violation existed for one day or less and did not recur the same day;

(ii) 2 if [~~repeated or continuous~~] the violation existed for more than one day or if the violation recurred the same day.

[~~(E)~~] (D) "R" is whether the violation resulted from an unavoidable accident, or a negligent, [~~or an~~] intentional or flagrant act of the [~~r~~] Respondent. The values for "R" and the finding which supports each are as follows:

(i) [~~2 if unavoidable accident;~~]

[~~(ii)~~] 0 if an unavoidable accident, or if there is insufficient information to make [~~any other~~] a finding;

[~~(iii)~~] (ii) 2 if negligent;

[~~(iv) 4 if grossly negligent; or~~]

[~~(v)~~] (iii) 6 if intentional; or

[~~(vi)~~] 10 if flagrant.

[~~(F)~~] (E) "C" is the [~~violator's~~] Respondent's cooperativeness and efforts to correct [~~in correcting~~] the violation. The values for "C" and the finding which supports each are as follows:

(i) -2 if [~~violator is~~] Respondent was cooperative and tried to correct the violation or the effects of the violation;

~~(ii)~~ 0 if [~~violator is neither cooperative nor uncooperative or~~] there is insufficient information [~~on which~~] to [~~base~~] make a finding, or if the violation or the effects of the violation could not be corrected;

(iii) 2 if [~~violator is~~] Respondent was uncooperative and did not try to correct the violation or the effects of the violation.

(F) "EB" is the approximated dollar sum of the economic benefit that the Respondent gained through noncompliance. The Department or Commission may increase the penalty by the approximated dollar sum of the

economic benefit, provided that the sum penalty does not exceed the maximum allowed for the violation by rule or statute. After determining the base penalty and applying the civil formula penalty above to determine the gravity and magnitude-based portion of the civil penalty, "EB" is to be determined as follows:

(i) Add to the formula the approximate dollar sum of the economic benefit gained through noncompliance, as calculated by determining both avoided costs and the benefits obtained through any delayed costs, where applicable;

(ii) The Department need not calculate nor address the economic benefit component of the civil penalty when the benefit obtained is de minimus;

(iii) As stated above, under no circumstances shall the imposition of the economic benefit component of the penalty result in a penalty exceeding the statutory maximum allowed for the violation by rule or statute. When a violation has extended over more than one day, however, for determining the maximum penalty allowed, the Director may treat the violation as extending over at least as many days as necessary to recover the economic benefit of noncompliance. When the purpose of treating a violation as extending over more than one day is to recover the economic benefit, the Department has the discretion not to impose the gravity and magnitude-based portion of the penalty for more than one day.

(2) In addition to the factors listed in subsection (1) of this rule, the Director may consider any other relevant rule of the Commission and shall state the affect the consideration had on the penalty. On review, the Commission shall consider the factors contained in subsection (1) of this rule and any other relevant rule of the Commission.

~~[(3) If the Department or Commission finds that the economic benefit of noncompliance exceeds the dollar value of 4 in subsection (1)(c)(C)(iv) of this section, it may increase the penalty by the amount of economic gain, as long as the penalty does not exceed the maximum penalty allowed by rule and statute.]~~

~~[(4) In any contested case proceeding or settlement in which Respondent has raised economic and financial condition as an issue, Respondent has the responsibility of providing documentary evidence concerning its economic condition. In determining whether to mitigate a penalty based on economic and financial condition, the Commission or Department may consider the causes and circumstances of Respondent's economic condition.]~~

(3) The Department or Commission may reduce any penalty based on the Respondent's inability to pay the full penalty amount. If the Respondent seeks to reduce the penalty, the Respondent has the responsibility of providing to the Department or Commission documentary evidence concerning Respondent's inability to pay the full penalty amount.

(a) When the Respondent is currently unable to pay the full amount, the first option should be to place the Respondent on a payment schedule with interest on the unpaid balance for any delayed payments. The Department or Commission may reduce the penalty only after determining that the Respondent is unable to meet a long-term payment schedule.

(b) The Department or Commission may impose a penalty that may force a company to go out of business in appropriate circumstances. Such circumstances may include situations where the violation is intentional or flagrant or situations where the Respondent's financial condition poses a serious concern regarding its ability or incentive to remain in compliance.

(Statutory Authority: ORS CH 468)

WRITTEN NOTICE OF ASSESSMENT OF CIVIL PENALTY; WHEN PENALTY PAYABLE

340-12-046

(1) A civil penalty shall be due and payable [~~when the respondent is served a written notice of assessment of civil penalty signed by the Director. Service shall be in accordance with rule 340-11-097~~] ten (10) days after the order assessing the civil penalty becomes final and the civil penalty is thereby imposed by operation of law or on appeal. A person against whom a civil penalty is assessed shall be served with a notice in the form and manner provided in ORS 183.415 and OAR Chapter 340, Division 11.

(2) The written notice of assessment of civil penalty shall substantially [~~follow the form prescribed by rule 340-11-098 for a notice of opportunity for a hearing in a contested case;~~] comply with ORS 468.135(1) and ORS 183.090, relating to notice and contested case hearing applications, and shall state the amount of the penalty or penalties assessed.

[~~(3)~~] The rules prescribing procedure in contested case proceedings contained in OAR Chapter 340, Division 11 shall apply thereafter.
(Statutory Authority: ORS CH 468)

COMPROMISE OR SETTLEMENT OF CIVIL PENALTY BY DIRECTOR
340-12-047

(1) Any time [~~subsequent to~~] after service of the written notice of assessment of civil penalty, the Director may compromise or settle any unpaid civil penalty at any amount that the Director deems appropriate. Any compromise or settlement executed by the Director shall be final .

(2) In determining whether a penalty should be compromised or settled, the Director may take into account the following:

(a) New information obtained through further investigation or provided by [r] Respondent which relates to the penalty determination factors contained in OAR 340-12-045;

(b) The effect of compromise or settlement on deterrence;

(c) Whether [~~r~~] Respondent has or is willing to employ extraordinary means to correct the violation or maintain compliance;

(d) Whether [~~r~~] Respondent has had any previous penalties which have been compromised or settled;

(e) Whether the compromise or settlement would be consistent with the Department's goal of protecting the public health and environment;

(f) The relative strength or weakness of the Department's case[~~,~~].
(Statutory Authority: ORS CH 468)

STIPULATED PENALTIES
340-12-048

Nothing in OAR Chapter 340 Division 12 shall affect the ability of the Commission or Director to include stipulated penalties in a Stipulat[~~ed~~]ion and Final Order, Consent Order, Consent Decree or any other agreement issued under [~~ORS 466.570 or 466.577, or~~] ORS Chapters 183, 454, 459, 465, 466, 467, [~~or~~] 468, 468A, or 468B.
(Statutory Authority: ORS CH 454, 459, 465, 466, 467, [&] 468, 468A, & 468B)

[~~CIVIL PENALTY FOR VIOLATIONS NOT SUBJECT TO OAR 340-12-042 AND OAR 340-12-045~~]
ADDITIONAL CIVIL PENALTIES
340-12-049

In addition to any other penalty provided by law, the following violations are subject to the civil penalties specified below:

(1) Any person who wilfully o[~~f~~]r negligently causes an oil spill shall incur a civil penalty commensurate with the amount of damage incurred. The amount of the penalty shall be determined by the Director with the advice of the Director of Fish and Wildlife. In determining the amount of

the penalty, the Director may consider the gravity of the violation, the previous record of the violator and such other considerations the Director deems appropriate.

(2) Any person planting contrary to the restriction of subsection (1) of ORS 468.465 pertaining to the open field burning of cereal grain acreage shall be assessed by the Department a civil penalty of $25 for each acre planted contrary to the restrictions.

(3) Whenever an underground storage tank fee is due and owing under ORS 466.785 or 466.795, the Director may issue a civil penalty not less twenty-five dollars ($25) nor more than one hundred dollars ($100) for each day the fee is due and owing.

(4) Any owner or operator of a confined animal feeding operation who has not applied for or does not have a permit required by ORS [~~468.740~~] 468B.050 shall be assessed a civil penalty of $500.

(5) Any person who fails to pay an automobile emission fee when required by law or rule.

(6) Any person who fails to pay an industrial emission fee when required by law or rule.

[~~(5)~~] (7) Any person who has care, custody or control of a hazardous waste or a substance which would be a hazardous waste except for the fact that it is not discarded, useless or unwanted shall incur a civil penalty according to the schedule set forth in this section for the destruction, due to contamination of food or water supply by such waste or substance, of any of the wildlife referred to in this section that are property of the state.

(a) Each game mammal other than mountain sheep, mountain goat, elk or silver gray squirrel, $400.

(b) Each mountain sheep or mountain goat, $3,500.

(c) Each elk, $750.

(d) Each silver gray squirrel, $10.

(e) Each game bird other than wild turkey, $10.

(f) Each wild turkey, $50.

(g) Each game fish other than salmon or steelhead trout, $5.

(h) Each salmon or steelhead trout, $125.

(i) Each fur-bearing mammal other than bobcat or fisher, $50.

(j) Each bobcat or fisher, $350.

(k) Each specimen of any wildlife species whose survival is specified by the wildlife laws or the laws of the United States as threatened or endangered, $500.

(l) Each specimen of any wildlife species otherwise protected by the wildlife laws or the laws of the United, but not otherwise referred to in this section, $25[~~.~~];

(8) Any person who intentionally or recklessly violates any provision of ORS 164.785, 459.205 to 459.426, 459.705 to 459.790, ORS Chapters 465, 466, 467 or 468 or any rule or standard or order of the commission adopted or issued pursuant to ORS 459.205 to 459.426, 459.705 to 459.790, ORS Chapters 465, 466, 467 or 468, which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment shall incur a penalty up to $100,000. When determining the civil penalty sum to be assessed under this section, the Director shall apply the following procedures:

(a) Select one of the following base penalties after determining the cause of the violation:

(i) $50,000 if the violation was caused recklessly;

(ii) $75,000 if the violation was caused intentionally;

(iii) $100,000 if the violation was caused flagrantly;

(b) Then determine the civil penalty through application of the formula: BP + (.1 x BP) (P + H + O + C) + EB, in accord with the applicable subsections of OAR 340-12-045(1)(c).

(Statutory Authority: ORS CHS 466 & 468)

AIR QUALITY CLASSIFICATION OF VIOLATIONS
340-12-050
Violations pertaining to air quality shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order, or variance;

(b) ~~[Exceeding an allowable emission level such that an ambient air quality standard is exceeded.]~~

~~[(f)]~~ Constructing or operating a source without an Air Contaminant Discharge Permit;

(c) ~~[(g)]~~ Modifying a source with an Air Contaminant Discharge Permit without first notifying and receiving approval from the Department;

(d) ~~[(h)]~~ Violation of a compliance schedule in a permit;

(e) [~~(c)~~] Exceeding an allowable emission level of a hazardous air pollutant.

(f) Exceeding an emission or opacity limitation for a criteria pollutant, by a factor of greater than or equal to two times the limitation, within 10 kilometers of either a Non-Attainment Area or a Class I Area;

(g) ~~[(d)]~~ Causing emissions that are a hazard to public safety;

(h) [~~(e)~~R] Failure to comply with Emergency Action Plans or allowing excessive emissions during emergency episodes;

(i) Violation of a work practice requirement for asbestos abatement projects which [~~results in or creates the likelihood~~] causes a potential for public exposure to asbestos or release of asbestos into the environment;

(j) Storage or accumulation of friable asbestos material or asbestos-containing waste material from an asbestos abatement project which [~~results in or creates the likelihood~~] causes a potential for public exposure to asbestos or release of asbestos into the environment;

(k) Visible emissions of asbestos during an asbestos abatement project or during collection, processing, packaging, transportation, or disposal of asbestos-containing waste material;

(l) Conduct of an asbestos abatement project by a person not licensed as an asbestos abatement contractor;

(m) Violation of a disposal requirement for asbestos-containing waste material which [~~results in or creates the likelihood of~~] causes a potential for public exposure to asbestos or release of asbestos into the environment;

(n) Advertising to sell, offering to sell or selling a[~~n un~~] non-certified wood stove;

(o) Illegal open burning[~~, including stack burning, which poses a major risk of harm to public health or the environment~~] of materials in violation of OAR 340-23-042;

[~~(q)~~] (p) Cause[~~s~~]ing or allow[s]ing open field burning without first obtaining a valid open field burning permit;

[~~(r)~~] (q) Cause[~~s~~]ing or allow[~~s~~]ing open field burning or stack burning where prohibited by OAR 340-26-010(7) or OAR 340-26-055(1)(e);

[~~(s)~~] (r) Cause[~~s~~]ing or allow[~~s~~]ing [~~to be maintained~~] any propane flaming which results in visibility impairment on any Interstate Highway or Roadway specified in OAR 837-110-080(1) and (2);

[~~(t)~~] (s) Fail[~~s~~]ing to immediately and actively extinguish all flames and smoke sources when any propane flaming results in visibility impairment on any Interstate Highway or Roadway specified in OAR 837-110-080(1) and (2);

[~~(u)~~] (t) Causing or allowing propane flaming of grass seed or cereal grain crops, stubble, or residue without first obtaining a valid propane flaming burning permit;

[~~(v)~~] (u) Stack or pile burning grass seed or cereal grain crop residue without first obtaining a valid stack or pile burning permit;

[~~(w)~~] (v) Open field burning or propane flaming when State Fire Marshal restrictions are in effect;

(w) Failure to install vapor recovery piping in accordance with standards set forth in OAR Chapter 340, Division 150;

(x) Installing vapor recovery piping without first obtaining a service providers license in accordance with requirements set forth in OAR Chapter 340, Division 160;

(y) Failure to provide access to premises or records when required by law, rule, permit or order;

(z) Any [~~other~~] violation related to air quality which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) [~~Allowing discharges of a magnitude that, though not actually likely to cause an ambient air violation, may have endangered citizens;~~

~~(b) Exceeding emission limitations in permits or rules;~~

~~(c) Exceeding opacity limitations in permits or rules;~~]

Exceeding emission or opacity limitations in permits or rules;

(b) [~~(d)~~] Violating standards in permits or rules for fugitive emissions, particulate deposition, or odors [~~in permits or rules~~];

(c) [~~(e)~~] Illegal open burning [~~, including stack burning, which poses a moderate risk of harm to public health or the environment~~] of commercial, construction and/or demolition, and/or agricultural waste;

(d) [~~(f)~~] Fail[~~ure~~]ing to report excess emissions due to upset or breakdown of air pollution control equipment[~~, or an emission limit violation~~];

[~~(g) Violation of a work practice requirement for asbestos abatement projects which are not likely to result in a potential for public exposure to asbestos or release of asbestos into the environment;~~

~~(h) Improper storage or accumulation of friable asbestos material or asbestos containing waste material from an asbestos abatement project which is not likely to result in a potential for public exposure to asbestos or release of asbestos into the environment;~~

~~(i) Violation of a disposal requirement for asbestos containing waste material which is not likely to result in a potential for public exposure to asbestos or release of asbestos to the environment;~~]

(e) Improper notification of an asbestos abatement project;

(f) Failure to comply with asbestos abatement licensing, certification, or accreditation requirements;

[~~(j) Conduct of an asbestos abatement project by a contractor not licensed as an asbestos abatement contractor;~~

~~(k) Failure to provide notification of an asbestos abatement project;~~]

(g) [~~(l)~~] Failure to display permanent labels on a certified woodstove;

(h) [~~(m)~~] Alteration of a permanent label for a certified woodstove ~~permanent label~~;

(i) [~~(n)~~] Failure to use Department-approved vapor control equipment when transferring fuel;

(j) Operating a vapor recovery system without first obtaining a piping test performed by a licensed service provider as required by OAR Chapter 340, Division 160;

(k) Failure to obtain Department approval prior to installing a Stage II vapor recovery system not already registered with the Department as specified in Department rules;

[~~(o) Failure to file a Notice of Construction or permit application;~~]

[~~(p) Failure to submit a report or plan as required by permit;~~]

[~~(q)~~] (l) Failure to actively extinguish all flames and major smoke sources from open field or stack burning when prohibition conditions are imposed by the Department or when instructed to do so by an agent or employe of the Department;

[~~(r)~~](m) Causing or allowing a propane flaming operation to be conducted in a manner which causes or allows an open flame to be sustained;

[*~~(s)~~] (n) Installing, servicing, repairing, disposing of or otherwise treating automobile air conditioners without recovering and recycling chlorofluorocarbons using approved recovery and recycling equipment;

[*~~(t)~~] (o) Selling, or offering to sell, or giving as a sales inducement any aerosol spray product which contains as a propellant any compound prohibited under ORS ~~[468.605]~~468A.655;

[*~~(u)~~] (p) Selling any chlorofluorocarbon or halon containing product prohibited under ORS ~~[468.616]~~468A.635;

~~[(v)]~~ (q) Any [~~other~~] violation related to air quality which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

(3) Class Three:

(a) Illegal residential open burning [~~, including stack burning, which poses a minor risk of harm to public health or the environment~~];

[~~(b) Improper notification of an asbestos abatement project;~~

~~(c) Failure to comply with asbestos abatement certification, licensing, certification, or accreditation requirements not elsewhere classified;~~]

[~~(d)~~](b) Failure to display a temporary label on a certified wood stove;

[(e)] (c) Violation of any other requirement of OAR Chapter 340, Division 26 pertaining to open field burning and propane flaming operations which is not otherwise classified;

[~~(f) Any other violation related to air quality which poses a minor risk of harm to public health or the environment.~~]

(Statutory Authority: ORS CH 468A)

[~~(* effective August 15, 1990)~~]

NOISE CONTROL CLASSIFICATION OF VIOLATIONS

340-12-052

Violations pertaining to noise control shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department order or variance;

(b) Violations that exceed noise standards by ten (10) decibels or more;

(c) Exceeding the ambient degradation rule by five (5) decibels or more; or

(d) Failure to submit a compliance schedule required by OAR 340-35-035(2);

(e) Operating a motor sports vehicle without a properly installed or well-maintained muffler or exceeding the noise standards set forth in OAR 340-35-040(2);

(f) Operating a new permanent motor sports facility without submitting and receiving approval of projected noise impact boundaries;

(g) Failure to provide access to premises or records when required by law, rule, or order;

(h) Violation of motor racing curfews set forth in OAR 340-35-040(6);

(i) Any [~~other~~] violation related to noise control which causes a

major harm or poses a major risk or harm to public health or the environment.

(2) Class Two:

(a) Violations that exceed noise standards by three (3) decibels or more;

(b) Advertising or offering to sell or selling an uncertified racing vehicle without displaying the required notice or obtaining a notarized affidavit of sale;

(c) Any [other] violation related to noise control which [poses a moderate risk of harm to public health or the environment] is not otherwise classified in these rules.

(3) [Class Three:]

[(a)] Violations that exceed noise standards by one (1) or two (2) decibels are Class III violations;

[(b) Any other violation of related to noise control which poses a minor risk of harm to public health or the environment.]

(Statutory Authority: ORS CH 467 & 468)

WATER QUALITY CLASSIFICATION OF VIOLATIONS

340-12-055

Violations pertaining to water quality shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) [Intentional unauthorized discharges;]

[(c) Negligent spills which pose a major risk of harm to public health or the environment;]

(c) Any unauthorized or non-permitted discharge of untreated or partially treated waste that enters waters of the state;

(d) Waste discharge permit limitation violations which cause major harm or pose a major risk of harm to public health or the environment;

(e) [Discharge of waste to surface waters without first obtaining a National Pollutant Discharge Elimination System Permit;]

[(f)] Failure to comply with statute, rule, or permit requirements regarding notification of a spill or upset condition which results in a non-permitted [immediately notify of spill or upset condition which results in an unpermitted] discharge to public waters;

(f) [(g)] Violation of a permit compliance schedule;

(g) [(h)] Any violation of any pretreatment standard or requirement by a user of a municipal treatment works which either impairs or damages the treatment works, or causes a major harm or poses a major risk of harm to public health or the environment;

(h) Failure to provide access to premises or records when required by law, rule, permit or order;

(i) Failure of any ship carrying oil to have financial assurance as required in ORS [468.780 to 468.815] 468B.300 to 468B.335 or rules adopted thereunder;

(j) Any [other] violation related to water quality which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) [Waste discharge permit limitation violations which pose a moderate risk of harm to public health or the environment;]

[(b)] Operation of a disposal system without first obtaining a Water Pollution Control Facility Permit;

[(c) Negligent spills which pose a moderate risk of harm to public health or the environment;]

(b) [(d)] Failure to submit a report or plan as required by rule permit, or license;

(c) Any violation of OAR Chapter 340, Division 49 regulations pertaining to certification of wastewater system operator personnel;

(d) Placing wastes such that the wastes are likely to enter public waters by any means;

(e) Failure by any ship carrying oil to keep documentation of financial assurance on board or on file with the Department as required by ORS [~~468.780 to 468.815~~] 468B.300 to 468B.335 or rules adopted thereunder;

(f) [~~(e)~~] Any [~~other~~] violation related to water quality which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

(3) Class Three:

(a) Failure to submit a discharge monitoring report [(DMR)] on time;

(b) Failure to submit a complete[~~d DMR~~] discharge monitoring report;

(c) [~~Negligent spills which pose a minor risk of harm to public health or the environment;~~]

[~~(d) Violation of~~] Exceeding a waste discharge permit BOD, CBOD, or TSS limitation [~~which poses a minor risk of harm to public health or the environment~~] by a concentration of 20 per cent or less, or exceeding a mass loading limitation by 10 per cent or less;

[~~(e) Any other violation related to water quality which poses a minor risk of harm to public health or the environment.~~]

(Statutory Authority: ORS CH 468B)

ON-SITE SEWAGE DISPOSAL CLASSIFICATION OF VIOLATIONS

340-12-060

Violations pertaining to On-Site Sewage Disposal shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department order;

(b) Performing, advertising or representing one's self as being in the business of performing sewage disposal services without first obtaining and maintaining a current sewage disposal service license from the Department[~~, except as otherwise provided by statute or rule~~];

(c) Installing or causing to be installed an on-site sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit from the Agent;

(d) Disposing of septic tank, holding tank, chemical toilet, privy or other treatment facility contents in a manner or location not authorized by the Department;

(e) Failure to provide access to premises or records when required by law, rule, permit or order;

(f) Any [~~other~~] violations related to on-site sewage disposal which cause major harm or pose[~~s~~] a major risk of harm to public health, welfare, safety or the environment.

(2) Class Two:

(a) Installing or causing to be installed an on-site sewage disposal system, or any part thereof, or the repairing of any part thereof, which fails to meet the requirements for satisfactory completion within thirty (30) days after written notification or posting of a Correction Notice at the site;

(b) Operating or using a nonwater-carried waste disposal facility without first obtaining a letter of authorization from the Agent therefore;

(c) Operating or using a newly constructed, altered or repaired on-site sewage disposal system, or part thereof, without first obtaining a Certificate of Satisfactory Completion from the Agent[~~, except as provided by statute or rule~~];

(d) [~~As a licensed sewage disposal service worker, p~~] Provid[~~es~~]ing any sewage disposal service in violation of [~~the~~] any statute, rule, [~~s~~] license, or permit, provided that the violation is not otherwise classified in these rules [~~of the Commission~~];

(e) Failing to obtain an authorization notice from the [~~a~~]Agent prior to affecting change to a dwelling or commercial facility that results in the potential increase in the projected peak sewage flow from the dwelling or commercial facility in excess of the sewage disposal system's peak design flow.

(f) Installing or causing to be installed a nonwater-carried waste disposal facility without first obtaining written approval from the Agent [~~therefor~~];

(g) Failing to connect all plumbing fixtures [~~from which sewage is or may be discharged to~~] to, or failing to discharge waste water or sewage into, a Department approved system;

(h) Operating or using an on-site sewage disposal system which is failing by discharging sewage or effluent onto the ground surface or into surface public water;

(i) Any [~~other~~] violation related to on-site sewage disposal which [~~poses a moderate risk of harm to public health, welfare, safety or the environment~~] is not otherwise classified in these rules.

(3) [~~Class Three:~~]

[~~(a) In situations~~] Violations where the sewage disposal system design flow is not exceeded, placing an existing system into service, or changing the dwelling or type of commercial facility, without first obtaining an authorization notice from the [~~a~~] Agent are Class III violations. [~~, except as otherwise provided by rule or statute;~~]

[~~(b) Any other violation related to on-site sewage disposal which poses a minor risk of harm to public health, welfare, safety or the environment.~~]

(Statutory Authority: ORS CH 454 & 468B)

SOLID WASTE MANAGEMENT CLASSIFICATION OF VIOLATIONS

340-12-065

Violations pertaining to the management, recovery and disposal of solid waste shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Establishing, expanding, maintaining or operating a disposal site without first obtaining a permit;

(c) Accepting for disposal, solid waste in a permitted solid waste unit or facility that has been expanded in area or capacity without first submitting plans to the Department and obtaining approval;

(d) [~~(c)~~] Violation of the freeboard limit [~~or~~] which results in the actual overflow of a sewage sludge or leachate lagoon;

(e) [~~(d)~~] Violation of the landfill methane gas concentration standards;

(f) Violation of any federal or state drinking water standard in an aquifer beyond the solid waste boundary of the landfill, or an alternative boundary specified by the Department;

(g) Violation of a permit-specific groundwater concentration limit, as defined in OAR 340-40-030(3) at the permit-specific groundwater concentration compliance point, as defined in OAR 340-40-030(2)(e);

(h) Failure to perform the groundwater monitoring action requirements specified in OAR 340-40-030 (5), when a significant increase (for pH, increase or decrease) in the value of a groundwater monitoring parameter is detected.

(i) [~~(e)~~] Impairment of the beneficial uses(s) of an aquifer beyond the solid waste boundary or an alternative boundary specified by the Department;

(j) [~~(f)~~] Deviation from the approved facility plans which results in an [~~potential or~~] actual safety hazard, public health hazard or damage to the environment;

(k) [~~(g)~~] Failure to properly construct and maintain groundwater, surface water, gas or leachate collection, treatment, disposal and monitoring [~~control~~] facilities in accordance with the facility permit, the facility environmental monitoring plan, or Department rules;

(l) Failure to collect, analyze and report groundwater, surface water or leachate quality data in accordance with the facility permit, the facility environmental monitoring plan, or Department rules;

[~~(h) Failure to comply with the requirements for immediate and final cover;~~]

(m) [~~(i)~~] Violation of a compliance schedule contained in a solid waste disposal or closure permit;

(n) [~~(j)~~] Failure to provide access to premises or records when required by law, rule, permit or order;

(o) Knowingly disposing, or accepting for disposal, used oil, in single quantities exceeding 50 gallons, or lead acid batteries;

(p) Accepting, handling, treating or disposing of clean-up materials contaminated by hazardous substances by a landfill in violation of the facility permit and plans approved by the Department or the provisions of OAR 340-61-060.

(q) Accepting for disposal infectious waste not treated in accordance with laws and Department rules;

(r) Accepting for treatment, storage or disposal wastes defined as hazardous under ORS 466.005, et seq, or wastes from another state which are hazardous under the laws of that state without specific approval from the Department;

(s) Mixing for disposal or disposing of principal recyclable material that has been properly prepared and source separated for recycling;

(t) [~~(k)~~] Any [~~other~~] violation related to the management, recovery and disposal of solid waste which causes major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

[~~(a) Failure to comply with the required cover schedule;~~

~~(b) Failure to comply with working face size limits;~~

~~(c) Failure to adequately control access;~~

~~(d) Failure to adequately control surface water drainage;~~

~~(e) Failure to adequately protect and maintain monitoring wells;~~

~~(f) Failure to properly collect and analyze required water or gas samples;~~

~~(g) Violation of a condition or term of a Letter of Authorization;~~

~~(h) Any other violation related to the management and disposal of solid waste which poses a moderate risk of harm to public health or the environment.~~]

(a) [~~(g)~~] Violation of a condition or term of a Letter of Authorization;

(b) Knowingly accepting for disposal or disposing of a material banned from land disposal under ORS 459.247, except those materials specified as Class I violations.

(c) Failure of a permitted landfill, solid waste incinerator or a municipal solid waste compost facility operator or a metropolitan service district to report amount of solid waste disposed in accordance with the laws and rules of the Department;

(d) Failure to report weight and type of material recovered or processed from the solid waste stream in accordance with the laws and rules of the Department;

(e) Failure of a disposal site to obtain certification for recycling programs in accordance with the laws and rules of the Department prior to accepting solid waste for disposal;

(f) Acceptance of solid waste by a permitted disposal site from a person that does not have an approved solid waste reduction program in accordance with the laws and rules of the Department;

(g) Failure to comply with any solid waste permit requirement pertaining to permanent household hazardous waste collection facility operations;

(h) Failure to comply with landfill cover requirements, including but not limited to daily, intermediate, and final covers, and limitation of working face size;

(i) Failure to comply with site development and operational plans as approved by the Department;

(j) Failure to submit a permit renewal application prior to the expiration date of the existing permit in accordance with the laws and rules of the Department;

(k) Any violation of a solid waste permit not otherwise classified in these rules.

(3) Class Three:

[~~(a) Failure to submit self-monitoring reports in a timely manner;~~

~~(b) Failure to submit a permit renewal application in a timely manner;~~

~~(c) Failure to submit required permit fees in a timely manner;~~]

(a) [~~(d)~~] Failure to post required [or adequate] signs;

(b) [~~(e)~~] Failure to [adequately] control litter;

[~~(g) Any other violation related to the management, recovery, and disposal of solid waste which poses a minor risk of harm to public health or the environment.~~]

(Statutory Authority: ORS CH 459)

SOLID WASTE TIRE MANAGEMENT CLASSIFICATION OF VIOLATIONS

340-12-066

Violations pertaining to the storage, transportation and management of waste tires or tire-derived products shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Disposing of waste tires or tire-derived products at an unauthorized site;

(c) Violation of the compliance schedule or fire safety requirements of a waste tire storage site permit;

(d) Hauling waste tires or advertising or representing one's self as being in the business of a waste tire carrier without first obtaining a waste tire carrier permit as required by laws and rules of the Department;

(e) Hiring or otherwise using an unpermitted waste tire carrier to transport waste tires;

(f) Failure to provide access to premises or records when required by law, rule, permit or order;

(g) Any [~~other~~] violation related to the storage, transportation or management of waste tires or tire-derived products which causes major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violation of a waste tire storage site or waste tire carrier permit other than a specified Class One or Class Three violation;

(b) Establishing, expanding, or operating a waste tire storage site without first obtaining a permit;

(c) Any [~~other~~] violation related to the storage, transportation or management of waste tires or tire-derived products which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

(3) Class Three:

(a) Failure to submit required annual reports in a timely manner;

(b) Failure to keep required records on use of vehicles;

(c) Failure to post required signs;

(d) Failure to submit a permit renewal application in a timely manner;

(e) Failure to submit permit fees in a timely manner;

(f) Failure to maintain written records of waste tire disposal and generation;

[~~(g) Any other violation related to the storage, transportation or management of waste tires which poses a minor risk of harm to public health or the environment.~~]

(Statutory authority: ORS CH 459)

UNDERGROUND STORAGE TANK AND HEATING OIL TANK CLASSIFICATION OF VIOLATIONS
340-12-067

Violations pertaining to Underground Storage Tanks and cleanup of petroleum contaminated soil at heating oil tanks shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Failure to [~~promptly~~] report a release from an underground storage tank [~~which poses a major risk of harm to public health or the environment~~]or a heating oil tank as required by statute, rule or permit;

(c) Failure to initiate and complete the investigation or cleanup of a release from an underground storage tank or a heating oil tank [~~which poses a major risk of harm to public health or the environment~~];

(d) Failure to prevent a release [~~which poses a major risk of harm to public health or the environment~~] from an underground storage tank or heating oil tank;

(e) [~~(i)~~] Failure to submit required reports from the investigation or cleanup of a release [~~which poses a major risk of harm to public health or the environment~~] from an underground storage tank or heating oil tank;

(f) [~~(j)~~] Failure to provide access to premises or records when required by law, rule, permit or order;

(g) [~~(e)~~] Placement of a regulated material into an unpermitted underground storage tank;

(h) [~~(f)~~] Installation of an underground storage tank in violation of the standards or procedures adopted by the Department;

[~~(g) Providing installation, retrofitting, decommissioning or testing services on an underground storage tank without first registering or obtaining an underground storage tank service providers license;~~]

[~~(h) Providing supervision of the installation, retroffiting, decommissioning or testing of an underground storage tank without first obtaining an underground storage tank supervisors license;~~]

(i) Failure to initiate and complete free product removal in accordance with OAR 340-122-235;

(j) Failure to report a release from a heating oil tank;

(k) Failure to initiate and complete the investigation or cleanup of a release from a heating oil tank;

(l) Providing installation, retrofitting, decommissioning, or testing services on an underground storage tank or providing cleanup of

petroleum contaminated soil at an underground storage tank site without first registering or obtaining an underground storage tank service providers license;

(m) Supervising the installation, retrofitting, decommissioning, or testing of an underground storage tank or supervising cleanup of petroleum contaminated soil at an underground storage tank site without first obtaining an underground storage tank supervisors license;

[~~(k)~~] (n) Any [~~other~~] violation[~~s~~] related to underground storage tanks or heating oil tanks or cleanup of petroleum contaminated soil at heating oil tanks which cause major harm or poses a major risk of harm to public health [~~and~~] or the environment.

(2) Class Two:

~~[(a) Failure to promptly report a release from an underground storage tank which poses a moderate risk of harm to public health or the environment;]~~

~~[(b) Failure to initiate investigation or cleanup of a release which poses a moderate risk of harm to public health or the environment;]~~

~~[(c) Failure to prevent a release which poses a moderate risk of harm to public health or the environment;]~~

~~[(d) Failure to submit required reports from the investigation or cleanup of a release which poses a moderate risk of harm to public health or the environment;]~~

(a) Failure to submit required reports from the investigation or cleanup of a release;

(c) [~~(e)~~] Failure to conduct required underground storage tank monitoring and testing activities;

(d) [~~(f)~~] Failure to conform to operational standards for underground storage tanks and leak detection systems;

(e) [~~(g)~~] Failure to obtain a permit prior to the installation or operation of an underground storage tank;

(f) [~~(h)~~] Failure to properly decommission an underground storage tank;

(g) [~~(i)~~] Providing installation, retrofitting, decommissioning or testing services on an unregulated underground storage tank or providing cleanup of petroleum contaminated soil at a regulated underground storage tank that does not have a permit;

(h) [~~(j)~~] Failure by a seller or distributor to obtain the tank permit number [~~prior to~~] before depositing product into the underground storage tank or failure to maintain a record of the permit numbers;

(i) [~~(k)~~] Allowing the installation, retrofitting, decommissioning, or testing of an underground storage tank or cleanup of petroleum contaminated soil at an underground storage tank by any person not licensed by the department;

(j) Allowing cleanup of petroleum contaminated soil at a heating oil tank by any person not licensed by the Department;

(k) Providing petroleum contaminated soil cleanup services at a heating oil tank without first registering or obtaining a heating oil tank soil matrix cleanup service provider license;

(l) Supervising petroleum contaminated soil cleanup at a heating oil tank without first registering or obtaining a heating oil tank soil matrix cleanup supervisor license;

(m) Failure to submit a corrective action plan (CAP) in accordance with the schedule or format established by the Department pursuant to OAR 340-122-250.

(n) Failure by the tank owner to provide the permit number to persons depositing product into the underground storage tank;

(o) Failure to report a suspected release from an underground storage tank.

(p) [~~(l)~~] Any [~~other~~] violation related to underground storage tanks or heating oil tanks or cleanup of petroleum contaminated soil at a heating oil tank [~~with poses a moderate risk of harm to public health or the environment~~] that is not otherwise classified in these rules.

(3) Class Three:

[~~(a) Failure to promptly report a release from an underground storage tank which poses a minor risk of harm to public health or the environment;~~

~~(b) Failure to initiate investigation or cleanup of a release which poses a minor risk of harm to public health or the environment;~~

~~(c) Failure to prevent a release which poses a minor risk of harm to public health or the environment;~~

~~(d) Failure to submit required reports from the investigation or cleanup or a release which poses a minor risk of harm to public health or the environment;~~]

(a) [~~(e)~~] Failure to submit an application for a new permit when an underground storage tank is acquired by a new owner;

(b) [~~(f)~~] Failure of a tank seller or product distributor to notify a tank owner or operator of the Department's permit requirements;

(c) [~~(g)~~] Decommissioning, installing, or retrofitting an underground storage tank or conducting a soil matrix cleanup without first providing [~~written~~] the required notifications to the Department;

(d) [~~(h)~~] Failure to provide information to the Department regarding the contents of an underground storage tank;

(e) [~~(i)~~] Failure to maintain adequate decommissioning records;

[~~(j) Failure by the tank owner to provide the permit number to persons depositing product into the underground storage tank;~~]

[~~(k) Any other violation related to underground storage tanks which poses a minor risk of harm to public health and the environment.~~]

HAZARDOUS WASTE MANAGEMENT AND DISPOSAL CLASSIFICATION OF VIOLATIONS
340-12-068

Violations pertaining to the management and disposal of hazardous waste shall be classified as follows:

(1) Class One:

(a) Violation of a Department or Commission order;

(b) Failure to carry out waste analysis for a waste stream or to properly apply "knowledge of process";

(c) Operating a storage, treatment or disposal facility (TSD) without a permit or without meeting the requirements of OAR 340-105-010(2)(a);

(d) Failure to comply with the ninety (90) day storage limit by a fully regulated generator or the 180 day storage limit for a small quantity generator where there is a gross deviation from the requirement;

(e) Shipment of hazardous waste without a manifest;

(f) Systematic failure of a generator to comply with the manifest system requirements;

(g) Failure to satisfy manifest discrepancy reporting requirements;

[~~(h) Failure to prevent the unknown entry or prevent the possibility of the unauthorized entry of persons or livestock into the waste management area of a TSD facility;~~

~~(i) Failure to properly handle ignitable, reactive, or incompatible wastes as required under 40 CFR Part 264 and 265.17(b)(1), (2), (3), (4) and (5);~~]

(h) [~~(j)~~] Illegal disposal of hazardous waste;

[~~(k) Disposal of waste in violation of the land disposal restrictions;~~]

(i) [~~(l)~~] Mixing, solidifying, or otherwise diluting waste to circumvent land disposal restrictions;

(j) [~~(m)~~] Incorrectly certifying a waste for disposal/treatment in violation of the land disposal restrictions;

(k) [~~(n)~~] Failure to submit notifications/certifications as required by land disposal restrictions;

(l) [~~(o)~~] Failure to comply with the tank integrity assessments and certification requirements;

(m) [~~(p)~~] Failure of an owner/operator of a TSD facility to have closure and/or post closure plan [~~and/or cost estimates~~];

(n) [~~(q)~~] Failure of an owner/operator of a TSD facility to retain an independent registered professional engineer to oversee closure activities and certify conformance with an approved closure plan;

(o) [~~(r)~~] Failure to establish or maintain financial assurance for closure and/or post closure care;

[~~(s) Systematic failure to conduct unit specific and general inspections as required or to correct hazardous conditions discovered during those inspections;~~]

(p) [~~(t)~~] Failure to follow emergency procedures contained in response plan when failure could result in serious harm;

[~~(u) Storage of hazardous waste in containers which are leaking or present a threat of release;~~

~~(v) Systematic failure to follow container labeling requirements or lack of knowledge of container contents;~~

~~(w) Failure to label hazardous waste containers where such failure could cause an inappropriate response to a spill or leak and substantial harm to public health or the environment;~~

~~(x) Failure to date containers with accumulation date;~~]

(q) [~~(y)~~] Failure to comply with the export requirements;

[~~(z) Violation of a Final Status Hazardous Waste Management Permit;~~]

(aa) [~~Systematic f~~]Failure to comply with OAR 340-102-041, generator [~~quarterly~~] annual reporting requirements and OAR 340-102-012, annual registration information;

(bb) [~~Systematic f~~]Failure to comply with OAR 340-104-075, Treatment, Storage, Disposal and Recycling facility [~~periodic~~] annual reporting requirements and OAR 340-102-012, annual registration information;

(cc) Construct or operate a new treatment, storage or disposal facility without first obtaining a permit;

(dd) Installation of inadequate groundwater monitoring wells such that detection of hazardous waste or hazardous constituents that migrate from the waste management area cannot be immediately be detected;

(ee) Failure to install any groundwater monitoring wells;

(ff) Failure to develop and follow a groundwater sampling and analysis plan using proper techniques and procedures;

(gg) Failure to provide access to premises or records when required by law, rule, permit or order;

(hh) Any [~~other~~] violation related to the generation, management and disposal of hazardous waste which causes major harm or poses a major risk of harm to public health or the environment.

(2) Any [~~other~~] violation pertaining to the generation, management and disposal of hazardous waste which is [~~either not specifically listed as, or otherwise meets the criteria for, a Class One violation~~] not otherwise classified in these rules is [~~considered~~] a Class Two violation.

(Statutory Authority: ORS CH 466)

OIL AND HAZARDOUS MATERIAL SPILL AND RELEASE CLASSIFICATION OF VIOLATIONS
340-12-069

Violations pertaining to spills or releases of oil or hazardous materials shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Failure to provide access to premises or records when required by law, rule, permit or order;

(c) Failure by any person having ownership or control over oil or hazardous materials to immediately cleanup spills or releases or threatened spills or releases;

(d) Failure by any person having ownership or control over oil or hazardous materials to immediately report all spills or releases or threatened spills or releases in amounts equal to or greater than the reportable quantity;

(e) Any [~~other~~] violations related to the spill or release of oil or hazardous materials which cause a major harm or pose[~~s~~] a major risk of harm to public health or the environment.

(2) Any [~~other~~] violation related to the spill or release of oil or hazardous materials which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules is a Class Two violation .

[~~(3) Any other violation related to the spill or release of oil or hazardous materials which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS CH 466)

PCB CLASSIFICATION OF VIOLATIONS

340-12-071

Violations pertaining to the management and disposal of polychlorinated biphenyls (PCB) shall be classified as follows:

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Treating or disposing of PCBs anywhere other than at a permitted PCB disposal facility:

(c) Establishing, constructing or operating a PCB disposal facility without first obtaining a permit;

(d) Failure to provide access to premises or records when required to by law, rule, permit or order;

(e) Any [other] violation related to the management and disposal of PCBs which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violating a condition of a PCB disposal facility permit;

(b) Any [~~other~~] violation related to the management and disposal of PCBs which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

[~~(3) Any other violation related to the management and disposal of PCBs which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS Chapter 466)

[*]USED OIL MANAGEMENT CLASSIFICATION OF VIOLATIONS

340-12-072

Violations pertaining to the management of used oil shall be classified as follows:

(1) Class One:

(a) Using untested used oil as a dust suppressant or pesticide, or otherwise spreading untested used oil directly in the environment, if the quantity of oil spread exceeds 50 gallons per event;

(b) Spreading used oil contaminated with hazardous waste or failing to meet the limits for materials set in OAR 340-111-030;

(c) Any [~~other~~] violation related to the management of used oil which causes major harm or poses a major risk of harm to public health or the environment.

(d) Failure to provide access to premises or records when required to do so by law, rule, permit or order.

(2) Class Two:

(a) Failure to notify the Department of activities relating to spreading used oil;

(b) Any [~~other~~] violation related to the management of used oil which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

[~~(3) Any other violation related to the use of used oil which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS CHS. 466 & 468)

[~~(* effective August 15, 1990)~~]

ENVIRONMENTAL CLEANUP CLASSIFICATION OF VIOLATIONS

340-12-073

Violations of ORS [~~466.540~~] 465.200 through 465.420 [~~466.590~~] and related rules or orders pertaining to environmental cleanup shall be classified as follow:

(1) Class One:

(a) Violation of a Commission or Department order;

(b) Failure to provide access to premises or records when required to do so by law, rule, permit or order;

(c) Any [~~other~~] violation related to environmental investigation or cleanup which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Failure to provide information under ORS [~~466.565(1)~~] 465.250;

(b) Any [~~other~~] violation related to environmental investigation or cleanup which [~~poses a moderate risk of harm to public health or the environment~~] is not otherwise classified in these rules.

[~~(3) Any [other] violation related to environmental cleanup or investigation which poses a minor risk of harm to public health or the environment is a Class Three violation.~~]

(Statutory Authority: ORS Chapter 466)

SELECTED MAGNITUDE CATEGORIES

340-12-080

(1) Magnitudes for select violations pertaining to Air Quality shall be determined as follows:

(a) Opacity limitation violations:

(i) Major - Opacity measurements or readings more than 25 percent opacity over the applicable limitation;

(ii) Moderate - Opacity measurements or readings from greater than 10 percent to 25 percent or less opacity over the applicable limitation.

(iii) Minor - Opacity measurements or readings of 10 percent or less opacity over the applicable limitation;

(b) Steaming rates and fuel usage limitations:

(i) Major - Greater than 1.3 times any applicable limitation;

(ii) Moderate - From 1.1 up to and including 1.3 times any applicable limitation;

(iii) Minor - Less than 1.1 times any applicable limitation.

(c) Air Contaminant Discharge Permit emission limitation violations for selected air pollutants:

(i) Magnitude determination shall be made based upon the following Table:

Pollutant	Amount	
Carbon Monoxide	100 tons	
Nitrogen Oxides	40 tons	
Particulate Matter	25 tons	See note
(A) TSP	25 tons	
(B) PM 10	15 tons	
Sulfur Dioxide	40 tons	
Volatile Organic Compounds	40 tons	See note
Lead	1200 lbs.	
Mercury	200 lbs.	
Beryllium	0.8 lbs.	
Asbestos	14 lbs.	
Vinyl Chloride	1 ton	
Fluorides	3 tons	
Sulfuric Acid Mist	7 tons	
Hydrogen Sulfide	10 tons	
Total Reduced Sulfur (including hydrogen sulfide)	10 tons	
Reduced Sulfur Compounds (including hydrogen sulfide)	10 tons	

NOTE: For the nonattainment portions of the Medford-Ashland Air Quality Maintenance Area, and the Klamath Falls Urban Growth Area, the numbers to be used for Particulate Matter (both TSP and PM 10) shall be 5 tons, and for Volatile Organic Compounds shall be 20 tons.

(ii) Major:

(A) Exceeding the annual permitted amount by more than the above amount;

(B) Exceeding the monthly permitted amount by more than 10 percent of the above amount;

(C) Exceeding the daily permitted amount by more than 0.5 percent of the above amount;

(D) Exceeding the hourly permitted amount by more than 0.1 percent of the above amount.

(iii) Moderate:

(A) Exceeding the annual permitted amount by an amount from 50 up to and including 100 percent of the above amount;

(B) Exceeding the monthly permitted amount by an amount from 5 up to and including 10 percent of the above amount;

(C) Exceeding the daily permitted amount by an amount from 0.25 up to and including 0.50 percent of the above amount;

(D) Exceeding the hourly permitted amount by an amount from 0.05 up to and including 0.10 percent of the above amount.

(iv) Minor:

(A) Exceeding the annual permitted amount by an amount less than 50 percent of the above amount;

(B) Exceeding the monthly permitted amount by an amount less than 5 percent of the above amount;

(C) Exceeding the daily permitted amount by an amount less than 0.25 percent of the above amount;

(D) Exceeding the hourly permitted amount by an amount less than 0.05 percent of the above amount.

(d) Asbestos work practice violations:

(i) Major - Over 260 lineal feet or 160 square feet of asbestos containing material regardless of the percent of asbestos; or over 40 lineal feet or 80 square feet of asbestos containing material containing more than 10% asbestos;

(ii) Moderate - From 40 lineal feet up to and including 260 lineal feet or from 80 square feet up to and including 160 square feet of asbestos containing material containing 10 % or less asbestos; or less than 40 lineal feet or 80 square feet of asbestos containing material containing more than 10% asbestos;

(iii) Minor - Less than 40 lineal feet or 80 square feet of asbestos containing material containing 10% or less asbestos.

(e) Open burning violations:

(i) Major - Open burning of material constituting more than five cubic yards in volume;

(ii) Moderate - Open burning of material constituting from 1 up to and including 5 cubic yards in volume;

(iii) Minor - Open burning of material constituting less than one cubic yard in volume.

(iv) For the purposes of determining the magnitude of a violation only, five tires shall be deemed the equivalent in volume to one cubic yard.

(2) Magnitudes for select violations pertaining to Water Quality wastewater discharge limitations shall be determined as follows:

(a) Major:

(i) Greater than 1.6 times any applicable maximum flow rate, concentration limitation, or any applicable mass limitation; or

(ii) Greater than 50 percent below any applicable minimum concentration limitation; or

(iii) Greater than 2 pH units above or below any applicable pH range; or

(iv) Greater than 10 percentage points below any applicable removal rate.

(b) Moderate:

(i) From 1.3 up to and including 1.6 times any applicable maximum flow rate, concentration limitation, or any applicable mass limitation; or

(ii) From 25 up to and including 50 percent below any applicable minimum concentration limitation; or

(iii) From 1 up to and including 2 pH units above or below any applicable pH range; or

(iv) From 5 up to and including 10 percentage points below any applicable removal rate.

(c) Minor:

(i) Less than 1.3 times any applicable maximum flow rate, concentration limitation or any applicable mass limitation; or

(ii) Less than 25 percent below any applicable minimum concentration limitation; or

(iii) Less than 1 pH unit above or below any applicable pH range; or

(iv) Less than 5 percentage points below any applicable removal rate.

(3) Magnitudes for select violations pertaining to Hazardous Waste shall be determined as follows:

(a) Failure to make a hazardous waste determination:

(i) Major - Failure to make the determination on four or more waste streams;

(ii) Moderate - Failure to make the determination on two or three waste streams;

(iii) Minor - Failure to make the determination on one waste stream.

(iv) The magnitude of the violation shall be increased by one level, if more than 1000 gallons of hazardous waste is involved in the violation.

(v) The magnitude of the violation shall be decreased by one level, if less than 250 gallons of hazardous waste is involved in the violation.

(b) Operating a hazardous waste storage facility without a permit by failing to meet the 40 CFR 262.34 and OAR Chapter 340, Division 102 generator requirements:

(i) Major - Failure to comply with 5 or more requirements listed in (iv) below, or any mismanagement of hazardous waste when more than 2000 gallons of hazardous waste are on site;

(ii) Moderate - Failure to comply with 3 or 4 requirements listed in (iv) below, or any mismanagement of hazardous waste when from 500 up to and including 2000 gallons of hazardous waste are on site;

(iii) Minor - Failure to comply with 2 or fewer of the requirements listed in (iv) below, or any mismanagement of hazardous waste when less than 500 gallons of hazardous waste are on site.

(iv) Failure to comply with:

(A) 40 CFR 262.34(a)(2) (accumulation date).
(B) 40 CFR 262.34(a)(3) (marked as hazardous waste).
(C) 40 CFR 265.171 (container condition).
(D) 40 CFR 265.173 (container management).
(E) 40 CFR 265.191 (tank system integrity assessment).
(F) 40 CFR 265.196 (tank leak response).
(G) Exceeding the applicable storage time limits.
(I) Non-compliance with three or more 40 CFR 262.34 standards not listed above.

(c) Hazardous Waste disposal violations:

(i) Major - Disposal of more than 150 gallons of hazardous waste, or the disposal of more than 3 gallons of acutely hazardous waste, or the disposal of any amount of hazardous waste or acutely hazardous waste that has a substantial impact on the local environment into which it was placed;

(ii) Moderate - Disposal of 50 to 150 gallons of hazardous waste, or the disposal of 1 to 3 gallons of acutely hazardous waste;

(iii) Minor- Disposal of less than 50 gallons of hazardous waste, or the disposal of less than 1 gallon of acutely hazardous waste.

(4) Magnitudes for violating provisions of a Department or Commission Order:

(a) Major - Failure to meet three or more requirements of an Order;
(b) Moderate - Failure to meet two requirements of an Order;
(c) Minor - Failure to meet one requirement of an Order.

SCOPE OF APPLICABILITY
340-12-[~~080~~]090
Amendments to OAR 340-12-026 to 12-080 shall only apply to formal enforcement actions issued by the Department on or after the effective date of such amendments and not to any contested cases pending or formal enforcement actions issued prior to the effective date of such amendments. Any contested cases pending or formal enforcement actions issued prior to the effective date of any amendments shall be subject to OAR 340-12-026 to 340-12-[~~080~~]090 as prior to amendment.

U:\RULES\OAR12DR.FTX

PROPOSED AMENDMENT TO OREGON ADMINISTRATIVE RULES, RULES OF PRACTICE AND PROCEDURE, (OAR) 340-11-132(5)

OAR 340-11-132(5) In proceedings before the Hearing Officer regarding the assessment of penalties under OAR Chapter 340, Division 12, the Department has the burden of explaining how it calculated the relevant penalties according to the principles set forth in this Division. The department has the burden of proving each factual finding by a preponderance of the evidence. With respect to determinations that call for the exercise of judgment (e.g., whether, in the absence of predetermined criteria, the magnitude of a particular violation was major, moderate, or minor), the Hearing Officer shall uphold the Director's decision if the department demonstrates a rational relationship between the facts and the decision. In exercising the authority to enter a final order pursuant to this rule, the Hearing Officer:

(a) Shall not reduce the amount of civil penalty imposed by the Director unless:

(A) The department fails to establish some or any of the facts regarding the violation; or

(B) New information is introduced at the hearing regarding mitigating and aggravating circumstances not initially considered by the Director. Under no circumstances shall the Hearing Officer reduce or mitigate a civil penalty based on new information submitted at the hearing below the minimum established in the schedule of civil penalties contained in Commission rules.

(b) May elect to prepare proposed findings of fact and a proposed order and refer the matter to the Commission for entry of a final order pursuant to th egeneral procedure for contested cases prescribed under OAR 340-11-098.

Attachment J
Agenda Item L
July 24, 1992
EQC Meeting

Attachment J

(10)

GOV
22 '92

May 21, 1992

ASSOCIATED OREGON INDUSTRIES

Mr. Tom Bispham
Department of Environmental Quality
Regional Operations Division
811 SW sixth Avenue
Portland, OR 97204

RE: Amendments to DEQ Rules, OAR Chapter 340, Division 12

Dear Mr. Bispham:

On behalf of Associated Oregon Industries (AOI), I am pleased to have the opportunity to comment on the proposed amendments to the Department of Environmental Quality (DEQ), Chapter 340, Division 12 enforcement rules.

Representing AOI, I participated on the DEQ Environmental Enforcement Advisory Committee. AOI is in general accord with the results of the advisory committee's work product, although there are certain minor exceptions as are herein set forth. One major exception is outlined in my letter to DEQ's Tom Bispham dated April 30, 1992.

Upon reviewing the Division 12 amendment package which was not reviewed by the advisory committee, I find myself dismayed. there are numerous issues which deserve more discussion and analysis then the 30 day comment period can afford. Indeed, my AOI Environment Subcommittee on Enforcement is not yet able to complete analysis as the deadline draws near. Therefore, AOI's comments are a mere sample of the issues contained in the amendment package.

1. First and foremost, the proposed amendments attempt to laundry list penalties for a multitude of possible violations appears to rewrite the underlying laws without adequate notice and public comment.

a Many of the listed violations paraphrase or summarize the underlying regulations in ways that suggest new meanings for those regulations For example, 340-12-067 (1) (j) suggests that someone has the obligation to report releases from

heating oil tanks. This underlying reporting obligation, however, depends entirely upon the amount of heating oil released over a 24 hour period. Does this violation description expand that underlying requirement?

b. Other of the listed violations overstate the underlying regulation. For example, 340-12-065 (1) (f) and (g) state that a major violation occurs if groundwater standards are exceeded at a solid waste facility compliance point. The underlying regulations, however state that exceedance of the groundwater standards trigger certain investigatory and corrective action obligations. The underlying rule does not indicate that such an exceedance is an appropriate basis for a penalty. If such exceedances are caused by the failure of the facility owner or operator to comply with the various operating requirements, then a penalty may be appropriate. To fine a facility simply because of the effect of some event that occurred when the facility is in compliance with the operating requirements (for example, failure of the leachate collection system through no fault of the owner or operator) makes a travesty out of the whole enforcement program. Such examples should not be given in the penalty policy without full rule making and public comment on the underlying issues.

Another example is 340-12-065 (2) (f). This section would impose a penalty on a disposal facility that accepts waste from a person that does not have an approved solid waste reduction program. However, only certain types of persons are even required to have a solid waste reduction program. Moreover it is not the obligation of the waste management facility to police this obligation of the generators as long as the generator represents that it has such a program. In other words, there is much more to the underlying regulation than indicated in the proposed violation description. Does this mean that the rule revision creates a new, broader obligation on facility operators?

c. In some cases the proposed rule simply misstates the underlying regulation. There are several such instances in the underground storage tank section. We do not believe a regulation exists that requires one to "initiate and complete the investigation or cleanup or a release from *** a heating oil tank" as indicated by 340-12-067 (1) (c). Although DEQ has the authority to order such a response, no regulation or statute imposes an affirmative obligation to conduct such a response. In fact, such responses are required for regulated underground storage tanks in only certain circumstances. 340-12-067 (1) (k) makes the same mistake

340-12-067 (1) (d) would impose a penalty for failing to prevent a release from an underground storage tank or heating oil tank. Again, DEQ regulations do not even impose operating requirements on heating oil tanks. Moreover, we know of no requirement that one must prevent releases. The regulations impose stringent operating requirements intended to prevent releases and if a release occurs the owner or operator of regulated tanks must take certain response actions. If these obligations are not met, enforcement action could be taken. However, the rules do not support the notion that enforcement action can be taken simply because a release occurs.

340-12-067 (2) (g) is clearly wrong. It specifically states that a service provider can be fined for providing services on an unregulated underground storage tank. How can this be? Tanks that are unregulated are exempt from all the underground storage tank requirements. Does DEQ intend that these unregulated tanks not be serviced?

These are but a few examples of the numerous problems created by the attempt to list particular violations. These problems could be avoided by reverting to a system that establishes objective standards DEQ should apply in determining the magnitude and class of a violation. DEQ can never list all the possible violations and the severity of most of the violations listed will vary with each case. If DEQ insists on perpetuating this approach, it at least should include citations to the underlying regulations and should carefully consider the language it uses to summarize them. Second, the rules should include a statement such as the following:

> "The list of violations set forth in 340-12-050 to -071 are intended to be used only for purposes of setting penalties for violations of other regulations in OAR Chapter 340. This division does not and may not be construed to create any new regulatory obligations, to narrow any existing regulatory obligations or to interpret any existing regulatory obligation."

2. The assumption that violations that are not listed should be characterized as class two is without support. The rules appear to be an attempt by DEQ to list all the truly significant types of violations. Thus, unlisted violations are most likely to be relatively insignificant and should be class one. On the other hand, some unlisted violations may rise to the level of a class

one violation. Again, this problem could be resolved by including in the rule objective standards for determining the class and magnitude of particular violations.

3. The selected magnitude of violations described in 340-12-080 appear to be largely arbitrary. In particular the opacity formula appears to bear no relation to the actual severity of any harm caused or the extent of the deviation from the required standard. Opacity is a measure of the density of particulate emissions. Opacity is an indicator of particulate emissions but does not itself cause any harm other than impact on aesthetics. The true extent of an opacity excursion depends on the rate gases are emitted, the degree of opacity and the duration of the excursion. All these factors should be taken into account in determining the class of the violation. Otherwise, a 75 percent opacity excursion from a large volume stack that could spew hundreds of pounds of particulate over a six-hour period would be classified the same as a few ounces of saw dust slowly drawn out of a process vent as the wind shifts for a few minutes.

4. The selected magnitude of violations set forth in 340-12-080 (3) (b) appear to be an attempt to change the law consistent with a hearings officer's decision earlier this year. This proposed rule would rewrite 40 CFR 262.34 as incorporated by OAR Chapter 340, Division 102 to make an unpermitted hazardous waste storage facility out of any generator that fails to meet any of the requirements imposed by that section on accumulation of hazardous wastes. This legal interpretation is at clear odds with the plain language of the regulation and its interpretation by EPA. The regulation specifically states at 40 CFR 262.34 (b) that accumulation of hazardous waste for more than 90 days causes the facility to be subject to the storage facility permitting requirements. The regulation neither states nor suggests that a similar result ensues if any of the other accumulation requirements are not met. If DEQ intends to rewrite this rule, it should propose a revision to Division 102 and should provide adequate public notice to allow informed comment on such a significant change.

5. The definition of "flagrant" at 340-12-030 (7) creates a standard of culpability that departs from any established legal theory of imputed knowledge. This definition indicates that a respondent may be held to have been flagrant as a result of the knowledge and intent of an individual that actually performed the act in question or directed it. first, this definition does not indicate the relationship between the respondent and the person with knowledge and intent Is that person an employee, an

agent, a daughter, a friend, or an uninvited trespasser? The definition does not say. As a result, the definition probably is void for vagueness.

Second, the definition does not indicate what culpability the respondent actually must have. Established legal principals will impute to an employer the knowledge of certain of its employees unless the employees have withheld that information from the employer. However, the knowledge of certain types of employees, such as hourly workers, is not always imputed to the employer. More important, the wrongful intent of an employee can be imputed to the employee only under very limited circumstances. If the employee is acting against established rules of the employer and the employer is not negligent in supervising the employee, the notion that the employee's wrongful intent will be imputed to the employer flies in the face of justice and fairness, even in the harsh world of draconian environmental regulations.

This definition was considered by the advisory committee but the recommended language is unworkable. The definition requires substantial additional consideration.

6. At least some of the changes to the adjustment factors are illogical. 340-12-045 (1) (c) (b) states that P and H factors must not sum to a negative number. To avoid a negative result, the rule would give the H factor the same value as the P factor if the sum otherwise would be zero. This approach creates some very inappropriate incentives and unfair results. If for example, the respondent had one prior violation for a P factor of 1 and had corrected that violation for an H factory of -2, the H factor would be adjusted to 1. The sum of the factors would be 2, effectively doubling the impact of the prior violation even though it was corrected. If he had not attempted to correct the prior enforcement action, the sum of these factors would be only 1. This respondent would have been much better off not to have been cooperative in the past enforcement action. This subparagraph should be revised to simply convert both the H and P factors to zero when their sum would be negative.

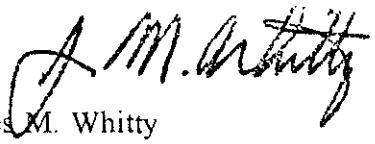
We have discovered an error in the language for the economic benefit factor. At 340-12-045 (1) (f) (iii), the proposed rule indicates that DEQ can treat a violation as extending for the period necessary to recover the economic benefit even if the actual duration of the violation is shorter. In essence, this provision would allow creation of a fiction that a respondent received an economic benefit from a continuing violation even

when it did not. The proposed rules include specific penalty adjustments for violations that persist for more than one day. To use the economic benefit factor to impose yet another penalty on multi-day violations is disingenuous. DEQ should not be able to regard a violation as persisting any longer than it actually did. This result was not the advisory committee's intention and should be corrected in the final rule.

At 340-12-049 (8) (b), the proposed rule purports to allow DEQ to adjust a penalty to levels greater than $100,000. DEQ does not have statutory authority to assess a penalty greater than $100,000 for any single violation. This is an inadvertent mistake in language drafting. The rule should include the statutory limitation.

I expect these comments are incomplete. With DEQ's permission, the AOI subcommittee will finish its work and submit additional comments as soon as possible.

Very truly yours,



James M. Whitty
Legislative Counsel

OSPIRG
The Oregon State Public Interest Research Group
1536 SE 11th Portland, Oregon 97214 (503) 231-4181, FAX: (503) 231-4007

(10)

May 18, 1992

Michael V. Nixon
Regional Operations, Enforcement Section
Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

Re: Divisions 11 & 12 Rulemaking Hearing Package

Dear Mr. Nixon:

Thank you for the opportunity to comment on the above-referenced matter.

It is important to make enforcement of violations more certain and more speedy and to increase the penalties for serious violations, both to deter future violations and to penalize violators. Accordingly, we support several of the proposed rule changes, including increasing the Class I base penalty amounts for the $10,000 matrix and providing that violations not expressly classified are Class II violations instead of Class III violations. We also support categorizing as a Class I violation the disposal of principal recyclable materials that have been properly prepared and source separated for recycling.

We have several concerns about the proposed rules, discussed below.

1. Definition of "Intentional," 340-12-126(9)

The proposed rules include a new definition of "intentional:" "conduct by a person with a conscious objective to cause the result of the conduct (i.e., the release of contaminants to the environment or other activity constituting the violation), but does not require a showing that the person intended any harm to public health or the environment."

This rule was developed by the Advisory Committee to implement Senate Bill 184, which permits assessment of up to $100,000 penalties for reckless or intentional violations that cause serious environmental damage. Senate Bill 184 specifically defines "intentional" in the context of imposing the increased penalties. The SB 184 definition is purposely more stringent due to the potential for such a high penalty. We support the new definition as applied to Senate Bill 184 penalties. We question whether it is appropriate to use the Senate Bill 184 definition of "intentional" for purposes other than imposing the $100,000 penalty.

Rule 340-12-040(2)(a) provides that no NPV is required to impose a penalty for an intentional violation of a permit. Rule 340-12-045(1)(c)(D) increases the base penalty if a violation was intentional (as opposed to a negligent violation or unavoidable accident).

Should the SB 184 definition of "intentional" apply to these other rules? If using the SB 184 definition makes it more difficult to prove an intentional violation than the current definition of intentional, the answer is no. If the SB 184 definition is a more stringent test of "intentional" than the current definition, the current definition should be retained and the SB 184 definition should apply only to SB 184 situations.

We urge the department not to propose changing the current definition of "intentional" without checking with the Attorney General's office to determine the effect of using the SB 184 definition in other situations. If the SB 184 definition is more stringent, we urge the department to retain the current definition and use the SB 184 definitions only for SB 184 situations.

2. Past History, 340-12-045(1)(c)(B), page E-11

The department proposes to delete subdivisions (iii), (iv) and (v), which would increase the base penalty if the violator took little or no action to correct a prior significant action. As you may recall, an OSPIRG memo to the Advisory Committee raised the question whether this is appropriate (see enclosed OSPIRG handout and notes from 2/22/92 meeting at which this was discussed.)

The Committee felt that it was not consistent policy to decrease the penalty if prior corrective action was taken, but have no increase if prior corrective action was not taken. The Committee recommended the following: add "+2" if the violator took no action to correct a prior violation, to match the "-2" that is subtracted from the penalty if a violator took action to correct a prior violation. We support that view and urge the department to include this in the proposed rule change.

3. 340-045(c)(D)(iv)

The current rule adds a "+4" to the penalty formula for a grossly negligent act. The proposed new rule deletes this category and would only add "+2" for a negligent act, "+6" for an intentional act, and "+10" for a flagrant act.

We support adding a "+4" for a reckless act. There seems to be no good reason to add a factor for a negligent or intentional violation, but not factor in a reckless violation. Reckless violations are recognized in criminal statutes and tort law, and should be recognized here and appropriately penalized.

4. Economic Benefit, 340-12-045

The Enforcement Advisory Committee -- on a split vote -- voted for the following language: "The department or commission may increase the penalty by the approximate dollar sum of the economic benefit." (Emphasis added.) I and other committee members supported the following language: "The department or commission shall increase the penalty by the approximate dollar sum of the economic benefit," and we urge the department to adopt this language.

If a violator makes or saves money by breaking the law, and then the penalty does not cover the full benefit gained by the violator, there is little if any deterrent effect. The rules should ensure that in each case of economic benefit that is not de minimis, the department shall increase the penalty to recover that economic benefit. It should not be optional.

5. Selected Magnitude Categories, 340-12-080

The Advisory Committee did not review or comment on any magnitude categories or specific penalties for specific violations. We have some serious concerns about the proposed magnitude categories.

a. Air Quality and Water Quality Emissions Permit Violations.

Air quality and water quality emissions permits are essentially "licenses to pollute" in that they permit the release of potentially harmful and often toxic chemicals into the air and water. Because the individual and cumulative permitted releases of toxics into air and water already impact the environment and public health, violation of emissions limits is a serious matter. We are concerned that the proposed magnitude categories may result in inappropriately low penalties for violating emissions permits.

Accordingly, we would like an explanation of how the percentage points and pollutant amounts were determined and assigned "major," "moderate," or "minor."

We would also like the rules to allow the department to categorize an emissions limit violation as major or moderate depending on the level of harm that occurred or could have occurred. Harm may differ depending on the location of the emission, other factors such as temperature, weather, and other emissions, and what other chemicals are emitted by the same plant. For example, an emission of asbestos that would otherwise be categorized as "minor" might be "major" if it occurred at or near a hospital. The department should be able to take such things into account and not be limited by a strict schedule when it comes to emissions of toxic or potentially harmful chemicals and pollutants.

b. Open Burning Violations.

The proposed rules provide that burning less than one cubic yard of material is automatically

"minor." This may or may not be true depending on what is burned and where it is burned. Burning a highly toxic material in a sensitive location should be "major" and the rules should allow for this.

c. Hazardous Waste Violations.

The same general comments apply to the categorization of hazardous waste violations: basing a magnitude on an absolute number alone ignores the other important factors such as toxicity, location, mental state of the violator (was it intentional or unwitting), and other factors. For example, disposal of less than 50 gallons of hazardous waste or less than one gallon of acutely hazardous waste is classified as "minor." There are some chemicals for which one gallon is far too much. In addition, the location and manner of disposal and the actual effect of the illegal disposal are also important. The rules should require the department to consider this and not base magnitude on an arbitrary number.

d. Violation of Department Order.

The proposed rules provide that failure to meet one requirement of an order is automatically "minor." This may or may not be true -- there may be cases where failure to meet one requirement is major depending on the circumstances. The rules should allow for this to occur.

We suggest that the rules address the need for flexibility by setting up the selected magnitude categories, and then at the end of 340-12-080 include a subsection that provides that where the violation resulted in a major risk of harm or in substantial harm to the public health or to the environment, such violation shall be major notwithstanding the above categories.

Thank you for your consideration of these matters. If you have any questions, please do not hesitate to call.

Sincerely,

Lauri G. Aunan

cc: Craig Johnston

OSPIRG
The Oregon State Public Interest Research Group
1536 SE 11th Portland, Oregon 97214 (503) 231-4181, FAX: (503) 231-4007

Discussed 2/22/92

February 12, 1992

To: Craig Johnston, Chair, DEQ Environmental Enforcement Committee
Holly Duncan, DEQ
Fr: Lauri Aunan, OSPIRG

Van Kollius and I discussed the list of issues I prepared, and found that many of them are resolved or are in the process of being resolved. This is to identify the outstanding issues the group may wish to discuss.

Outstanding Issues

340-12-030 (9) -- Definition of Magnitude

- The proposed deletion of the phrase "taking into account" certain factors, and substitution of the phrase "and may include consideration of" certain factors seems weaker -- making consideration of the factors discretionary instead of mandatory. Should the department be required to review each factor to at least determine if it is applicable? This issue relates to the standard of review issue and what the department needs to show before it is entitled to deference.

- Should "proximity to" human or environmental receptors continue to be a factor or should it be deleted and replaced with "number of" human or environmental receptors?

340-12-045 (B), "past history" factor

Should the department retain part (v) which adds a "1" to the formula if a violator took no action to correct prior significant actions? Yes, add a (+2) ??

340-12-068 (1) (hazardous waste violations

Should parts (s) and (u) through (x) and (z) be "declassified" from Class I to Class II violations? → LGA gave note to Quincy 2/25/92

leave to rules hearings pen Craig

P factor

E factor - no prompt action? 1st time

Metropolitan
Wastewater
Management
Commission

COMMISSION MEMBERS
Rob Bennett—Eugene Councilperson
Steve Duffy—Eugene Lay Representative
Scott Engstrom—Springfield Lay Representative
Chris Larson—Springfield Councilperson
Chris Matson—Lane County Lay Representative
Jerry Rust—Lane County Commissioner
Mark Westling—Eugene Lay Representative

FIFTH AND A STREETS – SPRINGFIELD CITY HALL – SPRINGFIELD, OREGON 97477 – TELEPHONE (503) 726-3694

June 3, 1992

Michael Nixon
Oregon Dept. of Environmental Quality
811 S.W. 6th Avenue
Portland, OR 97204

Re: Comments to Proposed Amendments to Enforcement and Civil Penalty Procedures

Dear Mr. Nixon:

This letter sets forth the Metropolitan Wastewater Management Commission's comments regarding some of the issues presented in the Department's proposal to amend the rules governing civil enforcement procedures, penalty assessments and the authority of hearings officers in contested cases. Given the complexity of the rules, the amount of time to review and prepare comments was short. This task was made more difficult due to the number of important water quality issues which are attracting attention at this time including the rules related to disinfection and mass limits, pretreatment issues and related NPDES permit issues among other things. Accordingly, we appreciate the extension of time to comment which you graciously extended to us. Nevertheless, given the overall time constraints, these comments are more limited than would have otherwise been submitted.

It is my understanding that the draft rules were developed with the participation of the Environmental Enforcement Advisory Committee which the Department assembled last December. In cooperation with that committee, a number of changes to the initial draft were made which cleared up many of the ambiguities. However, some ambiguities remain which could lead to the imposition of unintended and inappropriately harsh penalties for technical or minor violations which have no adverse water quality impact. In at least one case, the rules go beyond the legislature's purpose in enacting new penalty legislation last year. Finally, the additional restrictions on the authority of hearings officers may lead to additional and unnecessary appeals.

For ease of reference, these comments are organized in the order the issues appear in the draft rules starting with the revisions to Division 12.

Definition of "Intentionally" - OAR 340-12-030(9).

The 1991 legislature enacted ORS 468.996 which authorizes a

civil penalty up to $100,000 for any intentional or reckless violation of various pollution control statutes, rules or orders "which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment ...." The new penalty is four times greater than the maximum criminal monetary penalty and ten times greater than the former maximum civil penalty. Therefore, it is clear the legislature was looking to extreme forms of conduct to justify such a large increase. Moreover, the legislature specifically required that the conduct "result" in an extreme public health hazard or extensive environmental damage. Finally, the legislature specifically defined intentional to require conduct done "with a conscious objective to cause the result of the conduct." Emphasis added.

The proposed rule, however, broadens the scope of the term "result" and goes beyond the statute in specifying that intentional conduct "does not require a showing that the person intended to cause any harm to public health or the environment." Under the proposed rule, liability for intentional conduct could arise simply because a person consciously took any action constituting a violation. As a result, one could be found to have acted intentionally and be subject to a $100,000 penalty for consciously discharging a contaminant causing the required harm even though the person had no knowledge of the nature of the contaminant being discharged.

As written, the rule does not even require that the Department show that the person intentionally violated the applicable law, regulation or order. For example, assume that a person intentionally released the contents of a large tank to the environment, believing that the tank contained pure water. Further assume that the tank actually contained a toxic chemical which resulted in the required hazard or damage. Finally, assume that the release occurred either because the tank was mislabeled or because the person negligently assumed it contained only pure water.

Clearly, there was a conscious objective to cause the release of the contents of the tank into the environment. The fact that the contents happen to be contaminants would lead to liability for an intentional violation even though the person did not intend the resulting environmental damage or to violate the applicable law. Accordingly, the rule should be revised to more carefully circumscribe the conduct which results in liability for the $100,000 civil penalty.

Classification of Water Quality Violations OAR 340-12-055.

Subsection 1(c) of this rule provides that a Class 1 Violation includes "any unauthorized or non-permitted discharge of untreated or partially treated waste that enters waters of the State." Neither the term unauthorized nor the term partially treated is defined. Accordingly, any discharge of conventional pollutants such as BOD, CBOD and TSS which exceeds a permit concentration limit by more than 20% or a permit mass limit by more than 10% could be a Class 1 Violation. Generally speaking, summertime discharge limits to the Willamette River for conventional pollutants are limited to 10 mg/l. Thus, discharge to the Willamette in June of BOD at a concentration of 12.5 mg/l would be a Class 1 Violation requiring the issuance of a NPV pursuant to OAR 340-12-041(2)(c).

While the violation mentioned might justify more than treatment as a Class 3 Violation, it hardly seems to merit designation as a Class 1 Violation given a significantly greater penalty attached to it.

Subsections 2(b), (f) and 3(a) combine to lead to anomalous results for relatively minor paperwork violations. First, subsection 2(b) provides that any "failure to submit a report or plan as required by rule, permit or license" is a Class 2 Violation. Emphasis added. Many permits require various reports to be submitted within specified time periods. Therefore, the submission of a report one day late would not be "as required" by the permit and result in a Class 2 Violation. Undoubtedly, the actual intent was to make actual failure rather than late submittal of a report a Class 2 Violation. Deleting the word "as" would solve the problem created by subsection 2(b) but not the problem itself.

Subsection 3(a) makes "failure to submit a discharge monitoring report on time" a Class 3 Violation. Unfortunately, the rule does not cover the classification of the late submittal of various other reports which are often required by the Department's permits, rules or orders. For example, Schedule C in many NPDES permits contains a requirement that progress reports be submitted within specified time periods after any milestone in a compliance schedule. Thus, the late submittal of such a report is not specifically classified. Pursuant to the terms of subsection 2(f), the late submittal of such a report would result in a Class 2 rather than a Class 3 Violation.

Two things should be done to solve this problem. First,

subsection 3(a) should be modified so that it applies to the late submittal of any report required by a rule, permit or license. Second, the language of subsection 2(f) should be deleted from subsection 2 and dropped down into subsection 3 so that any other unclassified violation would simply be a Class 3 Violation. It seems only reasonable that the department would specifically classify any particular violation it feels to merit a penalty of greater severity than a class III violation.

Minor Removal Efficiency Violations - OAR 340-12-055.

Subsection 3(c) of the revised rule provides that certain minor permit exceedances related to concentration or mass limits for BOD, CBOD or TSS limitations in permits will be Class 3 Violations. For consistency, a violation of a similar minor nature related to the permit limit for the removal efficiency of BOD, CBOD or TSS should also be a Class 3 Violation. As presently written achieving 84% removal would be either a Class 1 Violation (unauthorized discharge of partially treated waste under 340-12-055(1)(c)) or a Class 2 Violation (not otherwise classified under 340-12-055(2)(f)) while exceeding a summertime concentration limit for the same pollutant by 20% would only be a Class 3 Violation.

Authority of Hearings Officers - OAR 340-11-132(5).

The revisions to this rule are designed to clarify the department's burden of proof with respect to factual findings in a contested case proceeding and ensure that hearings officials uphold the Director's decisions as long as a rational relationship has been demonstrated between the facts and the decision. While we have no objection to the first change, the second change appears to introduce an unduly defferential standard of review at the hearings official level which would lead to additional appeals to EQC.

The Department should not rush to insulate its decisions from thorough review at the administrative level. The typical administrative law concept of review of agency decisions based on the rational relationship or substantial evidence standard applies during judicial review of final agency action. Under the Administrative Procedures Act, judicial review does not occur until after the EQC takes that final action. Prior to that time and except as currently provided under OAR 340-11-132(5), there should continue to be thorough review at the hearings official level. Moreover, regardless of the hearings official decision, the EQC is free to substitute its judgment for that of the hearing officer with respect to "any

particular finding of fact, conclusion of law, or order." OAR 340-11-132(4)(i). Thus, requiring the hearings official to defer to the Department's initial decision will simply increase the number of appeals to EQC to obtain a more pervasive standard of review. Accordingly, the proposed amendment will not achieve the desired result.

MWMC recognizes that the existing structure of enforcement procedures and civil penalties is complex. We also recognize that many of the proposed changes are beneficial. Moreover, generally speaking, the effort made by the advisory committee and the Department to streamline and increase efficiency in the administrative process will be beneficial to all parties. Incorporation of the few changes outlined above will allow the process to continue while reducing the risk of unintended results. Thank you for your consideration.

Very truly yours,

Katherine Schacht
General Manager

KS/cam

(13)

RTM

RECEIVED
2 '92

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

ATTENTION: Michael Nixon

As a member of the Environmental Enforcement Advisory Committee (Committee) representing the Oregon Environmental Council, I would like to submit the following comments regarding the proposed rules amending Division 12.

Notice of Permit Violation

While the Oregon Environmental Council (OEC) continues to advocate for a class of violations for which no advance warning is necessary (other than the situations already defined in OAR 340-12-040(2) the proposed language clearly defines what the permittee must do upon receiving an NPV. This new language in 340-12-040(1)(c) is necessary to hold a permittee to the compliance schedule within an order by requiring sanctions of noncompliance. The changes in this section are an improvement over existing rules.

$100,000 Penalty Authority

OEC and the Committee support the language in OAR 340-12-049(8) adopting a 3-tiered approach to assessing base penalties. The new definitions of "intentional", "reckless" and "flagrant" are necessary and consistent with statutory definitions. It is important that each clearly states that it is not a requirement that the violator intentionally or recklessly caused the environmental harm which resulted from the violation.

Penalty Calculation Provisions

a. Economic Benefit - The Department should always seek to recoup the full economic benefit gained by a violator through noncompliance. OEC agrees with moving the economic benefit calculations out of the gravity determination so that the benefit, in full can be added to the gravity-based portion.

Under OAR 340-12-045(1)(c)(F), the new language gives the Department the necessary authority to treat a violation a multi-day (if it, in fact, extended more than 1 day) in order to recover the full economic benefit. However, the rules, as proposed do not go far enough. The authority to treat the violation as multi-day in these circumstances should be mandatory, not discretionary as these draft rules propose.

b. Inability to Pay - OEC agrees with the Committee and Department that the inability-to-pay component should be moved from the gravity-based penalty calculation. Rather, the issue is one that must be raised by the respondent, who bears the burden of showing that the Respondent is unable able to pay the full penalty amount. The proposed language in OAR 340-12-045(3) follows exactly the recommendations of the Committee in how and when to apply this factor. OEC concurs with this draft.

Burden of Proof in Contested Case Hearings

This was a controversial issue for the Committee, but it has resulted in an improvement in the clarity and certainty of the rules regarding burden of proof in making "Magnitude of Violation" determinations. OEC supports the recommendation of the Committee majority regarding the rule revisions in this area.

The proposed definition of "Magnitude of Violation" at OAR 340-12-030(10) now defines the factors the Department shall consider in making its determinations and states that any one factor could be conclusive. This new definition is more clear and should help in the hearing process.

The newly created OAR 340-12-080 - Selected Magnitude Categories - also demonstrates an effort by the Department to provide more structure to the determination of the magnitude of a violation. These provisions should assist a Hearings Officer in evaluating evidence in a contested case.

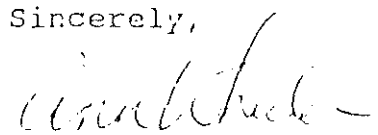
However, in the end, the only way to address directly the standard of review issue is with language like that in proposed amendment to the Oregon Administrative Rules (OAR 340-11-132(5). The proposed language reflects the recommendations of the majority of the Committee; e.g. that in situations which are inherently judgmental, the Department's judgement should be upheld if there is a rational relationship between the facts and the decision. OEC agrees with the majority of the Committee, that such language is necessary to clarify the Department's burden and the degree of discretion of the Hearings Officer.

Summary

OEC supports the recommendations of the Committee. The proposed rules should be adopted as drafted except in the area of calculating economic benefit. In order to guarantee that a violator who benefits economically from noncompliance always gives up that gain, when appropriate according to the rules, the Department should always treat a violation a multi-day in order to recoup that full economic gain. OAR 340-12-045(1)(c)(F).

Finally, I would like to commend the Department for its progress in this important rule arena and for its commitment to the recommendations of the Advisory Committee. The staff worked hard and rapidly to move this process forward. I enjoyed the opportunity to represent OEC.

Sincerely,



Ann Wheeler
Attorney, OEC

PUBLIC WORKS DEPARTMENT
WASTEWATER RECLAMATION DIVISION
WATER QUALITY CONTROL PLANT
1100 Kirtland Road
Central Point, OR 97502

CITY OF MEDFORD
MEDFORD, OREGON 97501

TELEPHONE
(503) 826-7943

May 22, 1992

Mr. Michael Nixon
Regional Operations Division
DEQ Enforcement Section
811 West Sixth Ave.
Portland, OR 97204-1390

SUBJECT: Review of Proposed Enforcement Procedure and Civil Penalty Rules

Dear Mr. Nixon:

As I had mentioned in our telephone conversation on Monday, May 18, 1992, the proposed rule changes presented for review are quite extensive and require a considerable amount of time for proper review and comment. The fact that DEQ is attempting to push through several NPDES permits concurrently, including ours, makes review even more difficult.

In our telephone conversation we had discussed extending the comment period to June 5, 1992. While this will provide some additional time, it is my opinion that DEQ will incur considerable resistance in administering these rules if adequate time isn't provided for comment from all affected utilities.

The following are brief comments after an initial review of the proposed rules:

1. On Page E-2, the definitions of "negligent", "negligence", "reckless" and "recklessly" are too open to interpretation.

2. On Page E-3, 340-12-035 classifies each day as a separate and distinct violation. On Page E-5, 340-12-041(1)(a) states a NON can be issued for existence of a violation. Page E-5, 340-12-041(2)(c) states more than three Class II NONs require issuance of a NPV. Any violation such as weekly mass limit could then be subject to an NPV.

3. On Page E-18, 340-12-055(1)(c), should be deleted. Partially treated waste could be interpreted to mean any discharge that doesn't meet NPDES permit requirements.

4. On Page E-19, 340-12-055(2)(d), should be eliminated or reworded. The term "by any means" is far too broad and would include just about any waste on the plant site.

5. On Page F-1, 340-11-132(5), delete the third sentence in the new paragraph (..."with respect to determinations"...). There are no definitions for major, moderate, or minor violations under 340-12-055. This language essentially allows DEQ to rather arbitrarily determine the magnitude of the violation as well as to make any other "judgement" decisions, since the concept of "rational relationship" is very broad and difficult to disprove. We feel this sentence essentially removes the Hearing Officer from several important decisions.

Additional comments will follow as we get the opportunity to complete our evaluation.

Very truly yours,

James L. Hill
WRD Administrator

JLH/pgm

c: G. David Jewett
Cathryn Collis, City of Portland
Fred Hansen, DEQ

(1+)

LANE REGIONAL

AIR POLLUTION AUTHORITY

(503) 726-2514
225 North 5th, Suite 501, Springfield, OR 97477

Donald R. Arkell, Director

May 20, 1992

Tom Bispham, Administrator
Regional Operations Division
Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

Dear Tom:

Attached are my comments on the proposed Division 12 rule revisions. Please enter them into the record of rulemaking.

I appreciate the opportunity to discuss these with you and hope the comments are helpful. I look forward to continuing active participation in subsequent discussions about the rules.

If you have any questions or need clarification, please call me.

Sincerely,

Donald R. Arkell
Director

DRA/mjd

COMMENTS--PROPOSED STATE RULES ON ENFORCEMENT, DIVISION 12

LRAPA has a special interest in these rules because civil penalty schedules adopted by the EQC apply statewide, including areas where there are regional authorities. Generally, LRAPA believes this proposal to attach specific penalties to specific violations will benefit all parties involved. The proposal addresses some difficulties, experienced locally, in implementing the civil penalty schedule. We are supportive of the proposal but have several areas of concern.

1. It is LRAPA's plan to use elements of these procedures as a model for our local enforcement regulations. Regulations adopted by regional authorities must not only conform to statute, but must also be equal to, or more restrictive than the corresponding state regulations. We are requesting that, where appropriate, some flexibility be built into the adopted state rule to accommodate differences between state and local enforcement protocols. At particular issue are the acceptance criteria for the permittee's 5-day response to first-time NPV's [340-12-40.(1)(b),(c),(d)].

   A permittee who has received a NPV for a first-time class I violation cannot be expected, within 5 days, to propose an acceptable compliance schedule with the kind of detail prescribed, signed by a corporate officer. We understand, however, that it is presumed a permittee who is issued a NPV by the Regional Operations Administrator will have already received one or more NON's issued by a region manager several weeks ahead, thus giving the permittee much more lead time to satisfy the requirement for a full response.

   Unlike DEQ, LRAPA originates and completes all enforcement actions from within the same office. We anticipate that, in most cases, NPV's will not be preceded by NON's. Thus, the NPV will be the only formal prior notice before assessing a civil penalty, as prescribed by statute. We believe, under our established procedure, it would be unreasonable to expect the same level of detail within 5 days in order to have an acceptable compliance schedule. To do so effectively removes the permittee's option to respond with a compliance schedule to avoid a CPA. We do think it is reasonable to expect, within 5 days, a commitment from the permittee to be in compliance within a specified time, with a detailed schedule and order developed several weeks or a month thereafter.

   We recommend that this rule allow local variation of the acceptance criteria where appropriate, as follows:

   > **ADD**, as 340-12-040(1)(e): **For purposes of this section, where a regional authority issues a NPV, different acceptability criteria in (a) and (b) may apply.**

We expect, in the local regulation, to adopt language similar to that in the statute.

Alternatively, when DEQ reviews corresponding LRAPA rules for the stringency requirement, the test for stringency should consider whether the local rule as a whole will achieve the desired result within a timeframe as similar state rule would.

2. **INSERT**, in 340-12-040(1)(c): the word **by** between the words **approved** and **the**, so the sentence reads in part, "...compliance schedule to be approved **by** the Department pursuant..."

3. We understand that counting prior offenses for the purpose of determining the appropriate enforcement action or the amount of civil penalty will be on a permit, plantsite-specific basis. There are some instances where it is unclear whether or not to count previous violations:

   A. The previous violation occurred at the same plantsite under a different permit;

   B. The previous violation occurred at an adjacent plantsite under a different permit, operated by the same permittee;

   C. The previous violation at the same plantsite was due to something not covered by the permit--such as an asbestos abatement work practices violation by the plantsite operator or a contractor;

   D. The previous violation occurred at an unrelated facility at the same plantsite, but under separate operational management.

   We recommend a that a definition of "permittee" be added to this proposed rule, to help clarify these or other situations.

4. The language adding woodstove violations to the $500 Matrix should be underlined as a new (a). We also request that **ordinances** be added to the list of violations. This will help us make it clear in Lane County that LRAPA, which is designated by the local general purpose governments to enforce their woodstove ordinances, will be using the $500 Matrix.

5. The civil penalty calculation procedure in 340-12-45 addresses some problems regarding ability to pay and economic benefit, in that the two considerations are now separated in this proposal. We concur with the advisory committee's observation that the means to make valid estimates of these two factors can be problematic, and this area needs to be addressed.

   As a practical matter in each case involving either ability to pay or economic benefit, we must weigh our costs and time to perform a detailed analysis against the size of the penalty and the final result of the enforcement action. Neither DEQ nor LRAPA recovers costs of enforcement activity through civil penalties. Perhaps some cost recovery for this kind of analysis could be built into the formula, at least for the EB calculation.

We would hope for opportunity participate in any workshops with the Department or Commission on this topic.

We appreciate the opportunity to comment on these proposed rule changes.

Donald R. Arkell

DONALD R. ARKELL, DIRECTOR
LANE REGIONAL AIR POLLUTION AUTHORITY

(4)

BILL W. LEE & SON CONSTRUCTION

839 N.E. 2ND ST.
BEND, OR. 97701
(503)388-4049

May 6, 1992

Michael Nixon
DEQ Conference Room 3A
811 SW 6th St.
Portland, OR.

Michael,

This is in response to the "A Chance To Comment On....." that I received on 5-4-92 regarding the proposed amendments of the rules concerning enforcement and civil penalty assessment procedures.

I feel that the fines that are in effect as of today are too high. The ones you are imposing way too high. Ten thousand dollars per day per violation! I think you should be more realistic! I am a small company, the $ 500.00 per day per violation that is in effect right now is too high. But $ 10,000.00 is ridiculous and should thought over again. Not only would a company of my size not be able to afford something like that, it would put us out of business. I don't really think that that is your intention but it would happen.

Fines are a good thing, to a point. I disagree with all of this.

Sincerely,

Bill W. Lee
Owner

BWL:tla

(4)

May 11, 1992

Michael-DEQ
10th floor
811 S. W. 6th Ave.
Portland, OR 97204

I wish to voice my opposition to any increase in penalties or fines placed on individuals or industry by Department of Environmental Quality for noise, pollution, sewage disposal or any other reason.

Already DEQ fines of $500.00 a day are preventing industry from establishing a factory site in Oregon. A fine of $10,000.00 a day would equal the death sentence.

Your proposed changes are unreasonable and outrageous..

Please re-consider.

Thank you.

Sincerely,
Jennie Otley
HC 72 Box 55
Princeton, OR 97721

cc State Senator Eugene Timms
State Rep. Denny Jones

(2)

5/11/92

Michael Dixon-DEQ
10th Floor
811 S.W. 6th Ave.
Portland, OR 97204-1390

Dear Sir:

I believe your plans to ammend the enforcement procedures and penalties on our local businesses is rediculous. Businesses can not afford those hi-cost fines. There are so many laws and regulations anymore that they can be broken very innocently. The only thing I can see that will be accomplished with these fines is you are going to put companies out of business and therefor put more people out of work. Don't you think that there is already enough unemployment? I don't know where this is all going to stop. Maybe when people are all unemployed and there are no tax dollars to pay government employees?!

Sincerely,

Ethel I Smith

Ethel I. Smith
P.O. Box 327
Prineville, OR 97754

Ken Stevens
Craig
Janean
Aprile Hinsley
Bill Hurlburt
Caren Stover
Scott Edgerly
Ken Tyree
Bill Woodenbaugh
Phyllis J. Hernandez
Kate Carter
Teresa Apolle
Debbie Baller
Kenneth Pedersen
Brad Pedersen
Dolores A. Sharp

(9)

RECEIVED
MAY 20 1992

Thom Seal
Vice - President
Eastern Oregon Mining Asc.
P.O. Box 545
Prairie City, Or. 97869
May 15, 1992

Mike Nixon
ODEQ
811 SW 6 Th Ave.
Portland, Or. 97204

SUBJECT: Written Comment on SB 184 - ORS 468.996

Good Day

Please accept and utilize the following comments for the new rules on OAR Chapter 340, Dvs. 12 & 11-132 (5).

1) Do not increase the max. daily fine above $ 500.

2) Give a 30 day written notice to violators as a warning so the situation could be corrected prior to issuing a fine.

3) Work with violators. Help them understand their impact and technically help them solve the problem prior to issuing fines.

4) Develope a program to inform potential violators of the current and potential rules so complete compliance is adhered to and the environment is allays protected.

Thank You

Thom Seal

Thom Seal, M.S. Met. Engr.
V.P. EOMA

(12)

Mike Nixon
ODEQ
811 SW 6 Th Ave.
Portland, Or. 97204
800-452-4011-Ex 5217

SUBJECT: Written Comment on SB 184 - ORS 468.996

Good Day

Please accept and utilize the following comments for the new rules on OAR Chapter 340, Dvs. 12 & 11-132 (5).

1) Do not increase the max. daily fine above $ 500.

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4) Develope a program to inform potential violators of the current and potential rules so complete compliance is adhered to and the environment is always protected.

(15)

RTM

RECEIV

92

Mike Nixon
ODEQ
811 SW 6 Th Ave.
Portland, Or. 97204
800-452-4011-Ex 5217

SUBJECT: Written Comment on SB 184 - ORS 468.996

Good Day

Please accept and utilize the following comments for the new rules on OAR Chapter 340, Dvs. 12 & 11-132 (5).

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4) Develope a program to inform potential violators of the current and potential rules so complete compliance is adhered to and the environment is always protected.

Floyd L Stevenson
P.O. Box 301
Prairie City, Oregon
97869

Tom F. Edmunson
Po Box 223
Canyon City, OR 97820

(24)

May 21, 1992

Mike Nixon
ODEQ
811 SW 6 Th Ave.
Portland, Or. 97204
800-452-4011-Ex 5217

SUBJECT: Written Comment on SB 184 - ORS 468.996

Good Day

Please accept and utilize the following comments for the new rules on OAR Chapter 340, Dvs. 12 & 11-132 (5).

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3) Work with violators. Help them understand their impact and technically help them solve the problem prior to issuing fines.

4) Develope a program to inform potential violators of the current and potential rules so complete compliance is adhered to and the environment is always protected.

It is just about impossible to keep up with all new rules and regulations I have read there were 7,367 laws & rules Originated by Agency wide in 1990. How is the public to keep up with that??

Thank you

Tom F. Edmunson

[redacted]

Tom F Edmunson

Mike Nixon
ODEQ
811 SW 6 Th Ave.
Portland, Or. 97204
800-452-4011-Ex 5217

SUBJECT: Written Comment on SB 184 - ORS 468.996

Good Day

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4) Develope a program to inform potential violators of the current and potential rules so complete compliance is adhered to and the environment is always protected.

Walter C LaBaugh

(27)

RTMD...

RECEIVED

JUN [illegible] 1992

Mike Nixon
ODEQ
811 SW 6 Th Ave.
Portland, Or. 97204
800-452-4011-Ex 5217

SUBJECT: Written Comment on SB 184 - ORS 468.996

Good Day

Please accept and utilize the following comments for the new rules on OAR Chapter 340, Dvs. 12 & 11-132 (5).

1) Do not increase the max. daily fine above $ 500.

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3) Work with violators. Help them understand their impact and technically help them solve the problem prior to issuing fines.

4) Develope a program to inform potential violators of the current and potential rules so complete compliance is adhered to and the environment is always protected.

PLEASE ANSWER THIS LETTER, THIS IS AN IMPORTANT ISSUE WITH ME AS IT EFFECTS MY LIVELY HOOD.

THANK YOU

Robert J. Saunders
BOX 284
PRAIRIE CITY, ORE
97869

PH 820 4775

(14)

WALT SCHROEDER
COOS AND CURRY COUNTIES
DISTRICT 5A

REPLY TO ADDRESS INDICATED
House of Representatives
Salem, OR 97310
1552 Rogue River Heights
Gold Beach, OR 97444

HOUSE OF REPRESENTATIVES
SALEM, OREGON
97310

RTM RECEIVED 1992

May 20, 1992

Mr. Michael Dixon
Department of Environmental Quality
811 SW 6th Ave.
Portland, OR 97204-1390

Increased penalties

I do not have a copy of the proposed enforcement procedures in which fines previously capped at $500.00 per day for non-compliance would go to as much as $10,000.00 per day.

On it's face, this seems exorbitant. Undoubtedly it will give us a clean and quiet Oregon because any business considering Oregon will look at the rules and opt for somewhere else. Just the threat of such a fine could be an impediment even to industries that consider themselves clean and quiet.

Please send me the proposals you are discussing in public hearings.

Sincerely yours,

Walt Schroeder
State Representative

(8)

American Electronics Association

AEA

[illegible]

May 18, 1992

Mr. Michael Nixon
Regional Operations Division
Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

RE: Proposed changes to enforcement rules, 340-12

Dear Mr. Nixon:

The following are a few comments on the proposed rule package from the Oregon Council of the American Electronics Association.

1) 340-12-045(1) Civil Penalty Schedule Matrices

We find in the notice of proposed rulemaking no explanation of why the Department proposes to adjust upward the civil penalties in the $10,000 matrix. I have read the enforcement advisory committee's justification in the April 20, 1992, letter from Craig Johnston to Director Hansen. That letter, however, is not a formal part of this rulemaking package. In order that the proposal not be considered arbitrary, we urge the Department to include a written justification of this penalty increase in its staff report to the Commission.

2) 340-12-049 Additional Civil Penalties, and 340-12-050

In the newly proposed subsections (5) and (6), we do not find specific penalties connected to the described violations. Is this an oversight?

HB 2175 (1991), section 14d, sets forth a penalty of $50 for nonpayment of the new motor vehicle emission fee, set to go into effect in 1993. Does this provide sufficient guidance to fix subsection (5)? I do not know if the $50 penalty from HB 2175 has been incorporated elsewhere in any rules of the department.

Regarding subsection (6), is a specific "additional civil penalty" required here? The air quality division recently proposed, and the EQC adopted, rules modifying 340-12-050 to classify penalties on industrial air emission fees. However, I cannot find the modifications made to 340-12-050 by the air quality division reflected in the revisions proposed in the current package to 340-12-050. Shouldn't the two be compared for conformity?

I hope these comments are helpful in crafting the final enforcement rules package. Please call me if I can provide further explanation of these comments.

Sincerely,

Jim Craven

Jim Craven
Government Affairs Manager

cc: Jim Whitty, AOI
Sara Laumann, DEQ Air Quality Division

(9)

May 12, 1992

Mr. Michael Nixon
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

RE: Written Testimony - Proposed Amendments Concerning Enforcement & Civil Penalty Assessment Procedures

Dear Mr. Nixon,

Please accept this letter as written testimony to the above-referenced subject which has a hearing date scheduled for May 18, 1992.

I concur with the Department's recommendations to propose amended civil enforcement procedures and penalty assessments. I recommend, however, that DEQ consider further increasing penalties outlined for Class I violations. Oregon can ill afford to have violations made at the proposed "affordable rates" presently outlined.

Thank you for your consideration of my comments.

Sincerely,

Janet E. Tobkin

Janet E. Tobkin
P.O. Box 82876
Portland, OR 97282

cc: Karl Anuta

CABLE, HILL, HUSTON, BENEDICT,
HAAGENSEN & FERRIS
ATTORNEYS AT LAW
2000 SECURITY PACIFIC PLAZA
1001 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204-1136
TELEPHONE (503) 224-3092
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JAMES E. BENEDICT
J. LAURENCE CABLE
KIMBALL H. FERRIS
DONALD A. HAAGENSEN
STEPHEN B. HILL
ROBERT T. HUSTON
DON K. LLOYD
LORY R. LYBECK
GREGORY J. McELROY*
LAURA J. WALKER

SUSAN S. FORD

OF COUNSEL
GEORGE B. HEILIG
DAVID K. McADAMS

*WASHINGTON BAR ONLY

MEMORANDUM

TO: Oregon Department of Environmental Quality
Regional Operations Division, Enforcement Section
Attn: Michael Nixon

FROM: Donald A. Haagensen
For Chemical Waste Management of the Northwest, Inc.
and Western Compliance Services, Inc.

DATE: May 22, 1992

RE: Proposed Amendments to Rules Concerning Civil Enforcement Procedures and Penalty Assessments and Hearing Officer's Authority in Contested Cases, OAR Chapter 340, Divisions 12 and 11

Chemical Waste Management of the Northwest, Inc and Western Compliance Services, Inc. submit the following comments on the above-referenced proposed rules. In the comments the part of the proposed rule at issue is quoted in full and followed by a discussion of the proposed rule and suggested changes to the proposed rule. In the suggested changes language recommended to be deleted from the proposed rule is enclosed by brackets with strike throughs and language to be added is underlined.

The Division 12 rules as proposed have changed substantially since the last changes to the rules in March, 1990. CWM and WesComp recognize the significant effort that has gone into refining the rules and the attempt to ensure that civil penalty assessments are objective and fair for all concerned through the use of detailed provisions.

The rules, however, appear to have become complex and confusing especially in the provisions dealing with civil penalty determinations, OAR 340-12-045. An effort should be made to simply and to streamline the formula for determining the penalty amount. As only one example, factor "H" and factor "C" focus on a respondent's cooperation and appear to overlap to some degree. To encourage the regulated community to show the utmost cooperation and responsibility to address problems, the formula should be set up so that H+C can cancel out P in appropriate circumstances. That is, that a regulated entity through cooperative and corrective actions can negate the effect in penalty determinations of past enforcement actions.

Once the current proposed rules are adopted, CWM and WesComp request that the Department through either staff or an advisory committee revisit the Division 12 rules especially with a focus on the formula for civil penalty determinations to see if a more streamlined, easier to use formula can be developed.

1.

PROPOSED RULE 340-12-045(1)(c)(A)

"'P' is whether the Respondent has any prior significant actions relating to statutes, rules, orders and permits pertaining to environmental quality or pollution control. For the purposes of this determination, any violations that were the subject of any prior significant actions that were issued prior to the effective date of the first original Division 12 rules shall be classified in accordance with the classifications set forth in those rules to ensure equity. The values for 'P' and the finding which supports each are as follows:

(i) 0 if no prior significant actions or there is insufficient information on which to base a finding;
(ii) 1 if the prior significant action is one Class Two or two Class Threes;
(iii) 2 if the prior significant action(s) is one Class One or equivalent;
(iv) 3 if the prior significant actions are two Class One or equivalents;
(v) 4 if the prior significant actions are three Class Ones or equivalents;
(vi) 5 if the prior significant actions are four Class Ones or equivalents;
(vii) 6 if the prior significant actions are five Class Ones or equivalents;
(viii) 7 if the prior significant actions are six Class Ones or equivalents;
(ix) 8 if the prior significant actions are seven Class Ones or equivalents;
(x) 9 if the prior violations significant actions are eight Class Ones or equivalents;
(xi) 10 if the prior significant actions are nine Class Ones or equivalents, or if any of the prior significant actions were issued for any violation of ORS 468.996.
(xii) In determining the appropriate value for prior significant actions as listed above, the Department shall reduce the appropriate factor by:
(I) A value of two (2) if all the prior

significant actions are greater than three years old but less than five years old;
(II) A value of four (4) if all the prior significant actions are greater than five years old;
(III) In making the above reductions, no finding shall be less than 0.

(xiii) Any prior significant action which is greater than ten years old shall not be included in the above determination."

COMMENT

This proposed rule sets forth one of the factors used in calculating the amount of civil penalty to be assessed for a violation. The factor is based on prior significant actions of a respondent. Language in the second sentence of this proposed rule requires that the determination of prior significant actions to be used in the calculation include violations "issued prior to the effective date of the first original Division 12 rules."

It is unclear what is meant by "the first original Division 12 rules." The present matrix system in Division 12 was adopted effective March 14, 1989. However, although in a different form, there has been a Division 12 dealing with civil penalties since the early 1970's. It appears that the "first original Division 12 rules" is intended to mean the rules adopted using a matrix system in March, 1989 rather than the rules adopted twenty years ago because the "P" factor does not include any prior significant action greater than 10 years old [see OAR 340-12-045(1)(c)(A)(xiii)]. Thus, the second sentence in the proposed rule appears to require that "violations" under Division 12 occurring before adoption of the matrix system in March, 1989 be considered in determining the "P" factor.

The matrix rules adopted in March 1989, however, substantially changed the method of assessing civil penalties. Factors that before that time had been general considerations in assessing civil penalties became specific detailed factors to be evaluated and determined and used in a mathematical formula to calculate a penalty. Whether a respondent chose to accept a violation and pay a penalty or contest a violation under those prior rules involved greatly different considerations than involved with the matrix rules. Because the civil penalty system changed so significantly in March of 1989, it is neither fair nor equitable to use enforcement actions that occurred before that time under completely different rules and circumstances in computing current penalties.

The Department and the Environmental Quality Commission recognized the significance of the change in civil penalty rules that took place in March 1989 by specifically providing that the rules were prospective only. The rules stated:

> "The amendments to OAR 340-12-026 to 12-080 should only apply to formal enforcement actions issued by the Department on or after the effective date of such amendments and not to any cases pending or formal enforcement actions issued prior to the effective date of such amendments. Any cases pending or formal enforcement actions issued prior to the effective date of the amendments shall be subject to OAR 340-12-030 to 12-373 as prior to amendment." OAR 340-12-080.

The proposed rule should be revised to indicate that the Department consider only violations occurring after the effective date of the Division 12 revisions in March 1989 in determining the "P" factor. The rule should be revised to read:

SUGGESTED CHANGES TO PROPOSED RULE 340-12-045(1)(c) (A)

> "'P' is whether the Respondent has any prior significant actions relating to statutes, rules, orders and permits pertaining to environmental quality or pollution control. For the purposes of this determination, [~~any~~] only violations that were the subject of any prior significant actions that were issued [~~prior to the effective date of the first original Division 12 rules shall be classified in accordance with the classifications set forth in those rules to ensure equity~~] after March 14, 1989 shall be considered in determining the 'P' value. The values for 'P' and the finding which supports each are as follows:
>
> (i) 0 if no prior significant actions or there is insufficient information on which to base a finding;
> (ii) 1 if the prior significant action is one Class Two or two Class Threes;
> (iii) 2 if the prior significant action(s) is one Class One or equivalent;
> (iv) 3 if the prior significant actions are two Class One or equivalents;
> (v) 4 if the prior significant actions are three Class Ones or equivalents;
> (vi) 5 if the prior significant actions are four Class Ones or equivalents;

(vii) 6 if the prior significant actions are five Class Ones or equivalents;
(viii) 7 if the prior significant actions are six Class Ones or equivalents;
(ix) 8 if the prior significant actions are seven Class Ones or equivalents;
(x) 9 if the prior violations significant actions are eight Class Ones or equivalents;
(xi) 10 if the prior significant actions are nine Class Ones or equivalents, or if any of the prior significant actions were issued for any violation of ORS 468.996.
(xii) In determining the appropriate value for prior significant actions as listed above, the Department shall reduce the appropriate factor by:
(I) A value of two (2) if all the prior significant actions are greater than three years old but less than five years old:
(II) A value of four (4) if all the prior significant actions are greater than five years old;
(III) In making the above reductions, no finding shall be less than 0.
(xiii) Any prior significant actions which is greater than ten years old shall not be included in the above determination."

2.

PROPOSED RULE 340-12-068

"Violations pertaining to the management and disposal of hazardous waste shall be classified as follows:
(1) Class One:
(a) Violation of a Department or Commission order;
(b) Failure to carry out waste analysis for a waste stream or to properly apply "knowledge of process";
(c) Operating a storage, treatment or disposal facility (TSD) without a permit or without meeting the requirements of OAR 340-105-010(2)(a);
(d) Failure to comply with the ninety (90) day storage limit by a fully regulated generator or the 180 day storage limit for a small quantity generator where there is a gross deviation from the requirement;
(e) Shipment of hazardous waste without a manifest;
(f) Systematic failure of a generator to comply with the manifest system requirements;
(g) Failure to satisfy manifest discrepancy reporting requirements;

(h) Illegal disposal of hazardous waste;

(i) Mixing, solidifying, or otherwise diluting waste to circumvent land disposal restrictions;

(j) Incorrectly certifying a waste for disposal/treatment in violation of the land disposal restrictions;

(k) Failure to submit notifications/certifications as required by land disposal restrictions;

(l) Failure to comply with the tank integrity assessments and certification requirements,

(m) Failure of an owner/operator of a TSD facility to have closure and/or post closure plan;

(n) Failure of an owner/operator of a TSD facility to retain an independent registered professional engineer to oversee closure activities and certify conformance with an approved closure plan;

(o) Failure to establish or maintain financial assurance for closure and/or post closure care;

(p) Failure to follow emergency procedures contained in response plan when failure could result in serious harm;

(q) Failure to comply with the export requirements;

(aa) Failure to comply with OAR 340-102-041, generator annual reporting requirements and OAR 340-102-012; annual registration information;

(bb) Failure to comply with OAR 340-104-075, Treatment, Storage, Disposal and Recycling facility annual reporting requirements and OAR 340-102-012, annual registration information;

(cc) Construct or operate a new treatment, storage or disposal facility without first obtaining a permit;

(dd) Installation of inadequate groundwater monitoring wells such that detection of hazardous waste or hazardous constituents that migrate from the waste management area cannot be immediately be detected;

(ee) Failure to install any groundwater monitoring wells;

(ff) Failure to develop and follow a groundwater sampling and analysis plan using proper techniques and procedures;

(gg) Failure to provide access to premises or records when required by law, rule, permit or order;

(hh) Any violation related to the generation, management and disposal of hazardous waste which causes major harm or poses a major risk of harm to public health or the environment.

(2) Any violation pertaining to the generation, management and disposal of hazardous waste which is not otherwise classified in these rules is a Class Two violation."

COMMENT

The classification of violations for hazardous waste management and disposal should be revised. First, OAR 340-12-068(1)(g) is overly strict because it classifies all manifest discrepancy reporting requirement violations automatically as Class One violations. Manifest discrepancies are differences in quantity or type of hazardous waste a facility receives as compared to the quantity or type of hazardous waste designated on the manifest. 40 CFR § 264.72. For differences in type variations greater than 10 percent in weight for bulk waste or any variation in piece count for batch waste are considered significant discrepancies. See 40 CFR § 264.72(a)(1). Such discrepancies rarely will pose the major risk of harm to public health or the environment required for classification as a Class One. In contrast, certain discrepancies in waste type such as manifesting an acid and transporting a solvent could pose a major risk of harm to the public health or environment and thus meet the criteria for a Class One violation.

The rules should recognize these distinctions for manifest discrepancies. To accomplish this, OAR 340-12-068(1)(g) should be deleted. Once this provision is deleted, OAR 340-12-068(1)(hh) would allow the Department to classify a manifest discrepancy reporting requirement as a Class One violation when it posed a major risk of harm to public health or environment. Manifest discrepancy reporting requirements not so classified would then become Class Two violations because of the catchall provision in OAR 340-12-068(2).

Second, OAR 340-12-068(1)(k) may be overly strict as a Class One violation. This provision classifies as a Class One violation failure to submit "notifications/certifications" as required by land disposal restrictions. If the intent of this provision is that only repeated or systematic failures are Class One violations, the classification is appropriate. However, if the intent is that a single failure is a Class One violation, the provision is overly strict.

A Class One violation for a one-time failure to submit a notification/certification is inappropriate because there is no risk a waste will be mismanaged from a one-time failure. A receiving facility will not treat, dispose or otherwise permanently manage a waste until the required notification/certification is received. Also, the receiving facility will have sufficient information from the manifest and profile to handle a waste until the notification/certification is received. This provision should be revised so it is clear that it applies

only to "systematic" failures to submit the required notification/certification.

Third, OAR 340-12-068(1)(aa) and (bb) are not realistic Class One violations. Currently, these two rules would recognize any noncompliance in completing certain required annual reports as a Class One violation. These reports, however, are complex and very detailed. The requirements for these reports also are only generally established in the rules and may change without going through the formal rulemaking procedures requiring public notice and allowing public comment.

These two rules should be rewritten to provide that failure to submit the required report is a Class One violation rather than allow omission of any detail from a report to be a Class One violation.

Finally, the civil penalty system for hazardous waste management and disposal does not recognize a Class Three violation. The majority of the other regulatory areas have Class Three violations such as, for example, OAR 340-12-050(3)(air quality).

In the past there apparently was a reluctance to recognize a Class Three violation classification for hazardous waste because of a belief by a prior administrator in the RCRA section that the Oregon statutes required that a hazardous waste activity violation be only a Class One or Class Two violation. The Oregon statutes impose no such requirement. The statutes providing authority for civil penalties for hazardous waste violations state:

> "(1) In addition to any other penalty provided by law, any person who violates ORS 466.005 to 466.385 and 466.890, a license condition or any commission rule or order pertaining to the generation, treatment, storage, disposal or transportation by air or water of hazardous waste, as defined by ORS 466.005, shall incur a civil penalty not to exceed $10,000 for each day of the violation.
>
> (2) The civil penalty authorized by subsection (1) of this section shall be imposed in the manner provided by ORS 468.135." ORS 466.880.

Nowhere in this provision is there a mention or even an implication that there should only be Class One and Class Two violations for hazardous waste activities and no Class Three violations. In fact, the statute refers to ORS 468.135 a

provision in the general environmental laws (which include air and water quality) for the manner of imposition of civil penalties for hazardous waste violations.

This statutory provision for hazardous waste is identical to the statutory authority provided in ORS 466.895 for civil penalties for underground storage tank violations. The proposed rules in OAR 340-12-067(3) include Class Three violations for underground storage tank activities. As an additional example, see ORS 459.995(1)(a) and (2) [identical civil penalty authority for solid waste] and OAR 340-12-065(3) [creating Class Three violations].

Where the Oregon Legislature intended the Department to treat regulatory areas differently, the Legislature made its intent clear. For example, ORS 468.126 requires the Department to give five days advance warning in writing before imposing a civil penalty for violation of "an air, water or solid waste permit." Here, the Legislature has given no direction to treat hazardous waste activity differently in the violation classification system. The rules should be revised to recognize Class Three violations for hazardous waste violations.

Once Class Three violations are recognized in the rules, particular violations could be written into the rules in detail to ensure that every possible violation that could pose a minor risk of harm was listed. An example of what might be a minor risk of harm and in turn an activity to list as a Class Three violation was a Notice of Noncompliance CWM received when a CWM inspector failed to check the box in a weekly inspection report showing that an emergency siren had been inspected. The inspection form had a box to be checked for both a siren and a flashing light. The inspector had checked the box for the flashing light but had failed to check the box for the siren. CWM responded to the Notice of Noncompliance stating that the way the system operated, when the siren was activated by the inspector during a test, the flashing light also activated simultaneously. Thus the inspection was performed for both items and they functioned properly, but the inspector made a check on the inspection form on only one line rather than both. At most a minor risk of harm (and likely no risk of harm) was presented by the situation, but a technical "violation" occurred.

For a hazardous waste treatment, storage and disposal facility like the one operated by CWM at Arlington to include every imaginable potential Class Three violation in the rules would be a Herculean task. The hazardous waste permit under which CWM operates is 135 pages long with twenty-four attachments many of which are over a hundred pages. Even if CWM could commit the resources to prepare a list of Class Three violations,

the Department would have to review the list as well. Such a process would not be productive for CWM or the Department.

As an alternative, a general Class Three violation category should be created to recognize activities that cause minor harm or pose a minor risk of harm. To balance the process, the burden to show that a violation was a Class Three could be placed on the party with the greatest interest in making such a showing, the respondent in a civil penalty situation. Before a Class Three violation classification would be recognized, the respondent would have to demonstrate that the particular violation caused only minor harm or posed only a minor risk of harm. Language to create such a system is included in the following and should be adopted.

SUGGESTED CHANGES TO PROPOSED RULE 340-12-068

"Violations pertaining to the management and disposal of hazardous waste shall be classified as follows:

(1) Class One:

(a) Violation of a Department or Commission order;

(b) Failure to carry out waste analysis for a waste stream or to properly apply "knowledge of process";

(c) Operating a storage, treatment or disposal facility (TSD) without a permit or without meeting the requirements of OAR 340-105-010(2)(a);

(d) Failure to comply with the ninety (90) day storage limit by a fully regulated generator or the 180 day storage limit for a small quantity generator where there is a gross deviation from the requirement;

(e) Shipment of hazardous waste without a manifest;

(f) Systematic failure of a generator to comply with the manifest system requirements;

[~~(g) Failure to satisfy manifest discrepancy reporting requirements;~~]

[~~(h)~~](g) Illegal disposal of hazardous waste;

[~~(i)~~](h) Mixing, solidifying, or otherwise diluting waste to circumvent land disposal restrictions;

[~~(j)~~](i) Incorrectly certifying a waste for disposal/treatment in violation of the land disposal restrictions;

[~~(k)~~](j)Systematic [~~F~~]failure to submit notifications/certifications as required by land disposal restrictions;

[~~(l)~~](k) Failure to comply with the tank integrity assessments and certification requirements,

[~~(m)~~](l) Failure of an owner/operator of a TSD facility to have a closure and/or post closure plan;

[~~(n)~~](m) Failure of an owner/operator of a TSD facility

to retain an independent registered professional engineer to oversee closure activities and certify conformance with an approved closure plan;

[~~(o)~~](n) Failure to establish or maintain financial assurance for closure and/or post closure care;

[~~(p)~~](o) Failure to follow emergency procedures contained in a response plan when failure could result in serious harm;

[~~(q)~~](p) Failure to comply with the export requirements;

[~~(aa)~~](q) Failure [~~to comply with OAR 340-102-041, generator annual reporting requirements and OAR 340-102-012, annual registration information~~] of a generator to file an annual report required by OAR 340-102-041 or to verify annual registration information required by OAR 340-102-012;

[~~(bb)~~](r) Failure [~~to comply with OAR 340-104-075, Treatment, Storage, Disposal and Recycling facility annual reporting requirements and OAR 340-102-012, annual registration information~~] of a treatment, storage, disposal and recycling facility to file an annual report required by OAR 340-104-075 or to verify annual registration information required by OAR 340-102-012;

[~~(cc)~~](s) Constructing or operat[e]ing a new [~~treatment, storage or disposal~~]TSD facility without first obtaining a permit;

[~~(dd)~~](t) Installation of inadequate groundwater monitoring wells such that detection of hazardous waste or hazardous constituents that migrate from the waste management area cannot be immediately [~~be~~] detected;

[~~(ee)~~](u) Failure to install any groundwater monitoring wells;

[~~(ff)~~](v) Failure to develop and follow a groundwater sampling and analysis plan using proper techniques and procedures;

[~~(gg)~~](w) Failure to provide access to premises or records when required by law, rule, permit or order;

[~~(hh)~~](x) Any violation related to the generation, management and disposal of hazardous waste which causes major harm or poses a major risk of harm to public health or the environment.

(2) Except as provided in paragraph (3), [A]any violation pertaining to the generation, management and disposal of hazardous waste which is not otherwise classified in these rules is a Class Two violation.

(3) Any other violation pertaining to the generation, management and disposal of hazardous waste which Respondent demonstrates causes minor harm or poses a minor risk of harm to public health or the environment is a Class Three violation."

(22)

CITY OF GRESHAM

Department of Environmental Services
1333 N.W. Eastman Parkway
Gresham, OR 97030-3813
(503) 669-2549
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Gregory E. DiLoreto
Director

Engineering Division

Parks & Recreation Division
Julee Conway
Manager

Operations Division
Ray Perkins
Superintendent

Office of Customer Relations
Liberty Lane
Supervisor

Office of Solid Waste & Recycling
Lynda Kotta
Manager

May 22, 1992

Michael Nixon
Regional Operations
Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

Dear Mr. Nixon:

RE: AMENDMENTS TO DEQ RULES CONCERNING ENFORCEMENT AND CIVIL PENALTY ASSESSMENT PROCEDURES (CHAPTER 340, DIVISION 12)
PUBLIC COMMENT

The City of Gresham has reviewed the above referenced proposed rules and comments as follows:

1. Ref WATER QUALITY CLASSIFICATION OF VIOLATIONS, 340-12-055, paragraph (1) Class One, section (g), page E-18.

The proposed language appears to imply that the municipal treatment works can be held responsible (and hence subject to a class one violation) for the discharge from one of the industrial users on its system. Based on conversation with Michael Nixon of May 22, 1992, it is our understanding that the intent of the language was aimed at the industrial user.

The City suggests that the language be clarified as to intent.

2. Ref WATER QUALITY CLASSIFICATION OF VIOLATIONS, 340-12-055.

The use of the word "any" is difficult to define and can be viewed to encompass many areas outside the scope of these regulations.

The City suggests deletion of the word "any" for the proposed regulations.

Gresham appreciates the opportunity to comment on the proposed rules.

Sincerely,

Gareth S. Ott, P.E.
Sanitary Engineer

GSO:cmj
Enclosure

pc: Gregory E. DiLoreto, Director
Alan P. Johnston, Pretreatment Coordinator
Matt Baines, Assistant City Attorney

File: 1.07-2

(16)

OSSI

OREGON SANITARY SERVICE INSTITUTE

MEMBER
NSWMA
National Solid Wastes
Management Association

May 20, 1992

RTM... E... ...AL F
...CEIVI
...92

Michael V. Nixon, RO
Environmental Law Specialist
811 SW 6th Avenue
Portland OR 97204

Dear Mr. Nixon:

I am writing to you on behalf of Oregon Sanitary Service Institute (OSSI), a service group representing more than 140 private waste carriers serving thousands of residents across the State of Oregon. Our members collect most of Oregon's residential and commercial refuse; operate many of its municipal solid waste landfills; and collect and process recyclables from residential and commercial establishments.

Our comments on the proposed amendments to the Department of Environmental Quality's rules concerning enforcement and civil penalty assessments are as follows.

SOLID WASTE MANAGEMENT CLASSIFICATIONS OF VIOLATION
OAR 340-12-065
We first address the proposed changes in:

(p) Accepting, handling, treating or disposing of clean-up materials contaminated by hazardous substances by a landfill in violation of the facility permit and plans approved by the Department or the provisions of OAR 340-61-060.

(q) Accepting for disposal infectious waste not treated in accordance with laws and Department rules.

(r) Accepting for treatment, storage or disposal wastes defined as hazardous under ORS 466.005, et seq, or wastes from another state which are hazardous under the laws of that state without specific approval from the Department.

Because these proposed violations are in Class I, we feel that as in

(o) Knowingly disposing, or accepting for disposal, used oil, in single quantities exceeding 50 gallons, or lead acid batteries,

"knowingly" should be added to (p), (q), and (r) to prevent a steep fine for a possible inadvertent violation that may often be impossible to detect.

For instance, a hauler may not even be aware of hazardous or infectious wastes that a generator may have intentionally or accidentally hidden among other acceptable solid wastes.

A specific example would be a hauler picking up a residential cart with a mechanical dumper and not realizing that somewhere in the 90 gallon rollcart that there are two syringes or a bottle of insecticide or substance classified as infectious or hazardous waste.

If in fact these violations are Class I violations, we feel strongly that some knowledge of the violations must be included in the rule.

Secondly, we address:

OAR 340-12-065 (1) (s)Mixing for disposal or disposing of principal recyclable material that has been properly prepared and source separated for recycling.

We believe that this subsection should properly be classified as a Class II violation. The rule as proposed is a Class I which generally calls for sanctions for violations that cause major harm or pose a risk of harm to the public health or the environment.

Although mixing recyclables for disposal that have previously been source separated is not something that we encourage or tolerate, we do think that a violation does not represent major risk to the public health or environment.

We submit that the current wording of this subsection is vague in that it would prevent a hauler from mixing source separated recyclables for convenience and efficiency on route even when they are re-separated later for recycling. We think its intent was to keep source separate recyclables from being mixed with other solid wastes for disposal.

In that vein, we offer the following substitute language:

(s) Knowingly mixing source separated recyclable material with solid waste in any vehicle, box, container or receptacle used in solid waste collection or disposal.

Secondarily, if the violation remains a Class I violation, we submit that it too should have "knowingly" added to the language.

Our suggestions for changes in OAR 340-12-065 (1)(p), (q) and (r) are as follows:

(p) Knowingly accepting, handling, treating or disposing of clean-up materials contaminated by hazardous substances by a landfill in violation of the facility permit and plans approved by the Department or the provisions of OAR 340-61-060.

(q) Knowingly accepting for disposal infectious waste not treated in accordance with laws and Department rules.

(r) Knowingly accepting for treatment, storage or disposal wastes defined as hazardous under ORS 466.005, et seq, or wastes from another state which are hazardous under the laws of that state without specific approval from the Department.

Our suggestions for changes in OAR 340-12-065 (1), (s) are as follows:

1. As a minimum, add the word "knowingly" to your language.

(s) Knowingly mixing for disposal or disposing of principal recyclable material that has been properly prepared and source separated for recycling.

2. Change the wording as we have suggested to better follow the intent 459A.070.

3. Reclassify as Class II.

Regarding proposed changes to OAR 340-11-132(5): We submit that there is no reason to believe that changing the standard of review will decrease the amount of appeals for the Environmental Quality Commission (EQC), decrease the cost of the contested case process or not have a chilling effect on bringing or appealing legitimate contested case action.

Therefore, we would urge that no amendment to OAR 340-11-132(5) be adopted.

OSSI asks that these comments be treated as part of the public record for public hearing scheduled May 18, 1992 with comments done by May 22, 1992.

If you have further questions regarding this testimony, please feel free to contact me.

Sincerely,

Max Brittingham
Executive Director

MB:kjc

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ASSOCIATED OREGON INDUSTRIES

April 30, 1992

Mr. Tom Bispham
Department of Environmental Quality
Regional Operations Division
811 SW Sixth Avenue
Portland, OR 97204

Re: Division 11 & 12 Rulemaking Hearing Package

Dear Mr. Bispham:

As a member of the Department's Environmental Enforcement Advisory Committee, I represent a minority view on the committee's recommended position on the issue of DEQ's burden of proof in contested case hearings and the hearing officer standards of review. There were two dissenters on the committee's position, Don Haagensen and myself.

As became apparent during advisory committee meetings, the principal reason DEQ staff is seeking a change in the standard of review is a disagreement with recent rulings of the hearings officer. AOI views a change in the burden of proof and standard of review as unnecessary in solving whatever problems the Department has with the hearings officer. If the Department is unsatisfied with a ruling in a particular case, the solution is an appeal to the Environmental Quality Commission (EQC). The EQC can give the hearings officer proper direction on matters of law and the application of law to fact. This avenue for addressing Department grievances on hearings officer rulings should be attempted before a fundamental change is made in the relationship between the hearings officer and the Department. A second avenue the Department can pursue is rulemaking to further clarify rule language found troublesome by either the hearings officer or the Department in a particular case.

The proposed change in the standard of review unnecessarily complicates the contested case process. The purpose of the hearings officer is to aide the EQC in reducing the number of hours spent on contested cases. The hearings officer essentially stands in the shoes of the EQC for contested cases. Making the standard of review for the hearings officer more deferential to the Department from that of the EQC will either increase the amount of

work for the EQC by increasing the number of appeals (and thereby increasing the cost of the contested case process to the respondent in many cases) or, because of the increased cost, produce a chilling effect on bringing or appealing legitimate contested case actions. Neither eventuality should be satisfactory to either the EQC or the people of Oregon.

AOI urges that no amendment to OAR 340-11-132(5) be adopted as a part of the enforcement rule package. AOI asks that these comments be treated as part of the record for public hearing on the rule package. AOI may have comments on other portions of the rule package as we complete our review during the public comment period.

Sincerely,

James M. Whitty
Legislative Council

JMW:tac

Klamath Falls, Ore
May 6, 1992

DEQ:

A chance to coment on---Proposed amendmentsto the department's rules concerning enforcement and civil penelty assessment procedures.

Dear Sir:
I agree we do need to do something about dumping waste. This includes garbage.

My wife tried doing like we did during the war. Take bothends out of a can, remove the label, mash it and take it to a depository. Now what the depository is at the dump about a ten mile drive. Plastic jugs, mash them and burry them. Or Burn them. If there was a place a person could take this stuff without making a day to get it there there wouldn't be so much garbage. The grocery stores sell it, there should be a place or two around town to deposit the stuff.

Smoking up theenvironment. You people are way out of line. Its 85 dagrees today, going down town the place is a stinking mess. Black smoke poring out of deisel trucks and pickups and cars. Some of these old crates are burning more oil than gass. You can see them coming for half a mile. I never saw smoke clming from one wood stove. What about those oil furnaces? The stink from those things cover the town. The same thing is going on in Klamath Falls that is going on in L A -Pheonics, Messa and Appachie J nction. If you want to see and smell some polution come to my house. Watch the stinking trucks going by. Going west the black smoke pouring out. Coming East the yellow blew smoke from the noisey Jake Brakes.

On the noise situation. I don't think we need Hectors Job any more. I have been trying for 22 years to get something done about the grose violations. Evidently we have no right to live in peace. I have spent hundreds of hours, getting information and sending it to your office. Once I sent a paper containing 37 signatures and addresses. Another waste of time. The State Police came out here and tried to make an ASSout of me. They never have issued one citation for noise in 22 years. I asked for a signe to prohibet the use of Jake brakes in this area. NOTHING. While taking information in the past I was assaulted by a State Highway employe, Threatoned with an Iron pipe by a truck driver. Another one threatoned to have me arrested. This was all waisted time and effort. Just like my time and effort writing this. One of the DEQ men came out here took readings. He said definatly too much noise. Sent it in stating no Jake Brakes used. He didn't even know what a Jake Brake was. 70% of the trucks used Jake Brakes that day.

Maybie you dont like my coments but I don't like whats going on either. I would like to see a report on how many citations were issued for the past year. Five years, ten years, or 22 years.

Thanks for ~~listening~~,
Leo E. Denn

(1-1)

Department of Environmental Quality
Attn.: Michael Nixon
Regional Operations Division
Enforcement Section
811 SW Sixth Avenue
Portland, OR 97204-1390

RTMENTAL Q
RECEIVED
MAY 21 1992

May 17, 1992

John Neely
1600 Horn Lane
Eug., OR 97404

Re: CHANCE TO COMMENT ON - DEQ's OARs Chapter 340, Divisions 11 and 12 - may amend,
Hearing Date: 5/18/92, Comments Due: 5/22/92.
HIGHLITE: Not enough time to write-a-book on all facets, so selecting the following:

"Persons who violate... noise laws... liable for a civil penalty of up to $10,000 per day of violation in comparison to the current rule limitation of $500 per day..." The NOISE which comes immediately to mind is that from the boom-box in vehicles being so loud that the offensiveness distracts other vehicles' drivers from the more normal/accepted traffic noises, to the extent in extra traffic hazard existing within the immediate area of this type of excessive and unnecessary noise.

Pass a law or make a rule (if the law exists but is not enforced) that the installer of such devices is liable when the volume can be dialed to more than the decibles in normal conversation. And the driver of the vehicle with the boom-box volume exceeding this decible limit is equally and separately liable for the same penalty; if the boom-box was installed by the owner/driver of the vehicle, double the penalty; paid to DEQ.

DEQ is represented in the March 13, 1992 WELLHEAD (protection) ADVISORY COMMITTEE and TAG MINUTES, page 3, "At the same time, there are also some very hard realities facing us, such as the effects of Ballot Measure 5. DEQ is going through the process of determining how we are going to cut 65 positions for the current 1993-1995 biennium. We are also reducing our expenditures by ($) 4.2 million from the general fund. Those realities will be compounded when we hit the 95-97 biennium... We cannot add more positions and fund a traditional program due to measure 5." What is the reality by 95-97 biennium toward launching or even continuing "... a traditional program." Nil?

"Persons who... violate the on-site sewage disposal laws and rules,..." Presenting some facets in this subject is from the perspective of a resident in a local area in which on-site sewage disposal laws are being circumvented/violated by professionals, who have had their professional and administrators opportunity-to-know to not have done so. ORS Chapter 454 (1989 edition) has the section ORS 454.605 to 454.745 that are specified in ORS 454.640 that county officials are required to use as limits of their authority. True, it also states "... or in rules of the Environmental Quality Commission." and then refer to ORS 454.625 which has the EQC required to conform to these same statutes of ORS 454.605 to 454.745. Automatically, this also requires the DEQ to also conform to the provisions in these statutes; they are titled: "REGULATION OF SUBSURFACE SEWAGE DISPOSAL"

In this group of statutes is ORS 454.675 which allows and provides for doing the alterations, repair, extensions on the exempted septic tank systems installed prior to January 1, 1974. W. Ray Trent, 831 Nadine Court, Eugene, OR 97404, ph. 689-8025, has stated that his septic tank/on-site system was installed prior to Jan. 1, 1974. It is not creating a health hazard nor polluting water - at tertiary treatment: from the New York State MANUAL OF INSTRUCTIONS FOR SEWAGE TREATMENT PLANT OPERATORS, page 88. He is understood to have not been informed by Eugene's officials or staff that he was exempt from connecting to and paying for the sewer syatem being installed in the River Road area. Therefore, he did not receive the full-disclosure required of officials on the subject prior to having legal authority in this subject.

However, he has provided a copy of the letter (copy accompanying), dated March 12, 1992, from Eugene, Public Works, Maintenance, 1820 Roosevelt Boulevard, Eugene, OR 97402, ph. 687-5220, from Maintenance Director Bob Hammitt, pertaining to applying for "extension of the connection requirement based on financial hardship." Paragraph three includes, "The extension... be terminated... in the event of an unsanitary condition." This reasons to constitute a violation by Mr. Hammitt of on-site sewage disposal laws.

On the basis that many property owners may have also applied, a DEQ representative might go into that office, count the number of such letters, multiply by $500 and a

penalty assessment be mailed to Eugene officials, naming this employee, for every one of the instances in which the property owners were not fully informed, so as to be/ have been able to make an informed decision. And, on the basis that this letter copy has as its last entry that a copy went to Fred McVey, Maintenance Planning Supervisor, DEQ may want to consider multiplying the total derived above on Mr. Hammitt by TWO. This would reason to be based in the ORS ORS 454.675; DEQ may want to consider its potential to double this above multiplied-by-two amount in reference to ORS 454.657.

Then, to another facet in augmenting DEQ's funds, "THE CITY COUNCIL OF THE CITY OF EUGENE FINDS AS FOLLOWS: (in RESOLUTION NO. 4246 - its EXHIBIT B page 3 has this as Res. No. 4642 - A RESULUTION INITIATING AND ORDERING ESTABLISHMENT OF A LOCAL IMPROVEMENT or special service DISTRICT FOR SANITARY SEWERS IN THE RIVER ROAD AREA FOR BASIN "D", BASIN "E" AND BASIN "F" - also known as the 1991 "basins") A. Under ORS... and 454.214 the City may construct sanitary sewers within or without its corporate limits and do all work the City Council deems essential and proper for the construction and operation of sanitary sewers." In considering a penalty amount as

1. The City Council is WRONG; ORS Chapter 454 has not an ORS 454.214. Additionally,
2. The City Council is WRONG in any statute in the ORSs 454.205 through 454.255 on the basis that part of ORS Chapter 454 is titled, DISPOSAL OF SEWAGE. And,
3. The City Council is WRONG; it represents local/special service districts of the "sanitary sewers" - NOT the DISPOSAL OF SEWAGE which provided City authority to extend DISPOSAL OF SEWAGE pipelines to the Site A-1 and Site C. And, again,
4. The City Council is WRONG; the ORS Chapter 454 section with authority to install/ provide service/sanitary pipelines is ORS 454.275 through 454.380: titled, "...; PROVISION OF SERVICES"and, therefore, again,
5. The City Council is WRONG; ORS 454.275 (4) restricts all "municipalities",service/ special districts from extending sewer service pipelines extraterritorially by "municipalities" in less than 400,000 population counties. Lane County had a 1990 census population of only 282,912. To extend service sewer lines in counties of less than 400,000, the statutes require a vote. The River Road nor the Santa Clara areas, extraterritorial/not annexed to Eugene, has had a vote on sewers.

DEQ should be able to determine the number of sewer connections in these "basins", multiply by $500 and then multiply by EACH DAY. This sum is alleged to be collectable from Eugene officials-majority and the involved-staff members. These violations of the applicable statutes are prima facie on the evidence pertaining to "Persons who ... violate the on-site sewage disposal laws..."

Also, prior DEQ director Kester Concannon required that the Eugene and Springfield old/trickling filters sewer plants meet their respective NPDES Permits 1941-J and 1942-J S 2, 2 provision of secondary treatment of all wastes collected by 1983. But, after former DEQ director W.H. Young signed the Eugene-Springfield-Lane County MWMC NPDES Permit 3721-J, this secondary-treat-all-wastes-collected became deleted. This appears to be the major factor in the need for the Willamette River study by the DEQ in contract with the Association of Oregon Sewerage Agencies; this is referenced in the E-S MWMC MINUTES, November 21, 1991, page 3.

On page 4 is, "Mr. (Terry) Smith (one of Eugene's Public Works personnel) expressed his belief that our (MWMC's) business has changed from collecting and treating domestic sewage to control and reduction of toxics, however our utility operation has not made that shift. The change will be necessary with the enactment of Senate Bill 1081 as it includes the Domestic Sewage Exemption which says that an industry may dispose of a substance into the sanitary sewer that under the Resource Conservation Recovery Act (RCRA) would have been catagorized as a hazardous waste. The concept is that municipal governments are required to have industrial pretreatment programs in place that regulate the worst of these materials and prevent the discharge in quantities large enough to pose a serious hazard. (cont. on page 5) Congress and also environmental advocacy groups are concerned that municipal governments are not regulating adequately and that substantial quantities of unregulated hazardous materials are ending up in surface waters. If the Domestic Sewage Exemption is removed, then RCRA comes into effect which is a very complicated and expensive process involving [illegible] several hundred toxic substances as opposed to the couple of dozen [illegible]." Is a "study" REALLY NEEDED?

Instead, a review of who-got-whom-to-reduce-requirements could be productive in comparing with "EPA regulations also specify that the more stringent of state or federal requirements shall prevail." and "Other provisions relating to EPA requirements are given in the 'Rules and Regulations', published in the February 11, 1974, Federal Register."

Then, Federal Register/Vol. 49, No. 34/Friday, February 17, 1984/ Rules and Regulations, page 6245 has in paragraph 35.2125 - "Treatment of wastewater from industrial users.

(a) Grant assistance shall not be provided for a project unless the project is included in a complete waste treatment system and the principal purpose of both the project and the system is for the treatment of domestic wastewater of the entire community, area, region or district concerned.

(b) Allowable project costs do not include:

(1) Costs of interceptor or collector sewers constructed exclusively, or almost exclusively, to serve industrial users; or

(2) Costs for control or removal of pollutants introduced into treatment works by industrial users, unless the applicant is required to remove such pollutants introduced from nonindustrial users."

Include in this review the U.S. EPA-600/8-80-026 Research Summary, Industrial Wastewater has on page 21, "Whereas early water pollution control measures focused on 'end of pipe' treatment to reduce the hazardous potential of industrial discharges, recent legislation, which has a goal of zero pollution discharge by 1985, has encouraged recycle/reuse alternatives." Compare with this letter's page 2 last para.'s quotes from the E-S MWMC minutes, November 21, 1991; Smith appears to be admitting the E-S MWMC has not acted toward this "goal of zero pollution discharge" by industrial sewer users.

This indicates the need for industrial polluters to have the high volume of water which is infiltration of groundwater through leaking 'sanitary' sewer pipes - the more the better - and the domestic sewage as also dilution and mass for transport of industrial pollutants and toxics. The problem here is in that so much of these toxics have been discharged to the annually-considered constant-flow Willamette River that a 'study' is planned.

The concept and context from these references would support an allegation in which the efforts to sewer the suburban areas on septic tank systems are concerted to the extent in abridging laws which state do-not-do-it as reflecting desperate need to try avoiding the costs of industrial pretreatment. Within this context is perception that all of the sewer costs to obtain the domestic sewage, despite statutes stating do-not-do-it - without a vote, belongs to the industrial sewer users.

When reviewing the extent of abridge/violate on-site sewage disposal laws, the potential for DEQ to augment its funds from penalties is extensive, even for just a one-day violation. Then, when this $500 is for each violation for each day, then to multiply by the numbers of days is compoundingly extensive. And I would accept a percentage of these amounts collected as penalties, which are recovered in reference to these references here provided.

That no vote has occurred in the RR-SC areas pertaining to joining the county service district, the only logical and seemingly legal way to obtain a legally valid vote in RR or/and SC would be to cause Eugene to remove all of the sewer pipelines: interceptors/collectors and laterals, and house taps, put every structure back with using the on-site systems. Then have the required vote. If this process is not used, the properties exempt from connecting to this sewer system by statute reason to have a legal-cloud over the ownership - even by future purchasers - and liabilities which attend the fact that this 'regional' sewer plant discharges such extensive quantities of industrial pollutants and toxics. The reference for this is in this letter's page 2 last paragraph, quoting the information which the MWMC attributes to Mr. Smith.

Considering all of this together, perhaps the present penalty schedule is enough, IF the DEQ enforces the statutes. We RR-SC residents in the unincorporated areas have not seen or read that the on-site statutes violations have produced penalties. Industry should be required to pay the domestic sewer users for their sewage.

Public Works
Maintenance

1820 Roosevelt Boulevard
Eugene, Oregon 97402
(503) 687-5220

March 12, 1992

Ray Trent
831 Nadine Court
Eugene, OR 97404

Subject: **Time Extension of Connection Requirement - 831 Nadine Court**
Taxlot 17-04-14-34-00800

Dear Mr. Trent

This letter is written in response to your request for a time extension to sewer connection requirements at the above referenced property on the basis of financial hardship. Determination of eligibility for time extension based on financial hardship is based on the same criteria used to determine eligibility for sewer assessment deferral (Eugene Code section 7.195 (3)).

Maintenance staff have reviewed your request and have confirmed that you have qualified for a sewer assessment deferral for the above referenced property and as such meet criteria for an extension of the connection requirement based on financial hardship. We are hereby granting an extension of connection requirements for the property.

Financial hardship extensions are indefinite in duration based on the duration of the particular qualifying hardship. While this extension is indefinite in duration, in the event that an unsanitary condition exists or results due to a failing septic tank or drain on the property the extension will be terminated. The extension will be reviewed periodically and may be terminated upon changes to financial status, development of the property, or in the event of an unsanitary condition. This property is in an area of mandated connection requirements based on pollution control and construction grant requirements and as such may be required to connect to the public sanitary sewer by December 31, 1999 irrespective of this extension.

Thank you for your understanding and cooperation in clarifying the sewer connection requirements for your property. If you have need of further information or clarification, please feel free to contact Fred McVey at 687-5240 or Donna Stark at 687-5201.

Sincerely,

Bob Hammitt, Maintenance Director

c: Connection Compliance File
Fred McVey, Maintenance Planning Supervisor

(19)

MAY 20, 1992

W.J. SHOCKMAN AND SON
P.O. BOX 3
MILTON FREEWATER, OR 97862

MICHAEL NIXON
DEPARTMENT OF ENVIRONMENTAL QUALITY
REGIONAL OPERATIONS DIVISION, ENFORCEMENT SECTION
811 SW SIXTH AVENUE
PORTLAND, OR 97204-1390

DEAR MR. NIXON,

THE FOLLOWING IS OFFERED IN RESPONSE TO THE REQUEST FOR PUBLIC COMMENT ON THE AMENDMENTS TO CHAPTER 340, DIVISIONS 11 AND 12 OF THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY DEPARTMENTAL RULES.

CONSIDERING THE COMPLEXITY OF THE AMENDMENTS THE TIME LINE BETWEEN AVAILABILITY OF THE DOCUMENT AND THE DATES SET FOR HEARING AND COMMENT WAS ALMOST IMPOSSIBLY SHORT. THE PUBLIC WAS GIVEN EIGHTEEN DAYS BETWEEN PUBLICATION OF THE AMENDMENTS AND THE HEARING DATE, AND TWENTY TWO DAYS BETWEEN PUBLICATION AND THE DATE WRITTEN COMMENTS WERE TO BE RECEIVED IN PORTLAND. EVEN THE EIGHTEEN DAYS AND THE TWENTY TWO DAYS WERE MORE APPARENT THAN REAL BECAUSE OF NECESSARY TIME FOR NOTIFICATION THAT COPIES OF THE AMENDMENTS WERE AVAILABLE, AND THE TIME NEEDED TO OBTAIN A COPY OF THE AMENDMENTS FROM ONE OF THE FOUR REGIONAL OFFICES CITED AS SOURCES IN THE LETTER. THE TASK OF INGESTING, DIGESTING, CONSULTING RESOURCE PEOPLE, AND FRAMING A CONSIDERED RESPONSE TO A DOCUMENT OF THE BULK AND DETAIL OF THIS MATERIAL IS ONE THAT REQUIRES MORE THAN THE FEW DAYS PROVIDED BY THE DEPARTMENT TIME LINE. IN ADDITION, IT SEEMS PROBABLE THAT FEW POTENTIAL RESPONDERS WOULD HAVE THE LUXURY OF SETTING ASIDE PRIOR COMMITMENTS AND DAILY RESPONSIBILITIES IN ORDER TO DEVOTE THE TIME NEEDED TO EVEN BEGIN THE TASK IN THE TIME PROVIDED.

I UNDERSTAND THAT MAINTAINING A BALANCE BETWEEN PROTECTING WHAT THE AGENCY VIEWS AS IMPORTANT INTERNAL REVISIONS AND THE RIGHT OF THE PUBLIC TO PARTICIPATE IN THESE REVISIONS IS NOT ALWAYS AN EASY ONE. HOWEVER, IN THIS CASE I FEEL THAT THE INTERESTS OF THE PEOPLE OF THE STATE OF OREGON CAN BE BEST SERVED BY EXTENDING THE TIME LIMIT FOR PUBLIC INPUT BEFORE ADOPTION OF ANY AMENDMENTS.

THANK YOU FOR YOUR TIME AND CONSIDERATION.

SINCERELY,

Linda Shockman

LINDA SHOCKMAN
W.J. SHOCKMAN AND SON

Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

May 22, 1992

Linda Schockman
W.J. Shockman and Son
PO Box 3
Milton Freewater, Oregon 97862

RE: Extension of time for submission of comments to DEQ rules

Dear Ms. Shockman:

This letter is in reply to your letter dated May 20, 1992. You may submit any additional comments for the record so long as they are received by DEQ no later than June 1, 1992. The Department looks forward to receiving any additional comments that you may submit for our consideration. If you have any questions, please call me at 229-5217, or toll-free at 1-800-452-4011, extension 5217.

Sincerely yours,

Michael V. Nixon
Environmental Law Specialist

c: Tom Bispham, Administrator, Regional Operations Division

THORP
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PURDY
GOLDEN
& JEWETT P.C.
ATTORNEYS AT LAW

644 North A Street
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Douglas R. Wilkinson
Richard L. Fredericks

Jan Drury
Office Manager

Marvin O. Sanders
(1912-1977)
Jack B. Lizer
(1923-1979)

92

May 20, 1992

Michael Nixon
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

Re: Time Extension for Comments

Dear Michael:

This letter confirms your telephone conversation today with Kathleen Hynes of my staff concerning an extension of time to submit written comments on proposed enforcement rules. As we discussed, this is a comprehensive rule change which requires detailed scrutiny. Therefore, in order to conduct a complete review of the proposed rules and provide you with substantive comments, you have agreed that we can remit our written comments no later than June 5, 1992.

Notwithstanding that extension, we will make every effort to get our comments to you as soon as possible.

Thank you for your consideration in granting this extension.

Very truly yours,

THORP, DENNETT, PURDY,
GOLDEN & JEWETT, P.C.

G. David Jewett

GDJ/syp
cc: Katherine Schacht/MWMC

CITY OF GRESHAM

1333 N.W. Eastman Parkway
Gresham, Oregon 97030-3825

FACSIMILE TRANSMISSION COVER SHEET

DATE: May 22, 1992

TO: Michael Nixon / 229-6124
Name / FAX number

DEQ
Company

FROM: Garry Orr
Name

669-2438
Telephone number

Sanitary Sewer & Wastewater Treatment Plant
Division

SUBJECT: DEQ Enforcement Hearing

COMMENTS:

3 pages to follow (excluding this sheet)

Our facsimile telephone number is.....(503) 661-5927
This number is to be used for business transmission only, and is not available for advertising purposes.

Should you encounter difficulties with this transmission, please call.....(503)669-2376

CITY OF GRESHAM

Department of Environmental Services
1333 N.W. Eastman Parkway
Gresham, OR 97030-3813
(503) 669-2540
FAX (503) 661-5927

Gregory E. DiLoreto
Director

Engineering Division

Parks & Recreation Division
Julia Conway
Manager

Operations Division
Ray Perkins
Superintendent

Office of Customer Relations
Liberty Lane
Supervisor

Office of Solid Waste & Recycling
Lynda Kotta
Manager

May 22, 1992

Michael Nixon
Regional Operations
Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

Dear Mr. Nixon:

RE: AMENDMENTS TO DEQ RULES CONCERNING ENFORCEMENT AND CIVIL PENALTY ASSESSMENT PROCEDURES (CHAPTER 340, DIVISION 12)
PUBLIC COMMENT

The City of Gresham has reviewed the above referenced proposed rules and comments as follows:

1. Ref WATER QUALITY CLASSIFICATION OF VIOLATIONS, 340-12-055, paragraph (1) Class One, section (g), page E-18.

The proposed language appears to imply that the municipal treatment works can be held responsible (and hence subject to a class one violation) for the discharge from one of the industrial users on its system. Based on conversation with Michael Nixon of May 22, 1992, it is our understanding that the intent of the language was aimed at the industrial user.

The City suggests that the language be clarified as to intent.

2. Ref WATER QUALITY CLASSIFICATION OF VIOLATIONS, 340-12-055.

The use of the word "any" is difficult to define and can be viewed to encompass many areas outside the scope of these regulations.

The City suggests delation of the word "any" for the proposed regulations.

Gresham appreciates the opportunity to comment on the proposed rules.

Sincerely,

Gareth S. Ott, P.E.
Sanitary Engineer

GSO:cmj
Enclosure

pc: Gregory E. DiLoreto, Director
Alan P. Johnston, Pretreatment Coordinator
Matt Baines, Assistant City Attorney

File: 1.07-2

MAY 22 '92 16:00 [illegible]

[illegible] or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violations that exceed noise standards by three (3) decibels or more;

(b) Advertising or offering to sell or selling an uncertified racing vehicle without displaying the required notice or obtaining a notarized affidavit of sale;

(c) Any [other] violation related to noise control which [poses a moderate risk of harm to public health or the environment] is not otherwise classified in these rules.

(3) [Class Three:]

[(a)] Violations that exceed noise standards by one (1) or two (2) decibels are Class III violations;

[(b) Any other violation of related to noise control which poses a minor risk of harm to public health or the environment.]

(Statutory Authority: ORS CH 467 & 468)

[illegible]

340-12-055

Violations pertaining to water quality shall be classified as follows:

[illegible]

(a) Violation of a Commission or Department Order;

(b) [Intentional unauthorized discharges;]

[(c) Negligent spills which pose a major risk of harm to public health or the environment;]

(c) Any unauthorized or non-permitted discharge of untreated or partially treated waste that enters waters of the state;

(d) Waste discharge permit limitation violations which cause major harm or pose a major risk of harm to public health or the environment;

(e) [Discharge of waste to surface waters without first obtaining a National Pollutant Discharge Elimination System Permit;]

[(f)] Failure to comply with statute, rule, or permit requirements regarding notification of a spill or upset condition which results in a non-permitted [immediately notify of spill or upset condition which results in an unpermitted] discharge to public waters;

(f) [(g)] Violation of a permit compliance schedule;

(g) [(h)] [illegible]

(h) Failure to provide access to premises or records when required by law, rule, permit or order;

(i) Failure of any ship carrying oil to have financial assurance as required in ORS [468.780 to 468.815] 468B.300 to 468B.335 or rules adopted thereunder;

(j) Any [other] violation related to water quality which causes a major harm or poses a major risk of harm to public health or the environment.

[illegible]

(a) [Waste discharge permit limitation violations which pose a moderate risk of harm to public health or the environment;]

[(b)] Operation of a disposal system without first obtaining a Water Pollution Control Facility Permit;

[(c) Negligent spills which pose a moderate risk of harm to public health or the environment;]

(b) [(d)] Failure to submit a report or plan as required by rule permit, or license;

23

PUBLIC WORKS DEPARTMENT
WASTEWATER RECLAMATION DIVISION
WATER QUALITY CONTROL PLANT
1100 Kirtland Road
Central Point, OR 97502

CITY OF MEDFORD

MEDFORD, OREGON 97501

TELEPHONE
(503) 826-7943

FAX #
(503) 826-8884

TO: Michael Nixon **DATE:** 5/22/92

FROM: Jim Hill **DEPT.** WQCP

MESSAGE:

Number of pages transmitted including Cover 3

\WP\MERI
FAX_CVR.FRM

PUBLIC WORKS DEPARTMENT
WASTEWATER RECLAMATION DIVISION
WATER QUALITY CONTROL PLANT
1100 Kirtland Road
Central Point, OR 97502

CITY OF MEDFORD
MEDFORD, OREGON 97501

TELEPHONE
(503) 826-7943

May 22, 1992

Mr. Michael Nixon
Regional Operations Division
DEQ Enforcement Section
811 West Sixth Ave.
Portland, OR 97204-1390

SUBJECT: Review of Proposed Enforcement Procedure and Civil Penalty Rules

Dear Mr. Nixon:

As I had mentioned in our telephone conversation on Monday, May 18, 1992, the proposed rule changes presented for review are quite extensive and require a considerable amount of time for proper review and comment. The fact that DEQ is attempting to push through several NPDES permits concurrently, including ours, makes review even more difficult.

In our telephone conversation we had discussed extending the comment period to June 5, 1992. While this will provide some additional time, it is my opinion that DEQ will incur considerable resistance in administering these rules if adequate time isn't provided for comment from all affected utilities.

The following are brief comments after an initial review of the proposed rules:

1. On Page E-2, the definitions of "negligent", "negligence", "reckless" and "recklessly" are too open to interpretation.

2. On Page E-3, 340-12-035 classifies each day as a separate and distinct violation. On Page E-5, 340-12-041(1)(a) states a NON can be issued for existence of a violation. Page E-5, 340-12-041(2)(c) states more than three Class II NONs require issuance of a NPV. Any violation such as weekly mass limit could then be subject to an NPV.

3. On Page E-18, 340-12-055(1)(c), should be deleted. Partially treated waste could be interpreted to mean any discharge that doesn't meet NPDES permit requirements.

4. On Page E-19, 340-12-055(2)(d), should be eliminated or reworded. The term "by any means" is far too broad and would include just about any waste on the plant site.

5. On Page F-1, 340-11-132(5), delete the third sentence in the new paragraph (..."with respect to determinations"...). There are no definitions for major, moderate, or minor violations under 340-12-055. This language essentially allows DEQ to rather arbitrarily determine the magnitude of the violation as well as to make any other "judgement" decisions, since the concept of "rational relationship" is very broad and difficult to disprove. We feel this sentence essentially removes the Hearing Officer from several important decisions.

Additional comments will follow as we get the opportunity to complete our evaluation.

Very truly yours,

James L. Hill
WRD Administrator

JLH/pgm

c: G. David Jewett
Cathryn Collis, City of Portland
Fred Hansen, DEQ

THORP
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LAURENCE P. THORP
DOUGLAS J. DENNETT
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JOHN C. URNESS
DOUGLAS R. WILKINSON
RICHARD L. FREDERICKS

(26)

FAX TRANSMITTAL LETTER

DATE June 2, 1992 NUMBER OF PAGES (INCLUDING THIS SHEET) 6

TO: 1-229-6124 (FAX NUMBER) Michael Dixon (ATTENTION)

FROM: Katherine Schacht

MESSAGE: MWMC's comments to draft enforcement and Civil Penalty rules.

IF TRANSMISSION IS NOT CLEARLY RECEIVED, PLEASE CALL (503) 747-3354

#31

6/4

VAN/TOM:

I would like to have Shelley assist me in responding to MWMC's comment re: $100K rule. Please authorize ASAP, if OK. I think it's important

Michael

Metropolitan
Wastewater
Management
Commission

COMMISSION MEMBERS
Rob Bennett—Eugene Councilperson
Steve Duffy—Eugene Lay Representative
Scott Engstrom—Springfield Lay Representative
Chris Larson—Springfield Councilperson
Chris Matson—Lane County Lay Representative
Jerry Rust—Lane County Commissioner
Mark Westling—Eugene Lay Representative

FIFTH AND A STREETS – SPRINGFIELD CITY HALL – SPRINGFIELD, OREGON 97477 – TELEPHONE (503) 726-3694

June 3, 1992

Michael Nixon
Oregon Dept. of Environmental Quality
811 S.W. 6th Avenue
Portland, OR 97204

Re: Comments to Proposed Amendments to Enforcement and Civil Penalty Procedures

Dear Mr. Nixon:

This letter sets forth the Metropolitan Wastewater Management Commission's comments regarding some of the issues presented in the Department's proposal to amend the rules governing civil enforcement procedures, penalty assessments and the authority of hearings officers in contested cases. Given the complexity of the rules, the amount of time to review and prepare comments was short. This task was made more difficult due to the number of important water quality issues which are attracting attention at this time including the rules related to disinfection and mass limits, pretreatment issues and related NPDES permit issues among other things. Accordingly, we appreciate the extension of time to comment which you graciously extended to us. Nevertheless, given the overall time constraints, these comments are more limited than would have otherwise been submitted.

It is my understanding that the draft rules were developed with the participation of the Environmental Enforcement Advisory Committee which the Department assembled last December. In cooperation with that committee, a number of changes to the initial draft were made which cleared up many of the ambiguities. However, some ambiguities remain which could lead to the imposition of unintended and inappropriately harsh penalties for technical or minor violations which have no adverse water quality impact. In at least one case, the rules go beyond the legislature's purpose in enacting new penalty legislation last year. Finally, the additional restrictions on the authority of hearings officers may lead to additional and unnecessary appeals.

For ease of reference, these comments are organized in the order the issues appear in the draft rules starting with the revisions to Division 12.

Definition of "Intentionally" - OAR 340-12-030(9).

The 1991 legislature enacted ORS 468.996 which authorizes a

civil penalty up to $100,000 for any intentional or reckless violation of various pollution control statutes, rules or orders "which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment ...." The new penalty is four times greater than the maximum criminal monetary penalty and ten times greater than the former maximum civil penalty. Therefore, it is clear the legislature was looking to extreme forms of conduct to justify such a large increase. Moreover, the legislature specifically required that the conduct "result" in an extreme public health hazard or extensive environmental damage. Finally, the legislature specifically defined intentional to require conduct done "with a conscious objective to cause the result of the conduct." Emphasis added.

The proposed rule, however, broadens the scope of the term "result" and goes beyond the statute in specifying that intentional conduct "does not require a showing that the person intended to cause any harm to public health or the environment." Under the proposed rule, liability for intentional conduct could arise simply because a person consciously took any action constituting a violation. As a result, one could be found to have acted intentionally and be subject to a $100,000 penalty for consciously discharging a contaminant causing the required harm even though the person had no knowledge of the nature of the contaminant being discharged.

As written, the rule does not even require that the Department show that the person intentionally violated the applicable law, regulation or order. For example, assume that a person intentionally released the contents of a large tank to the environment, believing that the tank contained pure water. Further assume that the tank actually contained a toxic chemical which resulted in the required hazard or damage. Finally, assume that the release occurred either because the tank was mislabeled or because the person negligently assumed it contained only pure water.

Clearly, there was a conscious objective to cause the release of the contents of the tank into the environment. The fact that the contents happen to be contaminants would lead to liability for an intentional violation even though the person did not intend the resulting environmental damage or to violate the applicable law. Accordingly, the rule should be revised to more carefully circumscribe the conduct which results in liability for the $100,000 civil penalty.

Classification of Water Quality Violations OAR 340-12-055.

Subsection 1(c) of this rule provides that a Class 1 Violation includes "any unauthorized or non-permitted discharge of untreated or partially treated waste that enters waters of the State." Neither the term unauthorized nor the term partially treated is defined. Accordingly, any discharge of conventional pollutants such as BOD, CBOD and TSS which exceeds a permit concentration limit by more than 20% or a permit mass limit by more than 10% could be a Class 1 Violation. Generally speaking, summertime discharge limits to the Willamette River for conventional pollutants are limited to 10 mg/l. Thus, discharge to the Willamette in June of BOD at a concentration of 12.5 mg/l would be a Class 1 Violation requiring the issuance of a NPV pursuant to OAR 340-12-041(2)(c).

While the violation mentioned might justify more than treatment as a Class 3 Violation, it hardly seems to merit designation as a Class 1 Violation given a significantly greater penalty attached to it.

Subsections 2(b), (f) and 3(a) combine to lead to anomalous results for relatively minor paperwork violations. First, subsection 2(b) provides that any "failure to submit a report or plan as required by rule, permit or license" is a Class 2 Violation. Emphasis added. Many permits require various reports to be submitted within specified time periods. Therefore, the submission of a report one day late would not be "as required" by the permit and result in a Class 2 Violation. Undoubtedly, the actual intent was to make actual failure rather than late submittal of a report a Class 2 Violation. Deleting the word "as" would solve the problem created by subsection 2(b) but not the problem itself.

Subsection 3(a) makes "failure to submit a discharge monitoring report on time" a Class 3 Violation. Unfortunately, the rule does not cover the classification of the late submittal of various other reports which are often required by the Department's permits, rules or orders. For example, Schedule C in many NPDES permits contains a requirement that progress reports be submitted within specified time periods after any milestone in a compliance schedule. Thus, the late submittal of such a report is not specifically classified. Pursuant to the terms of subsection 2(f), the late submittal of such a report would result in a Class 2 rather than a Class 3 Violation.

Two things should be done to solve this problem. First,

subsection 3(a) should be modified so that it applies to the late submittal of any report required by a rule, permit or license. Second, the language of subsection 2(f) should be deleted from subsection 2 and dropped down into subsection 3 so that any other unclassified violation would simply be a Class 3 Violation. It seems only reasonable that the department would specifically classify any particular violation it feels to merit a penalty of greater severity than a class III violation.

Minor Removal Efficiency violations - OAR 340-12-055.

Subsection 3(c) of the revised rule provides that certain minor permit exceedances related to concentration or mass limits for BOD, CBOD or TSS limitations in permits will be Class 3 Violations. For consistency, a violation of a similar minor nature related to the permit limit for the removal efficiency of BOD, CBOD or TSS should also be a Class 3 Violation. As presently written achieving 84% removal would be either a Class 1 Violation (unauthorized discharge of partially treated waste under 340-12-055(1)(c)) or a Class 2 Violation (not otherwise classified under 340-12-055(2)(f)) while exceeding a summertime concentration limit for the same pollutant by 20% would only be a Class 3 Violation.

Authority of Hearings Officers - OAR 340-11-132(5).

The revisions to this rule are designed to clarify the department's burden of proof with respect to factual findings in a contested case proceeding and ensure that hearings officials uphold the Director's decisions as long as a rational relationship has been demonstrated between the facts and the decision. While we have no objection to the first change, the second change appears to introduce an unduly defferential standard of review at the hearings official level which would lead to additional appeals to EQC.

The Department should not rush to insulate its decisions from thorough review at the administrative level. The typical administrative law concept of review of agency decisions based on the rational relationship or substantial evidence standard applies during judicial review of final agency action. Under the Administrative Procedures Act, judicial review does not occur until after the EQC takes that final action. Prior to that time and except as currently provided under OAR 340-11-132(5), there should continue to be thorough review at the hearings official level. Moreover, regardless of the hearings official decision, the EQC is free to substitute its judgment for that of the hearing officer with respect to "any

particular finding of fact, conclusion of law, or order." OAR 340-11-132(4)(i). Thus, requiring the hearings official to defer to the Department's initial decision will simply increase the number of appeals to EQC to obtain a more pervasive standard of review. Accordingly, the proposed amendment will not achieve the desired result.

MWMC recognizes that the existing structure of enforcement procedures and civil penalties is complex. We also recognize that many of the proposed changes are beneficial. Moreover, generally speaking, the effort made by the advisory committee and the Department to streamline and increase efficiency in the administrative process will be beneficial to all parties. Incorporation of the few changes outlined above will allow the process to continue while reducing the risk of unintended results. Thank you for your consideration.

Very truly yours,

Katherine Schacht
General Manager

KS/cam

If you respond and decline to be interviewed for this position, it will not affect your status on the list. You will continue to be contacted for Environmental Specialist 2 vacancies because your name appears on the list used to fill positions in various program areas, you will probably receive notices like this one for positions that are not of interest to you. We ask that you do respond to each notice, however. I apologize for any inconvenience this may cause you.

Sincerely,

Marie Stein
Human Resources Assistant

MS:dp
WTENVSP2 (5/7/92)
Enclosures: Position Description

FAX INFO

TO
NAME TOM BISPHAM
ORGANIZATION DEQ—REGIONAL OPERATIONS DIV
FAX NUMBER 229-6124

FROM
NAME DON ARKELL
PHONE NUMBER 726-2514

MESSAGE
Here is a copy of LRAPA's comments on the proposed Division 12 rule revisions. I'm also sending them regular mail today, and you should receive them by Friday.

RECEIVED
MAY 20 1992
DEPARTMENT OF ENVIRONMENTAL QUALITY
REGIONAL OPERATIONS DIV

Lane Regional Air Pollution Authority

LANE REGIONAL AIR POLLUTION AUTHORITY

Environmental Quality Commission

☐ Rule Adoption Item
☑ Action Item
☐ Information Item

Agenda Item N
July 23-24, 1992 Meeting

Title:

Request by City of Prineville for an Exception to the Receiving Stream Dilution Requirement

Summary:

The City of Prineville is currently under order to upgrade its sewerage facilities to meet permit conditions and reduce discharges to the Crooked River in critical summertime periods. The City proposes to construct an upgraded facility which will eliminate discharges during the summer period. Treated effluent will be used during the summer for golf course irrigation. Irrigation utilization is not viable during the winter months. Stream flows during the winter months are not sufficient to assure that the current "dilution rule" requirement for 30 to 1 dilution will be met with the proposed facility. Costs for facilities to meet the wintertime dilution rule requirement range from $6.3 million to $14 million, as compared to the proposed upgrade of $4.1 million.

The Department's evaluation concludes that water quality standards will be met during the winter with the proposed treatment facility provided that no wastewater is discharged when the daily average flow of the Crooked River is less than 15 cubic feet per second (cfs), and the quantity of effluent does not exceed 1/15 of the flow of the river at the discharge point when stream flow is between 15 and 25 cfs.

The Department gave notice and held a public hearing on the proposal on June 25, 1992, in Prineville. No one appeared to testify, and no written comments were received.

The Dilution Rule is a "rule of thumb" that was intended to assure protection of water quality (principally dissolved oxygen) when specific data and analysis was not available for more detailed analysis. The rule allows the Commission to grant exceptions where supported by specific analysis.

If the Commission approves the waiver as requested, the Department will issue the permit consistent with the waiver, and approve the plans for the treatment facility upgrade.

Department Recommendation:

Approve the request by the City of Prineville for waiver of the dilution requirement during the winter months subject to the condition that no discharge to the Crooked River occur when the daily average flow is less than 15 cfs, and the quantity of effluent discharged not exceed 1/15 of the flow of the river at the point of discharge when the average flow of the river is 15 cfs or greater but less than 25 cfs.

Report Author	Division Administrator	Director acting

July 2, 1992

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

REQUEST FOR EQC ACTION

Meeting Date: July 24, 1992
Agenda Item: N
Division: Water Quality
Section: Municipal Projects

SUBJECT:

Request by the City of Prineville for an exception of the receiving stream dilution requirement specified in the Deschutes River Minimum Design Criteria for Treatment and Control of Wastes (OAR 340-41-575 (1)(c)).

PURPOSE:

An exception to the dilution requirement would allow the City of Prineville to discharge treated municipal wastewater into the Crooked River in the winter months during periods of relative low stream flow. Without the exception, the City would be required to provide facilities designed to only discharge when flows meet a stream-to-discharge-flow ratio of 30 to 1.

ACTION REQUESTED:

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

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

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

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

_X_ Approve Department Recommendation
___ Variance Request — Attachment ___
_X_ Exception to Rule — Attachment ___
___ Informational Report — Attachment ___
___ Other: (specify) — Attachment ___

DESCRIPTION OF REQUESTED ACTION:

The Commission is requested to grant an exception to the City of Prineville to allow the City to design a facility to discharge when Crooked River flow is insufficient to meet the minimum design criteria for allowable dilution. As proposed, the City would be allowed to discharge under the following criteria:

> No discharge when daily average flow in the Crooked River is less than 15 cfs. When the daily average flow of the Crooked River is 15 cfs or greater but less than 25 cfs, the quantity of effluent discharged to the Crooked River shall not exceed 1/15 of the flow of the Crooked River at the point of discharge.

With treatment levels under the current design, in order to meet the design criteria, the City could only discharge at rates equivalent to 1/30 the flow of the river. At full design flow, river flow would have to be about 50 cfs.

AUTHORITY/NEED FOR ACTION:

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

Oregon Administrative Rule (OAR 340-41-575(1)(c), commonly referred to as the dilution rule, states that facilities shall be designed such that: "effluent biochemical oxygen demand (BOD) concentration in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise approved by the Environmental Quality Commission (EQC)."

In more general terms as applied to the Prineville sewerage facilities: sewerage facilities shall be designed so that effluent with a BOD concentration of 30 mg/l shall not be

discharged to a receiving stream where the ratio of receiving stream flow to effluent flow is less than 30 to 1, unless otherwise approved by the EQC.

___ Other: Attachment ___

_X_ Time Constraints: (explain)

The City is under an order to upgrade its sewerage facility to address permit violations and reduce discharges to the Crooked River in critical summer time periods. Plans and specifications for the upgraded facilities are currently under review by DEQ staff.

DEVELOPMENTAL BACKGROUND:

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

* A hearing was held in Prineville on June 25, 1992, at 7 PM. No one appeared to testify. In addition, no written comments were received by the Department.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The upgraded sewerage facilities proposed by the City of Prineville will eliminate discharge in the summer-time period when the Department suspects that water quality conditions in the river are critically degraded. During the summer period, effluent will be irrigated on a golf course. Irrigation is not desirable during the winter months, however, because the golf course turf will be dormant and will not utilize the water. Water irrigated during this time will only migrate to the groundwater or, if the ground is frozen, run off into the Crooked River. The cost of providing additional storage in order to meet the dilution rule is estimated to be about $6.3 million as opposed to $4.1 million for the sewerage facility as proposed. Advanced wastewater treatment which would likely meet the dilution rule is estimated to cost $14 million.

Based upon the fact that no one testified in opposition to the proposed permit or against the proposed exception to the dilution rule, the Department concludes that proposed sewerage facility is acceptable to the community in and around the City of Prineville.

PROGRAM CONSIDERATIONS:

Because it is based upon biochemical oxygen demand, the rationale behind the dilution requirement is to assure that there is sufficient flow in the receiving stream to maintain dissolved oxygen levels above the water quality standard. Sufficient flow in the river helps assure adequate dissolved oxygen levels through dilution of the effluent. More flow generally increases the re-aeration of the stream because greater flow means higher velocity and more turbulence. In addition, however, oxygen depletion in a receiving stream is, in part, directly related to the water temperature. More rapid oxygen depletion takes place as receiving stream temperature increases.

The dilution rule contemplates a year-round discharge. The City's facility, however, will only discharge in the winter period when river temperatures are cool. The Department has evaluated the proposed discharge for the winter time period and believes that the proposed limitations for discharge will not lead to water quality standards violations.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Require the City to meet the dilution criteria. This would force the City to construct additional storage facilities to hold effluent for the November and December period. This is the period when flow is more likely to be insufficient to provide dilution of the effluent produced by the City's proposed waste treatment system. The City could also construct a mechanical treatment facility that could meet the dilution requirement by producing a higher quality effluent.

2. Grant the waiver as requested.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission grant the waiver. The new treatment system proposed by the City will significantly reduce waste water discharges and improve water quality such that in-stream water quality standards are not violated. The costs for providing enhanced treatment and/or storage are substantial considering the relatively small size of the City of Prineville. An increase in cost at this point in the scheduling of this project could seriously jeopardize the ability of the City to complete the project.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

This recommendation is consistent with agency policy which allows the Commission to grant a waiver of the dilution requirements as specified in OAR 340-41-575(1)(c). Water quality standards would not be violated as a result of the recommended dilution criteria.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the Commission grant the exception to the dilution rule?

INTENDED FOLLOWUP ACTIONS:

The permit will be prepared for final issuance following the Commission's decision.

Approved:

Section: _____

Division: _____

Director: _____

Report Prepared By: Dick Nichols

Phone: 229-5323

Date Prepared: June 28, 1992

Nichols:crw
MW\WC10\WC10385.5
June 26, 1992

Approved:

Section: _____

Division: _____

Director: _____

Report Prepared By: Dick Nichols

Phone: 229-5323

Date Prepared: June 28, 1992

Nichols:crw
MW\WC10\WC10385.5
June 26, 1992

Environmental Quality Commission

☐ Rule Adoption Item
☑ Action Item
☐ Information Item

Agenda Item O
July 23-24, 1992 Meeting

Title:

Request by Unified Sewerage Agency for an Exception to the Receiving Stream Dilution Requirement for the Durham and Rock Creek Wastewater Treatment Facilities

Summary:

The Unified Sewerage Agency (USA) has requested a waiver from the water quality dilution requirement. The waiver would allow discharge to the Tualatin River from USA's two most technologically advanced wastewater treatment facilities on a year-round basis.

The Dilution Rule is a "rule of thumb" that was intended to assure protection of water quality (principally dissolved oxygen) when specific data and analysis was not available for more detailed analysis. The rule allows the Commission to grant exceptions where supported by specific analysis.

Following extensive analysis, Total Maximum Daily Loads (TMDL's) have been established for the affected stream reaches. The analysis supporting the establishment of the TMDL's included an assessment of effluent limits needed to achieve water quality standards at different stream flows. Based on this earlier analysis, the Department concludes that adequate protection of water quality has been established, and that the requested waiver will be consistent with the approved TMDL and will not jeopardize water quality standards.

If the waiver is not granted, USA would have to expend over $100 million for additional wastewater storage and reuse facilities. USA is already spending substantial funds for treatment facility improvements and is developing and implementing an extensive wastewater reuse program. The Department believes that additional expenditure to meet the dilution requirement are not warranted.

Department Recommendation:

Approve the request by the Unified Sewerage Agency for exception to the requirements of the dilution rule (OAR 340-41-455(1)(f)) for the Durham and Rock Creek wastewater treatment facilities.

Report Author	Division Administrator	Director Acting

July 2, 1992

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

REQUEST FOR EQC ACTION

Meeting Date: July 24, 1992
Agenda Item: O
Division: Water Quality
Section: Municipal Wastewater

SUBJECT:

Request by Unified Sewerage Agency (USA) of Washington County for an exception to the receiving stream dilution requirement, for the Durham and Rock Creek wastewater treatment facilities, as specified in the Willamette Basin Minimum Design Criteria for Treatment and Control of Wastes (OAR 340-41-455(1)(f)).

PURPOSE:

An exception to the dilution requirement would enable the Durham and Rock Creek wastewater treatment facilities to continue to discharge treated municipal wastewater to the Tualatin River on a year-round basis. Without the exception, USA would be required to provide non-discharge alternatives when flows do not meet the dilution requirement. As the population increases in Washington County, violations of the dilution requirement would probably occur on a routine basis during dry weather periods.

ACTION REQUESTED:

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

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

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

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

_X_ Approve Department Recommendation
- ___ Variance Request — Attachment ___
- _X_ Exception to Rule — Attachment _A_
- ___ Informational Report — Attachment ___
- ___ Other: (specify) — Attachment ___

DESCRIPTION OF REQUESTED ACTION:

National Pollutant Discharge Elimination System (NPDES) permits were issued to USA on July 3, 1991, for the Durham and the Rock Creek facilities. Both permits included the dilution ratio requirement as a waste discharge limitation parameter. The Durham and Rock Creek facilities are designed to produce an effluent Carbonaceous Biochemical Oxygen Demand (CBOD) concentration of 2 to 3 milligrams per liter.

Each set of basin standards includes a section on minimum design criteria for domestic wastewater dischargers. Included is a requirement that a minimum amount of dilution be available in the receiving stream, based on the degree of treatment for the discharge. For example, if the effluent has a Biochemical Oxygen Demand (BOD) of 30 mg/l, then the flow in the receiving stream must be a least 30 times the effluent flow. If the effluent has a BOD of 10 mg/l, then the flow in the receiving stream must be at least 10 times the effluent flow.

The purpose of the dilution rule is to prevent violations of water quality instream standards due to lack of dilution or assimilative capacity. It is a rough tool which, nevertheless, has helped to prevent many streams from becoming polluted or water quality limited. The dilution rule pre-dated the detailed water quality analyses the Department now conducts.

The Tualatin River has been designated as water quality limited. Total Maximum Daily Loads (TMDLs) for total phosphorus and ammonia-nitrogen have been established, and Waste Load Allocations (WLAs) have been determined for these parameters. The establishment of TMDLs in the Tualatin River provides an assessment of effluent limits needed to achieve limits at different stream flows. These standards were established by the Commission to limit pollutants that could potentially cause dissolved oxygen depletion in the Tualatin River and to limit excessive algal growth through nutrient control. Waste discharge limitations for ammonia and phosphorus have been established in the NPDES permits for the Rock Creek and the Durham facilities, and USA is on schedule to meet the requirements for the TMDLs.

USA is in the process of developing an extensive wastewater reuse program, which will allow the diversion of reclaimed effluent to agricultural areas during dry weather periods. However, there may be some instances when there will not be the capability to sufficiently divert all reclaimed effluent to allow USA to meet the dilution rule. The Department believes that the dilution rule can safely be waived without jeopardizing water quality standards.

If USA were required to meet the dilution rule, they would have to construct additional storage basins, and divert more flows to reclaimed water use. The additional cost of these projects is estimated to be over $100 million. The Department believes that this additional expense is not warranted.

The Department is requesting the Commission grant an exception to the dilution ratio for the Durham and Rock Creek facilities.

AUTHORITY/NEED FOR ACTION:

___	Required by Statute: _____	Attachment ___
	Enactment Date: _____	
___	Statutory Authority: _____	Attachment ___
X	Pursuant to Rule: OAR 340-41-455(1)(f)	Attachment A
___	Pursuant to Federal Law/Rule: _____	Attachment ___
___	Other:	Attachment ___
___	Time Constraints: (explain)	

DEVELOPMENTAL BACKGROUND:

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

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Strict adherence to the dilution rule in this case is not required to assure that the receiving stream complies with water quality standards. The additional expense of complying with the dilution rule, estimated to be over $100 million, is not warranted based on the water quality impact.

PROGRAM CONSIDERATIONS:

The rationale behind the dilution requirement is to assure that water quality standards are not violated. This concern is being addressed now through the TMDL process. In this circumstance, the dilution rule is not needed.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Approval of the exception to the dilution rule would enable the Durham and Rock Creek facilities to discharge to the Tualatin River on a year-round basis, and not incur additional costs.

2. Denial of the exception to the dilution rule would require that USA provide expanded non-discharge alternatives for the Durham and Rock Creek facilities.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission grant the exception to the dilution rule to USA for the Durham and Rock Creek facilities. The Department will continue to issue water quality based permits for facilities that discharge to streams that have been designated as water quality limited.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

This recommendation is consistent with agency policy which allows the Commission to grant an exception to the dilution requirement as specified in OAR 340-41-455(1)(f). The Department has determined the assimilative capacity of the Tualatin River, and the exception to the dilution rule would not violate the Waste Load Allocations. An exemption of the dilution requirement would not exempt USA from meeting other waste discharge limitations specified in the Durham and Rock Creek NPDES permits.

ISSUES FOR COMMISSION TO RESOLVE:

Should the Commission grant an exception to the dilution rule, where such an exception can be granted without causing violations of water quality standards?

INTENDED FOLLOWUP ACTIONS:

When the NPDES permits were issued on July 3, 1991, USA appealed several permit conditions, one of which is the dilution parameter stated under Schedule A as a Waste Discharge Limitation. Other permit conditions that were appealed will be settled upon determination of Commission action with proposed rule changes. The settlement of the appealed permit conditions will be effective as soon as Commission action is taken.

Approved:

Section: Barbara A. Burton

Division: Lydia Taylor

Director: Stephanie Hallock, acting

Report Prepared By: Judy K. Johndohl

Phone: 229-6896

Date Prepared: June 23, 1992

JKJ:crw
MW\WC10\WC10384
7-6-92

chlorine only when it is demonstrated on a case-by-case basis that immediate dilution of the effluent within the mixing zone reduces toxicity below lethal concentrations. The Department may on a case-by-case basis establish a zone of immediate dilution if appropriate for other parameters.

(ii) Materials that will settle to form objectionable deposits;

(iii) Floating debris, oil, scum, or other materials that cause nuisance conditions;

(iv) Substances in concentrations that produce deleterious amounts of fungal or bacterial growths.

(B) The water outside the boundary of the mixing zone shall:

(i) Be free of materials in concentrations that will cause chronic (sublethal) toxicity. Chronic toxicity is measured as the concentration that causes long-term sublethal effects, such as significantly impaired growth or reproduction in aquatic organisms, during a testing period based on test species life cycle. Procedures and end points will be specified by the Department in wastewater discharge permits;

(ii) Meet all other water quality standards under normal annual low flow conditions.

(c) The limits of the mixing zone shall be described in the wastewater discharge permit. In determining the location, surface area, and volume of a mixing zone area, the Department may use appropriate mixing zone guidelines to assess the biological, physical, and chemical character of receiving waters, and effluent, and the most appropriate placement of the outfall, to protect instream water quality, public health, and other beneficial uses. Based on receiving water and effluent characteristics, the Department shall define a mixing zone in the immediate area of a wastewater discharge to:

(A) Be as small as feasible;

(B) Avoid overlap with any other mixing zones to the extent possible and be less than the total stream width as necessary to allow passage of fish and other aquatic organisms;

(C) Minimize adverse effects on the indigenous biological community especially when species are present that warrant special protection for their economic importance, tribal significance, ecological uniqueness, or for other similar reasons as determined by the Department and does not block the free passage of aquatic life;

(D) Not threaten public health;

(E) Minimize adverse effects on other designated beneficial uses outside the mixing zone.

(d) The Department may request the applicant of a permitted discharge for which a mixing zone is required, to submit all information necessary to define a mixing zone, such as:

(A) Type of operation to be conducted;

(B) Characteristics of effluent flow rates and composition;

(C) Characteristics of low flows of receiving waters;

(D) Description of potential environmental effects;

(E) Proposed design for outfall structures.

(e) The Department may, as necessary, require mixing zone monitoring studies and/or bioassays to be conducted to evaluate water quality or biological status within and outside the mixing zone boundary;

(f) The Department may change mixing zone limits or require the relocation of an outfall if it determines that the water quality within the mixing zone adversely affects any existing beneficial uses in the receiving waters.

(5) Testing methods: The analytical testing methods for determining compliance with the water quality standards contained in this rule shall be in accordance with the most recent edition of **Standard Methods for the Examination of Water and Waste Water published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation**, unless the Department has published an applicable superseding method, in which case testing shall be in accordance with the superseding method; provided, however, that testing in accordance with an alternative method shall comply with this rule if the Department has published the method or has approved the method in writing.

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.735
Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 1-1980, f. & ef. 1-9-80; DEQ 18-1987, f. & ef. 9-4-87; DEQ 14-1991, f. & cert. ef. 8-13-91

Minimum Design Criteria for Treatment and Control of Wastes

340-41-455 Subject to the implementation program set forth in OAR 340-41-120, prior to discharge of any wastes from any new or modified facility to any waters of the Willamette River Basin, such wastes shall be treated and controlled in facilities designed in accordance with the following minimum criteria. (In designing treatment facilities, average conditions and a normal range of variability are generally used in establishing design criteria. A facility once completed and placed in operation should operate at or near the design limit most of the time but may operate below the design criteria limit at times due to variables which are unpredictable or uncontrollable. This is particularly true for biological treatment facilities. The actual operating limits are intended to be established by permit pursuant to ORS 468.740 and recognize that the actual performance level may at times be less than the design criteria).

(1) Sewage wastes:

(a) Willamette River and tributaries except Tualatin River Subbasin:

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;

(B) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practical efficiency and effectiveness so as to minimize waste discharges to public waters.

(b) Main stem Tualatin River from mouth to

Gaston (river mile 0 to 65):

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;

(B) During the period of high stream flows (approximately November 1 to April 30): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

(c) Main stem Tualatin River above Gaston (river mile 65) and all tributaries to the Tualatin River: Treatment resulting in monthly average effluent concentrations not to exceed 5 mg/l of BOD and 5 mg/l of SS or equivalent control;

(d) Tualatin River Subbasin: The dissolved oxygen level in the discharged effluents shall not be less than 6 mg/l;

(e) Main stem Columbia River:

(A) During summer (May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control;

(B) During winter (November 1 to April 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practicable efficiency and effectiveness so as to minimize waste discharges to public waters.

(f) Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise specifically approved by the Environmental Quality Commission;

(g) Sewage wastes shall be disinfected, after treatment, equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time unless otherwise specifically authorized by permit;

(h) Positive protection shall be provided to prevent bypassing raw or inadequately treated sewage to public waters unless otherwise approved by the Department where elimination of inflow and infiltration would be necessary but not presently practicable;

(i) More stringent waste treatment and control requirements may be imposed where special conditions may require.

(2) Industrial wastes:

(a) After maximum practicable inplant control, a minimum of secondary treatment or equivalent control (reduction of suspended solids and organic material where present in significant quantities, effective disinfection where bacterial organisms of public health significance are present, and control of toxic or other deleterious substances);

(b) Specific industrial waste treatment requirements shall be determined on an individual basis in accordance with the provisions of this plan, applicable federal requirements, and the following:

(A) The uses which are or may likely be made of the receiving stream;

(B) The size and nature of flow of the receiving stream;

(C) The quantity and quality of wastes to be treated; and

(D) The presence or absence of other sources of pollution on the same watershed.

(c) Where industrial, commercial, or agricultural effluents contain significant quantities of potentially toxic elements, treatment requirements shall be determined utilizing appropriate bioassays;

(d) Industrial cooling waters containing significant heat loads shall be subjected to offstream cooling or heat recovery prior to discharge to public waters;

(e) Positive protection shall be provided to prevent bypassing of raw or inadequately treated industrial wastes to any public waters;

(f) Facilities shall be provided to prevent and contain spills of potentially toxic or hazardous materials and a positive program for containment and cleanup of such spills should they occur shall be developed and maintained.

(3) Nonpoint source pollution control in the Tualatin River subbasin and lands draining to Oswego Lake:

(a) Subsections (3)(b) of this section shall apply to any new land development within the Tualatin River and Oswego Lake subbasins, except those developments with application dates prior to January 1, 1990. The application date shall be the date on which a complete application for development approval is received by the local jurisdiction in accordance with the regulations of the local jurisdiction;

(b) For land development, no preliminary plat, site plan, permit or public works project shall be approved by any jurisdiction in these subbasins unless the conditions of the plat permit or plan approval includes an erosion control plan containing methods and/or interim facilities to be constructed or used concurrently with land development and to be operated during construction to control the discharge of sediment in the stormwater runoff. The erosion control plan shall utilize:

(A) Protection techniques to control soil erosion and sediment transport to less than one (1) ton per acre per year, as calculated using the Soil Conservation Service Universal Soil Loss Equation or other equivalent methods. See Figures 1 to 6 in Appendix I for examples. The erosion control plan shall include temporary sedimentation basins or other sediment control devices when, because of steep slopes or other site specific considerations, other on-site sediment control methods will not likely keep the sediment transport to less than one (1) ton per acre per year. The local jurisdictions may establish additional requirements for meeting an equivalent degree of control. Any sediment basins constructed shall be sized using 1.5 feet minimum sediment storage depth plus 2.0 feet storage depth above for a settlement zone. The storage capacity of the basin shall be sized to store all of the sediment that is likely to be transported and collected during construction while the erosion potential exists. When the erosion potential has been removed, the sediment basin, or other sediment control facilities, can be removed and the site restored as per the final site plan. All sediment basins shall be constructed with an emergency overflow to prevent erosion or failure of the containment dike; or

(B) A soil erosion control matrix derived from and consistent with the universal soil equation approved by the jurisdiction or the Department.

A-2

FILED: July 22, 1992

IN THE COURT OF APPEALS OF THE STATE OF OREGON

GILLIAM COUNTY, OREGON and
OREGON WASTE SYSTEMS, INC.,

Petitioners,

v.

DEPARTMENT OF ENVIRONMENTAL
QUALITY OF THE STATE OF
OREGON,

Respondent.

COLUMBIA RESOURCE COMPANY
L.P., a Washington Limited
Partnership,

Petitioner,

v.

ENVIRONMENTAL QUALITY
COMMISSION,

Respondent.

(CA A68441 (Control) & CA A68455)
(Cases Consolidated)

Judicial Review of Administrative Rules.

Argued and submitted September 6, 1991.

J. Laurence Cable, Portland, argued the cause for petitioners Gilliam County, Oregon, and Oregon Waste Systems, Inc. With him on the brief were James E. Benedict, Donald A. Haagensen, Hill, Huston, Cable, Ferris & Haagensen, Timothy V. Ramis, Jeff Bachrach, and O'Donnell, Ramis, Crew & Corrigan, Portland.

John A. DiLorenzo, Jr., Portland, argued the cause for petitioner Columbia Resource Company, L.P. With him on the brief was O'Connell, Goyak & DiLorenzo, Portland.

Robert M. Atkinson, Assistant Attorney General, Salem, argued the cause for respondents. With him on the brief were Dave Frohnmayer, Attorney General, and Virginia L. Linder, Solicitor General, Salem.

Before Buttler, Presiding Judge, and Rossman and De Muniz, Judges.

DE MUNIZ, J.

Rules held valid.

DESIGNATION OF PREVAILING PARTY AND AWARD OF COSTS

Prevailing party: Respondent

[xx] No costs allowed.
[ ] Costs allowed, payable by:

In a case in which a party could be represented by appointed counsel entitled to compensation under ORS 138.500, but the prevailing party is represented by retained counsel or appeared pro se, the prevailing party is allowed costs.

MONEY JUDGMENT

	Judgment #1	Judgment #2*
Creditor:	_____	State of Oregon, Judicial Department
Debtor:	_____	_____
Costs:	_____	Unpaid filing fee:
Attorney fees:	_____	
TOTAL AMOUNT:	$_____	$_____

Interest: Simple, 9% per annum, from the date of this appellate judgment.

*Judgment for unpaid filing fees. ORS 21.605(1)(c).

This section to be completed when the appellate judgment issues. See ORAP 14.05(3).

NOTICE OF EXPENSES AND COMPENSATION UNDER ORS 138.500(4)

The appellate court has affirmed the conviction in this criminal case and has certified expenses and compensation of appointed counsel. This is notice to the trial court so that it may exercise its discretion under ORS 161.665(2) to include the expenses and compensation of appointed counsel in the final judgment, in addition to transcript preparation expenses allowed by the trial court. The court has certified expenses and compensation in the amount of $ _____.

This section to be completed when the appellate judgment issues. See ORAP 14.05(3).

Appellate Judgment
Effective Date:

COURT OF APPEALS
(seal)

DE MUNIZ, J.

Petitioner Oregon Waste Systems, Inc. (OWS), owns and operates a regional solid waste disposal facility known as the Columbia Ridge Recycling Center and Landfill. It is located southwest of Arlington in Gilliam County. OWS disposes of waste generated in Oregon and also waste generated outside of Oregon. The operation provides direct and indirect benefits to petitioner Gilliam County as a result of employment in the county and the payment of local fees and taxes.

Petitioner Columbia Resource Company, L.P. (CRC), has a 20-year contract with Clark County, Washington, under which it disposes of solid waste originating there. CRC uses the Finley Buttes Landfill in Morrow County as its disposal site. The operator of the Finley Buttes Landfill passes through to CRC the costs incurred for disposal, including charges made by respondent Department of Environmental Quality (DEQ).

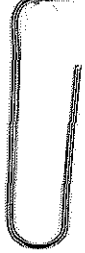
Petitioners challenge the constitutionality of two DEQ rules that the Environmental Quality Commission (EQC) adopted in December, 1990, OAR 340-61-115(1); OAR 340-61-120(6), and the enabling statutes that established the legal standards and procedures for adoption of those rules. ORS 459.297; ORS 459.298. The portions of the rules that petitioners challenge impose a surcharge for in-state disposal of garbage generated out-of-state.[1]

In 1989, the legislature enacted Oregon Laws 1989,

chapter 833, an amalgamation of several bills dealing with waste reduction. Section 155, codified as ORS 459.297, provides that every person who disposes of solid waste that was generated out-of-state must pay a surcharge to help meet the cost to the state of administering the solid waste program.[2] Section 156, codified as ORS 459.298, enables EQC to establish the amount of the surcharge.[3] The rules impose on the disposal site a surcharge of $2.25 per ton for out-of-state waste that the site receives. The surcharge imposed at the disposal site for waste generated within Oregon is capped at $.50 per ton. Former ORS 459.294(5).[4]

The Oregon Supreme Court has explained that, before we can reach constitutional issues under ORS 183.400,[5] we must first determine: (1) whether the agency had the general authority to make that kind of rule; (2) whether the agency followed the procedures prescribed by statute or regulation; and (3) whether the substance of the rule departed from the legal standard expressed or implied in the enabling legislation or contravened some other applicable statute. Planned Parenthood Assn. v. Dept. of Human Res., 297 Or 562, 565, 687 P2d 785 (1984).

> "These steps are designed to assure that the challenged action, particularly an action challenged for arguably violating constitutional rights, in fact was authorized by the state's or local government's politically accountable policy makers. Only if the action was clearly so authorized is there any reason to decide whether the state or local government has adopted a policy that the constitution forbids." 297 Or at 565.



Petitioners do not contend that the agency did not have the general authority to make rules imposing surcharges on solid waste. They also make no meritorious arguments that the substance of the rules deviated from the legal standard provided in the statute[6] or that they contravened some other applicable statute.[7] Their procedural argument is that ORS 459.298 requires the agency to follow a process that violates the Oregon Constitution and that the statute in its entirety is therefore invalid, so no rules could be made under it. They argue in the alternative that, if the procedures are permissible, then the rules are invalid, because the agency did not follow those procedures. If the rules were made by a valid procedure, they argue, they are nonetheless invalid, because they impermissibly discriminate against interstate commerce in violation of the United States Constitution.

We turn first to the state law issues. Planned Parenthood Assn. v. Dept. of Human Res., supra. Under ORS 459.298, the amount of the surcharge is subject to approval by the Joint Committee on Ways and Means (Committee) during legislative sessions or by the Emergency Board during the interim. OWS argues that the grant of authority to the Emergency Board violates the state constitution. CRC agrees and argues that subjecting the rules to approval by the Committee is also unconstitutional. Both petitioners assert that the unconstitutional provisions render the statute unconstitutional

and, therefore, that the rules promulgated under it are invalid. If the approval requirements are valid, they argue, then the rules are invalid, because EQC did not seek to obtain final approval from either authority.

Respondents concede, and we agree, that ORS 459.298 is unconstitutional to the extent that it subjects the surcharge determination to Emergency Board approval, because the Board has only the powers granted to it in Article III, section 3, of the Oregon Constitution. Art IV, §§ 1, 25. Those powers do not include the power to veto EQC's surcharge rule.[8] Respondents argue, however, that the language requiring Emergency Board approval is severable from ORS 459.298, that the statute is workable without that provision and that EQC followed the correct procedure by not obtaining final approval of the Board.

The starting point for deciding that issue is ORS 174.040, which states the legislative preference for severability:

> "It shall be considered that it is the legislative intent, in the enactment of any statute, that if any part of the statute is held unconstitutional, the remaining parts shall remain in force unless:
>
> "(1) The statute provides otherwise;
>
> "(2) The remaining parts are so essentially and inseparably connected with and dependent upon the unconstitutional part that it is apparent that the remaining parts would not have been enacted without the unconstitutional part; or
>
> "(3) The remaining parts, standing alone, are incomplete and incapable of being executed in

accordance with the legislative intent."

Petitioners contend that Emergency Board approval is essential to the remaining parts, because without it the statute cannot be executed in accordance with legislative intent.

The bills that comprised HB 3515, which became Oregon Laws 1989, chapter 833, had been referred first to subject matter committees to consider their substance and then to the Joint Committee on Ways and Means to consider their fiscal impacts. The Joint Committee on Ways and Means, the first committee to consider HB 3515 as a whole, inserted the Emergency Board approval requirement without providing a detailed explanation for it. Petitioners rely on the history of other sections of the bill that also included Emergency Board oversight. On the basis of that history, they argue that "the overriding philosophy * * * was to maintain strict E-Board control over fees of various agencies" and that the legislature would not have enacted the statute without that control.

The history cited by petitioners shows that members of the Committee were informed that, legally, the Emergency Board could review and comment on the surcharges, but that it did not have approval authority. During consideration of the State Fire Marshall's authority to establish a fee schedule relating to hazardous wastes,[9] a legislative committee staff member, Acuff, commented:

"Mr. Chairman, I believe that legislative counsel will

tell you that the Emergency Board does not have the approval authority * * * that it is a review and comment only."

The response of the chair, Representative Hanlon, was to instruct staff to include control "to the extent authorized by law."

The history also demonstrates that inclusion of Emergency Board review was intended to permit the exertion of political, even if not legal, pressure:

> "Acuff: "Well, I think you're accomplishing your objective * * *. I think you're accomplishing the objective that you want now in limiting the dollars that you have in your first four decisions. You're forcing the fee structure as it is and they will come back to you and prove that [to] you either to the E-Board or to the Assembly.
>
> "Rep. Jones: Except that * * * if [the Fire Marshall does not prove the need to the Emergency Board to increase fees] they go ahead and do it anyway.
>
> "Acuff: I doubt that the Fire Marshall would go ahead and do it anyway.
>
> "Rep Hanlon: So do I. We will be breaking for a quick lunch at 12:30 * * * half an hour or so. Up to the lounge and get some cornflakes. I would like to see the amendment. I'm not sure because I wasn't listening to the whole thing, but I think Representative Jones and I agree the amendment should be made to the fullest extent possible to control the imposition of those fees. And that means that the E-Board * * * whoever it is that's approving it in the legislature has the authority * * * that authority * * * whatever authority they have, they may, may exercise at that point.

"Sen. Hill: Mr. Chairman.

"Rep. Hanlon: Larry.

"Sen. Hill: I'd agree. I'd ask that the committee request Sue to give us the toughest language we can have for E-Board control over the fee."

We infer from that discussion that the legislature wanted to exercise whatever authority it could over the imposition of fees but that it understood that the Emergency Board might not have the power to overrule the agency. Nevertheless, it did not enact a nonseverability provision, as it presumably would have done had it intended to override the preference for severability contained in ORS 174.040.

With the unconstitutional provision granting approval authority to the Emergency Board omitted, the statute provides:

> "Subject to approval by the Joint Committee on Ways and Means during the legislative sessions, the Environmental Quality Commission shall establish by rule the amount of the surcharge to be collected under ORS 459.297."

The statute, so read, is restrictive in that it limits the approval requirement to when the legislature is in session. That does not render the statute unworkable. We conclude that the unconstitutional provision relating to Emergency Board authority is severable.

Read that way, however, the statute still requires EQC to submit the surcharge rules to the Committee for approval. CRC argues that that provision also violates the Oregon Constitution.

It urges us to adopt the reasoning of INS v. Chadha, 462 US 919, 103 S Ct 2764, 77 L Ed 2d 317 (1983), which held unconstitutional a provision of the Immigration and Nationality Act of 1952, 8 USC §§ 1101 et seq, that purportedly authorized a one-house legislative veto of the Attorney General's determination that a particular deportable alien should not be deported. 8 USC § 1254(c)(2). Respondents do not directly respond to those arguments but, in the course of explaining that the Emergency Board provision is severable, they conclude that "without the offending provision the statute simply provides that the agency shall set the rates." We assume, however, that respondents did not intend that to be an affirmative concession that the provision subjecting the rules to the approval of the Committee is also unconstitutional.

CRC argues that, even if approval of the surcharge is a legislative act,[10] the Committee cannot do it, because all bills must be approved by a majority of each house, Or Const, Art IV, § 25, and presented to the governor for signature. Or Const, Art V, § 15b.[11] The plain language of the statute provides that the rules are subject to approval of the Committee; it does not provide that the rules are subject to approval of the Legislative Assembly. The legislature has required approval of the Emergency Board or the "Legislative Assembly" before agency action can take effect in other contexts, but it did not use such language here. See, e.g., ORS 341.565(4); ORS 537.805(4)(a).[12] Although the

legislature has the undoubted authority to enact laws establishing charges, nowhere does the legislative history suggest that anyone thought that the provision required any action by the Legislative Assembly beyond review by the Committee. We therefore read the words "Joint Committee on Ways and Means" to signify that the legislature intended the approval process to be completed by the Committee without further legislative process.

If the statute were given effect as written, it would constitute a command by the legislature ordering EQC to propose legislation to be enacted by the Committee. Respondents concede that the power to enact or repeal laws is vested solely in the Legislative Assembly and that that power cannot be delegated, even to a group of its own members. See Marr v. Fisher et al., 182 Or 383, 388, 187 P2d 966 (1947); Van Winkle v. Fred Meyer, Inc., 151 Or 455, 49 P2d 1140 (1935); see also 31 Op Att'y Gen 161 (Or 1962-64). The Committee is composed of only 16 legislators, 8 from each house, ORS 171.555, and therefore could not constitute "[a] majority of all the members elected to each House." Or Const, Art IV, § 25. No laws can constitutionally be enacted by the process described in the statute.[13]

CRC argues that the approval provision is not severable from the statute for all the same reasons that Emergency Board approval is not severable. The starting point again is ORS 174.040. Because the legislature has expressed a strong general

preference in favor of severability, we can find the Committee approval requirement not severable only if (1) it is apparent that the legislature would not have enacted the statute without that provision or (2) the resulting parts of the statute would be incomplete and incapable of being executed in accordance with legislative intent.

ORS chapter 459 contains over 40 pages devoted to the control of solid waste. The legislature found that "[t]here is a shortage of appropriate sites for landfills in Oregon," ORS 459.015(1)(c), and:

> "It is in the best interests of the people of Oregon to extend the useful life of existing solid waste disposal sites by encouraging recycling and reuse of materials whenever recycling is economically feasible, and by requiring solid waste to undergo volume reduction through recycling and reuse measures before disposal in landfills to the maximum extent feasible. Implementation of recycling and reuse measures will not only increase the useful life of solid waste disposal sites, but also decrease the potential public health and safety impacts associated with landfill operation." ORS 459.015(1)(d) (since amended by Or Laws 1991, ch 385, § 7). (Emphasis supplied.)

The legislative scheme was intended to establish a comprehensive system of regulation that provides for broad participation and cooperation among local governments and state agencies, "reserving to the state those functions necessary to assure effective programs, cooperation among local government units and coordination of solid waste management programs throughout the state." ORS 459.015(2)(c) (since amended by Or Laws 1991, ch

385, § 7). It delegated to EQC and DEQ the authority to adopt and enforce rules in order to implement and assure the effectiveness of the extensive regulatory plan. See ORS 459.025; ORS 459.045; ORS 459.376; ORS 459.385.

Chapter 459 contains a plethora of sections authorizing EQC, DEQ and local governments to impose fees and charges to recover costs at each step in the solid waste control program.[14] As in the statutes at issue here, almost every delegation of authority to charge a fee is accompanied by an explanation of how the fee is to be calculated and how the funds collected are to be used. See, e.g., former ORS 459.170(2) (renumbered 459A.025(2) in 1991); former ORS 459.200(8) (renumbered 459A.085 in 1991); ORS 459.235(2); ORS 459.236(5); ORS 459.284; ORS 459.335. That careful structuring of fees demonstrates that the legislature wanted to ensure that the costs of each protective activity would be borne by those who had created the need for it. It clearly wished to avoid spreading among all Oregonians the costs of mitigating environmental risks that they did not create.

Although the Committee was reluctant to delegate final authority to EQC to establish the surcharge, that reluctance was insufficient to motivate it to include in the statute a non-severability clause. See, e.g., INS v. Chadha, supra, 462 US at 932. From that fact, the extensiveness of the regulatory scheme, the detail with which the authority was delegated and the nature

of the overall fee structure that the chapter creates, we conclude that the legislature would have enacted ORS 459.297 and ORS 459.298 even if it had known that neither the Committee nor the Emergency Board could have the power to veto the resulting rules.[15] The language that remains after both approval provisions are deleted is still a workable statute that contains clear standards for EQC to follow.

After EQC drafted the rule that established the fee, it submitted it to the Emergency Board. The Board instructed EQC that the fee had been set too high for reasons that we need not examine. EQC then redrafted the rule to require a slightly lower fee. It did not, however, submit the amended rule to the Emergency Board or to the Committee for final approval. Strictly speaking, EQC did not follow the procedure prescribed in the statute. The rule is not invalid on that ground, however, because the portion of the statutory procedure that the agency failed to follow is unconstitutional. It would be perverse, indeed, to hold a rule invalid on the ground that the agency did not follow a constitutionally impermissible procedure. No one has otherwise challenged the validity of the procedure that EQC actually employed.

Petitioners contend that OAR 340-61-115(1) and OAR 340-61-120(6) violate the Commerce Clause, Article I, section 8, clause 3, of the United States Constitution[16] by imposing a higher surcharge for garbage received from out-of-state haulers

than that received from in-state haulers.[17]

The Commerce Clause grants Congress the power to regulate commerce among the states. Unless Congress precludes it, states may make laws that affect persons engaged in interstate commerce. However, states cannot enact laws that discriminate against articles of interstate commerce "unless there is some reason, apart from their origin, to treat them differently." City of Philadelphia v. New Jersey, 437 US 617, 627, 98 S Ct 2531, 57 L Ed 2d 475 (1978); see also Chemical Waste Management, Inc. v. Hunt, ___ US ___, 112 S Ct 2009, ___ L Ed 2d ___ (1992); Fort Gratiot Sanitary Landfill, Inc., v. Michigan Dept. Nat'l Res., supra, n 17; New Energy Co. of Indiana v. Limbach, 486 US 269, 273, 108 S Ct 1803, 100 L Ed 2d 302 (1988). States cannot benefit in-state interests by burdening out-of-state interests. New Energy Co. of Indiana v. Limbach, supra, 486 US at 273; see also Wyoming v. Oklahoma, ___ US ___, 112 S Ct 789, 800, 117 L Ed 2d 1 (1992).

The rules at issue here, by the express language of ORS 459.298, exact a compensatory fee for specific costs incurred by the state. They exact a per-ton surcharge on landfill operators who accept refuse from out-of-state haulers. ORS 459.297 provides that those funds are appropriated to DEQ to meet the costs that it incurs in administering the solid waste program. ORS 459.298 provides that the amount of the surcharge must be based on the costs to the state and its political subdivisions of

disposing of solid waste generated out-of-state. Those may include, but are not limited to, costs associated with solid waste management, permit issuance, environmental monitoring, ground water monitoring and site closure. They may not include costs that are paid under other provisions in the chapter. The rules implement those statutory directives.

Laws that impose compensatory fees[18] are

> "not a burden upon, or regulation of, interstate commerce in violation of the commerce clause of the Constitution. A law exhibiting the intent to impose a compensatory fee for such a legitimate purpose is prima facie reasonable." Great Northern Ry. Co. v. State of Washington, 300 US 154, 160, 57 S Ct 397, 81 L Ed 573 (1937). (Footnotes omitted.)

See also Commonwealth Edison Co. v. Montana, 453 US 609, 622 n 12, 101 S Ct 2946, 69 L Ed 2d 884 (1981). When that kind of law is challenged on Commerce Clause grounds, the challenger has the burden to show that the fee is excessive for the purpose for which it is collected, Clark v. Paul Gray, Inc., 306 US 583, 599, 59 S Ct 744, 83 L Ed 1001 (1939), or that "there is no sufficient relation between the measure employed and the extent or manner of use" of the state provided service. Interstate Transit, Inc. v. Lindsey, 283 US 183, 190, 51 S Ct 380, 75 L Ed 953 (1931).[19]

In Interstate Busses Corp. v. Blodgett, 276 US 245, 48 S Ct 230, 72 L Ed 551 (1928), a state law had assessed a per-mile user fee on busses engaged in interstate commerce but did not assess that fee on those engaged in intrastate commerce. The Court first recognized that a state may impose a reasonable

charge for the use of the facilities that it provides to those engaged in interstate commerce, roads, in that case. It then determined, from a facial review of the statutory scheme, that the funds generated were dedicated to financing those facilities. The Court sustained the validity of the fee, because the party challenging it failed to show that "the aggregate charge [bore] no reasonable relation to the privilege granted." 276 US at 252.

In Clark v. Paul Gray, Inc., supra, the state had exacted a "caravaning" fee for each automobile "operated on its own wheels, or in tow of a motor vehicle, for the purpose of selling or offering the same for sale * * * within or without [the] State." 306 US at 586. (Citation omitted.) The purpose of the fee was

> "to reimburse the State for expense [sic] incurred in administering police regulations pertaining to the operation of vehicles moved pursuant to such permits and to public safety upon the highways as affected by such operation." 306 US at 586. (Citation omitted.)

Because the law exempted cars moved exclusively within one of two zones that were roughly defined as the northern and southern halves of the state, the plaintiffs claimed that it unlawfully discriminated against interstate commerce. The Court disagreed. It first determined that the distinction that the state had made between intrazone and interzone traffic was permissible, because the state incurred a distinct burden by managing and facilitating the latter form of traffic and the intrazone traffic was already paying its fair share of costs of that commerce. The Court then

recognized that the fees would offend the Commerce Clause if the plaintiffs showed that they were "excessive for the declared purposes." 306 US at 599. Because the fees did not appear, on their face, to be manifestly disproportionate to the services rendered, and the plaintiffs failed to present any other evidence of disproportionality, the Court sustained the validity of the fees. EQC's rules exact a compensatory fee for the distinct burden that the state incurs to regulate and facilitate disposal of out-of-state waste. Unlike the Michigan plan at issue in Chemical Waste Management, Inc. v. Hunt, supra, the rules impose a surcharge on in-state and out-of-state waste for the state services. The state might nevertheless be unlawfully discriminating if there is no reason, apart from its origin, to charge more for its services to manage and regulate out-of-state waste than it charges to manage and regulate in-state waste. The state, however, appears to have a reason apart from origin per se to treat out-of-state waste differently. It first encounters any out-of-state waste at the disposal site. In contrast, by the time in-state waste reaches the disposal site, it has already been subjected to state and local regulations and fees that are designed to reduce its volume and alter its character in order to limit the risks associated with dumping it on the ground. See n 14, supra. We cannot discern, from a facial review of the rules and legislation whether, in the aggregate, in-state garbage ultimately "pays" all of the costs that the state and its

political subdivisions incur to manage and regulate its disposal. However, it does show that EQC is expressly forbidden to impose fees on out-of-state waste that exceed the costs of management of that waste. The legislature has made abundantly clear that it intends only to make "out-of-state generators pay their 'fair share' of the costs" and no more. Chemical Waste Management, Inc. v. Hunt, supra, ___ US at ___ n 9. Therefore, before we could say that the rules are unconstitutional, petitioners would have to show that the fees are excessive for the purposes for which they are collected or that there is no sufficient relation between the measure employed and the extent or manner of use of the state provided service.

Petitioners brought this challenge under ORS 183.400, which provides, in part:

> "(3) Judicial review of a rule shall be limited to an examination of:
>
> "(a) The rule under review;
>
> "(b) The statutory provisions authorizing the rule; and
>
> "(c) Copies of all documents necessary to demonstrate compliance with applicable rulemaking procedures."

A facial review of the enabling legislation and the rules does not show that the fees are either excessive or unrelated to the state provided service. ORS 183.400(3) does not permit us to consider the evidence that petitioners would have to produce to show that the fees are, nevertheless, manifestly disproportionate

to the costs incurred by the state to manage and facilitate disposal of out-of-state waste. That kind of evidence can be considered only on review of an order in a contested case. ORS 183.482.

Rules held valid.

FOOTNOTES

[1] Pertinent parts of the rules provide:

"Beginning July 1, 1984, each person required to have a Solid Waste Disposal Permit shall be subject to a three-part fee consisting of a filing fee, an application processing fee and an annual compliance determination fee as listed in OAR 340-61-120. In addition, each disposal site receiving domestic solid waste shall be subject to an annual recycling program implementation fee as listed in OAR 340-61-120, and a per-ton fee on domestic solid waste as specified in section (5) of this rule. In addition, each disposal site or regional disposal site receiving solid waste generated out-of-state shall pay a surcharge as specified in section (6) of this rule." OAR 340-61-115(1).

"Each solid waste disposal site or regional solid waste disposal site that receives solid waste generated out-of-state shall submit to the Department of Environmental Quality a per-ton surcharge of $2.25. This surcharge shall apply to each ton of out-of-state solid waste received at the disposal site." OAR 340-61-120(6).

[2] ORS 459.297 provides:

"(1) Beginning on January 1, 1991, every person who disposes of solid waste generated out-of-state in a disposal site or regional disposal site shall pay a surcharge as established by the Environmental Quality Commission under ORS 459.298. The surcharge shall be in addition to any other fee charged for disposal of solid waste at the site.

"(2) The surcharge collected under this section shall be deposited in the State Treasury to the credit of an account of the Department of Environmental Quality. Such moneys are continuously appropriated to the department to meet the costs of the department in administering the solid waste program under ORS 459.005 to 459.426, 459.705 to 459.790 and 459A.005 to 459A.665."

[3] ORS 459.298 provides:

"Subject to approval by the Joint Committee on Ways and Means during the legislative sessions or the Emergency Board during the interim between sessions, the Environmental Quality Commission shall establish by rule the amount of the surcharge to be collected under ORS 459.297. The amount of the surcharge shall be based on the costs to the State of Oregon and its political subdivisions of disposing of solid waste generated out-of-state which are not otherwise paid for under the provisions of ORS 459.235 and ORS 459.297, 459.298, 459.411 to 459.417, 459A.100 to 459A.120 and sections 70 to 73, chapter 833, Oregon Laws 1989. These costs may include but need not be limited to costs incurred for:

"(1) Solid waste management;

"(2) Issuing new and renewal permits for solid waste disposal sites;

"(3) Environmental monitoring;

"(4) Ground water monitoring; and

"(5) Site closure and post-closure activities."

[4] ORS 459.294 was renumbered ORS 459A.110 in 1991. Or Laws 1991, ch 385, § 91.

[5] ORS 183.400(4) provides:

"The court shall declare the rule invalid only if it finds that the rule:

"(a) Violates constitutional provisions;

"(b) Exceeds the statutory authority of the agency; or

"(c) Was adopted without compliance with applicable rulemaking procedures."

[6] Gilliam County argues that the agency improperly considered various costs to include as components of the surcharge. It cites Kids Against the Cut v. Wage and Hour Comm., 41 Or App 179, 597 P2d 1264 (1979), for the proposition that we must examine DEQ's "methodology to develop" those costs to determine whether the agency "failed to act in conformance with the enabling statute." That infers too much from Kids Against the Cut. In that case, we held only that we may look at the record to see whether the agency made a determination on which its authority to act was predicated, not that we may consider whether the method used to reach that determination was correct.

[7] Petitioners assert in one short paragraph that EQC violated ORS 459.305 by including in the surcharge $0.05 per ton for what EQC calls "solid waste reduction activities related to reviewing and certifying out-of-state waste reduction and recycling plans." They argue that certification fees may not be "lumped into the surcharge levied on all out of state waste," because they must be "set in accordance with ORS 486.065," which they believe requires the fee to be set by a rule after a hearing. Moreover, they observe, the fee is "subject to review of the Executive Department and the prior approval of the appropriate legislative review agency." ORS 459.305(4).

Even assuming, without deciding, that ORS 459.305 is the exclusive source of authority for EQC to assess the

certification fee, we see nothing in the statute that prohibits the agency from considering that fee at the same time that it considers the surcharge and nothing that requires the fee to be established by a separate rule, rather than as a component part of a more general rule. We also see nothing in ORS 468.065 (since amended by Or Laws 1991, ch 752, § 15) that requires the certification fee to be set by a rule after a hearing. Subsection (1) pertains only to permits issued under various sections of ORS chapters 448, 454 and 468. Subsection (2) pertains only to fees for permits issued pursuant to the specified sections that govern water and air pollution sources. Subsection (3) describes the costs that the agency may consider in determining fees for certification of hydroelectric power projects. Subsection (5) applies only to the specified sections of chapters 448, 454 and 468. Subsections (4) and (6) are the only subsections to which ORS 459.305(4) could refer. The former provides that DEQ may require various documents and reports to be submitted by those who apply for permits; the latter merely addresses what must be done with the fees that the DEQ collects. Neither requires a separate rule or a hearing.

We also see no merit in petitioners' second argument under ORS 459.305(4). As far as we can tell, that subsection requires nothing different from the procedure specified under ORS 459.298. Petitioners do not explain any other way that we should

read it, and we decline to try to create an argument for them.

[8] No one has raised, and we do not decide, any issue about the validity of a statutory requirement that EQC consult the Emergency Board, any legislative committee or legislative counsel.

[9] The quotations are from Tape Recording, Ways and Means Subcommittee on Transportation and Regulation regarding HB 3515, June 24, 1989, 155B.

[10] Respondents concede that, if approval of the surcharge rule is an executive act, then only the Executive Branch may approve. Or Const, Art III, § 1. They also do not argue that any part of the legislature could approve the surcharge, if approval is a judicial act.

[11] Article IV, section 25, provides:

> "A majority of all the members elected to each House shall be necessary to pass every bill, or Joint resolution; and all bills, and Joint resolutions so passed, shall be signed by the presiding officers of the respective houses."

Article V, section 15b(1), provides:

> "Every bill which shall have passed the Legislative Assembly shall, before it becomes a law, be presented to the Governor; if the Governor approve, the Governor shall sign it; but if not, the Governor shall return it with written objections to that house in which it shall have originated, which house shall enter the objections at large upon the journal and proceed to reconsider it."

[12] We note that several other 1989 enabling statutes that contained language requiring Committee or Emergency Board approval were amended in 1991. Those statutes now contain language similar to that in ORS 448.410(1)(d), which governs the adoption of fees to certify persons qualified to supervise the operation of sewage treatment works:

> "Subject to the prior approval of the Executive Department and a report to the Emergency Board prior to adopting the fee, * * *. The fees established * * * shall be within the budget authorized by the Legislative Assembly as that budget may be modified by the Emergency Board."

See also ORS 448.450(1)(d); ORS 453.408(3); ORS 465.385(2)(b).

[13] We also note that, even if we were to construe the language to imply that the Committee would submit EQC's proposal to the Legislative Assembly, the statute would still establish a defective process, because all bills must originate in one of the houses and revenue bills must originate in the House of Representatives. Or Const, Art IV, § 18.

[14] Those include: ORS 459.053(9) (DEQ--fees to repay department costs and fund operation and maintenance of a department owned landfill disposal site); ORS 459.125(1)(d) (Marion County--fees to control and regulate disposal, transfer and resource recovery sites located in the county); former ORS 459.170(1)(g) (renumbered 459A.025 in 1991) (EQC--fees to carry out various provisions of the chapter); former ORS 459.200(7)(b)

(renumbered 459A.085 in 1991) (cities and counties--fees from persons holding collection service franchises); ORS 459.235 (fee for permit to operate a disposal site); ORS 459.236 (permit fees imposed on all disposal sites to pay for removal or remediation of hazardous substances); ORS 459.284 (permit fees that are imposed on governmental unit that has a disposal site to be used for rehabilitation and enhancement of the area around the site); former ORS 459.294 (renumbered 495A.110 and amended by Or Laws 1991, ch 385, § 91) and former ORS 459.295 (renumbered 459A.120 in 1991) (EQC--schedule of fees for receipt of domestic solid waste; to be used to reduce environmental risks at waste disposal sites); ORS 459.305(4) (fee for certification that a governmental unit has implemented recycling opportunity provisions); ORS 459.310 (local governments can impose surcharge on solid waste received at regional disposal sites); ORS 459.311 (local governments must charge for remedial action or removal at solid waste disposal site); ORS 459.335 (user fees set by metropolitan service district); and ORS 459.509-ORS 459.765 (fees for sale of new tires and disposal of waste tires).

15 Even without the power to veto administrative rules, the legislature retains oversight by virtue of ORS 171.572, which provides:

> "The Legislative Counsel shall review administrative rules adopted or proposed for adoption by state agencies. Such review shall be in accordance with the provisions of ORS 183.710 to 183.725."

[16] Article I, section 8, clause 3, of the United States Constitution provides:

"The Congress shall have Power * * *

"* * * * *

"To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes."

[17] The rules require Oregon landfill operators to remit the surcharge to DEQ, but do not require them to exact the surcharge from out-of-state haulers. Accordingly, a landfill operator can pass the surcharge on to in-state as well as out-of-state haulers in the form of uniformly increased dumping fees. Nevertheless, because it is interstate commerce that gives rise to the obligation to pay the surcharge, the rules are subject to scrutiny under the Commerce Clause. See Fort Gratiot Sanitary Landfill, Inc. v. Michigan Dept. of Nat'l Res., ___ US ___, 112 S Ct 2019, ___ L Ed 2d ___ (1992); Evansville Airport v. Delta Airlines, 405 US 707, 714, 92 S Ct 1349, 31 L Ed 2d 620 (1972); Pickard v. Pullman Southern Car Co., 117 US 34, 6 S Ct 635, 29 L Ed 785 (1886).

[18] A compensatory fee is not the same thing as a "compensatory tax," which is a general revenue measure that is intended to equalize the tax burden between substantially similar interstate and intrastate transactions. The classic example is a use tax imposed on goods purchased out of state that is

equivalent to the sales tax that would have been generated had those goods been purchased in state. See Henneford v. Silas Mason Co., 300 US 577, 57 S Ct 524, 81 L Ed 814 (1937). Such taxes permit an individual faced with the choice of an in-state or out-of-state purchase to make that choice without regard to the tax consequences. Boston Stock Exchange v. State Tax Comm'n, 429 US 318, 330, 97 S Ct 599, 50 L Ed 2d 514 (1977). Accordingly, when a state enacts a valid compensatory tax, it does not discriminate against interstate commerce. Complete Auto Transit, Inc. v. Brady, 430 US 274, 97 S Ct 1076, 51 L Ed 2d 326 (1977); see also Maryland v. Louisiana, 451 US 725, 759-60, 101 S Ct 2114, 68 L Ed 2d 576 (1981).

[19] Petitioners argue that we should apply the reasoning in a number of cases that address discriminatory health and general welfare laws and general revenue measures. Regulations that control conduct to protect some aspect of the health or general welfare of a state's citizens are valid when preservation of health or welfare is the law's true purpose and the means chosen to achieve that objective does not unduly burden interstate commerce. Maine v. Taylor, 477 US 131, 106 S Ct 2440, 91 L Ed 2d 110 (1986); Pike v. Bruce Church, Inc., 397 US 137, 142, 90 S Ct 844, 25 L Ed 2d 174 (1970). However, if the actual purpose or effect of a health or welfare regulation is economic or resource protectionism, the law may be invalid. See, e.g., Wyoming v.

Oklahoma, supra; Hunt v. Washington State Apple Advertising Comm., 432 US 333, 97 S Ct 2434, 53 L Ed 2d 383 (1977); Dean Milk Co. v. City of Madison, 340 US 349, 71 S Ct 295, 95 L Ed 329 (1951); compare Maine v. Taylor, supra, with City of Philadelphia v. New Jersey, supra. General revenue measures are taxes imposed to compensate the state for "providing police and fire protection, the benefit of a trained work force, and the advantages of a civilized society." Commonwealth Edison Co. v. Montana, supra, 453 US at 624. (Citations and internal quotations omitted.) A state can impose such a tax on those engaged in interstate commerce if it

> "is applied to an activity with a substantial nexus with the taxing State, is fairly apportioned, does not discriminate against interstate commerce, and is fairly related to services provided by the State." Complete Auto Transit, Inc. v. Brady, supra, 430 US at 274.

When a law satisfies that standard, out-of-state interests pay their fair share of the costs of running the state.

The statutes and rules here neither regulate conduct nor impose taxes that support state government generally. The fees are based on and applied to the provision of a narrow range of state services that are directly connected to the activity on which the fees are imposed.

Oregon

DEPARTMENT OF
FORESTRY

State Forester's Office

"STEWARDSHIP IN FORESTRY"

July 23, 1992

Environmental Quality Commission
811 SW Sixth
Portland, Oregon 97204

Dear Members of the Commission,

We felt it would be valuable to you to have some background information on prescribed burning trends. Certain aspects of prescribed burning are experiencing major change.

Our smoke management program has three major goals:

- Minimize the smoke impacts into the 11 Designated protection areas,
- Reduce the emissions from western Oregon prescribed burning,
- Help protect visibility in Class I areas during the protection period.

Progress in achieving these goals is discussed below and charts are attached which show detailed results.

The amount of prescribed burn emissions in western Oregon has been reduced by over 60%. Total particulate levels have dropped from 58 thousand tons to about 21 thousand tons over the past 13 years (Attachment 1).

The number of smoke intrusions into Designated areas, over the last 10 years, has been reduced over 50%. Intrusions have declined from an average of over 30 per year to 14 per year (Attachment 2). Attachment 3 shows the downward trend in the number of smoke impact hours.

Visibility in the Cascades, during the summer months, has substantially improved. Visibility impairment from all sources in the Cascades is shown in Attachment 4.

I hope this information is of help to you and we would be glad to provide you other information as needed.

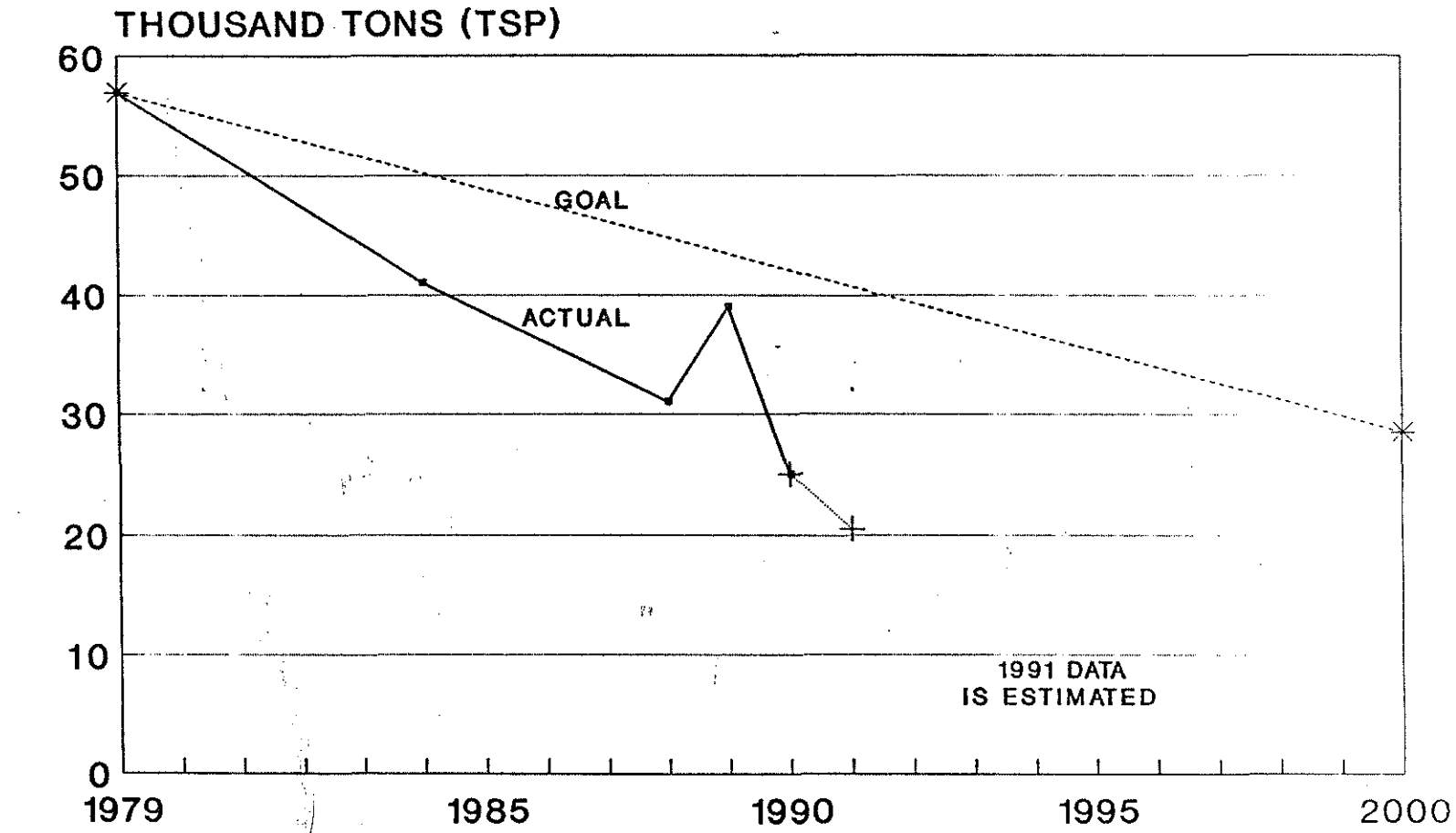
Sincerely,

Don Matlick
Smoke Management and Fuels Program

DEM
cc: Steve Greenwood - DEQ, Air Quality

2600 State Street
Salem, OR 97310
(503) 378-2560

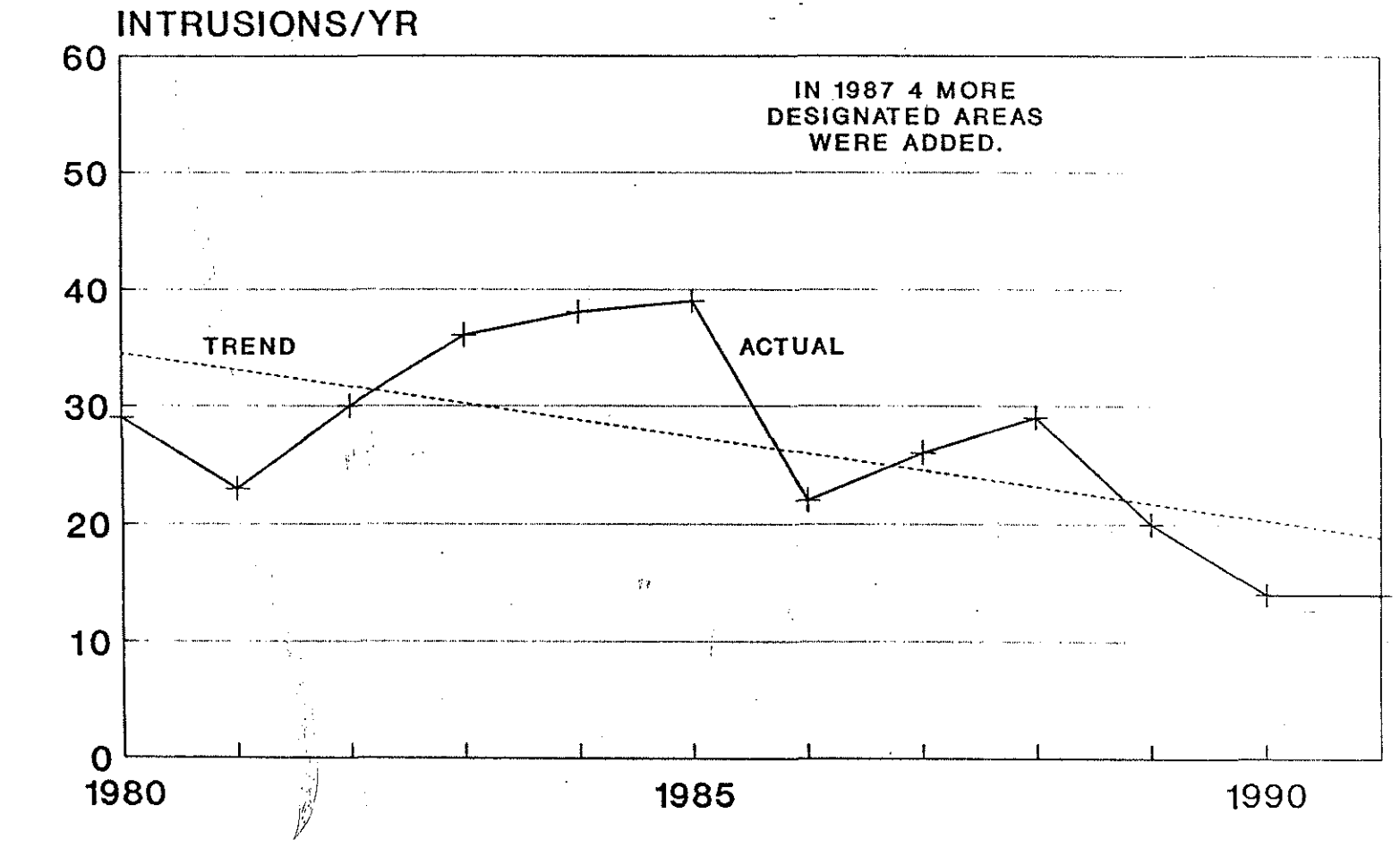
PRESCRIBED BURN EMISSIONS
WESTERN OREGON



ODF DATA 5/15/92

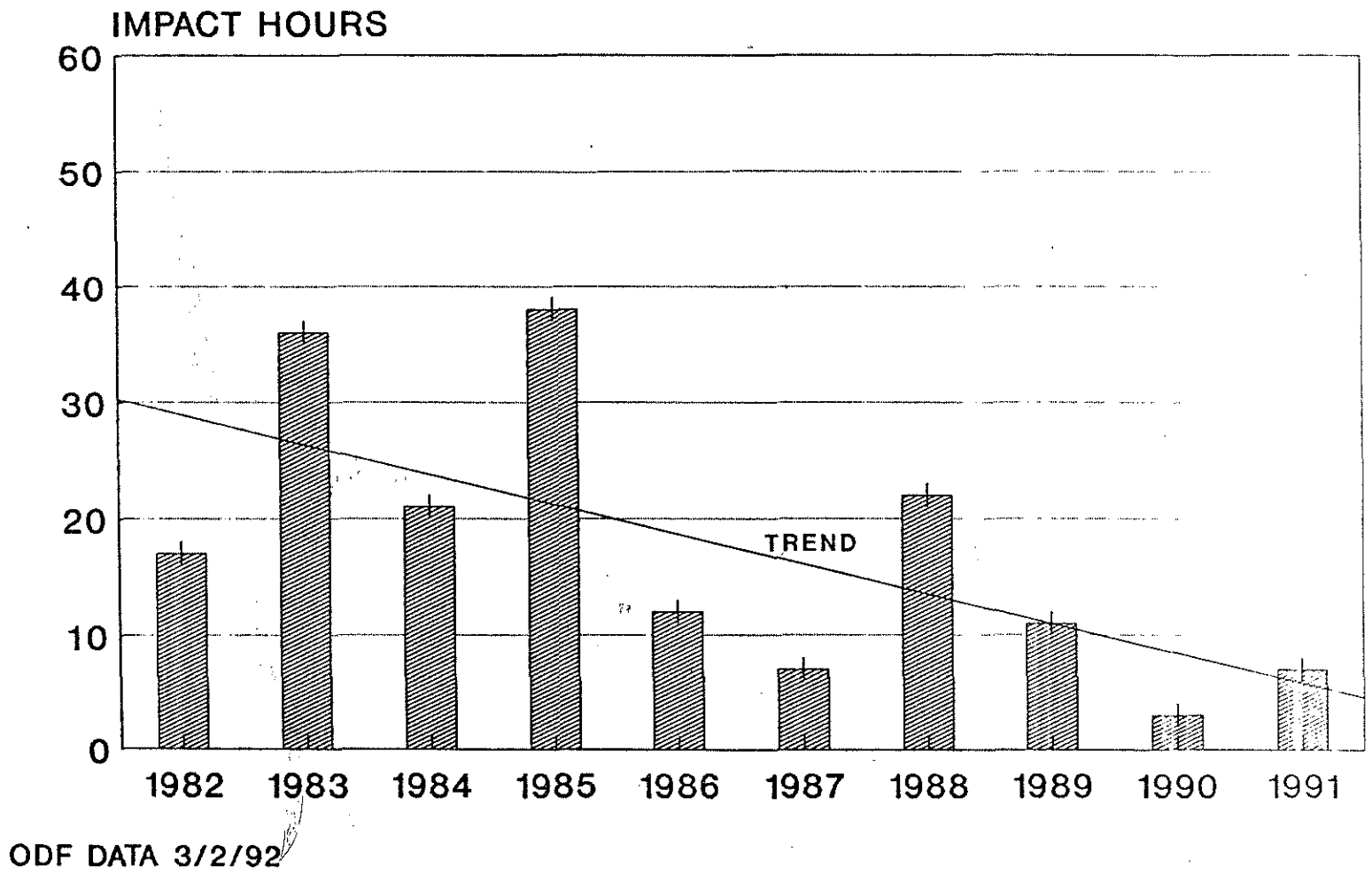
Attachment 1

INTRUSION DATA
OREGON PRESCRIBED BURNING



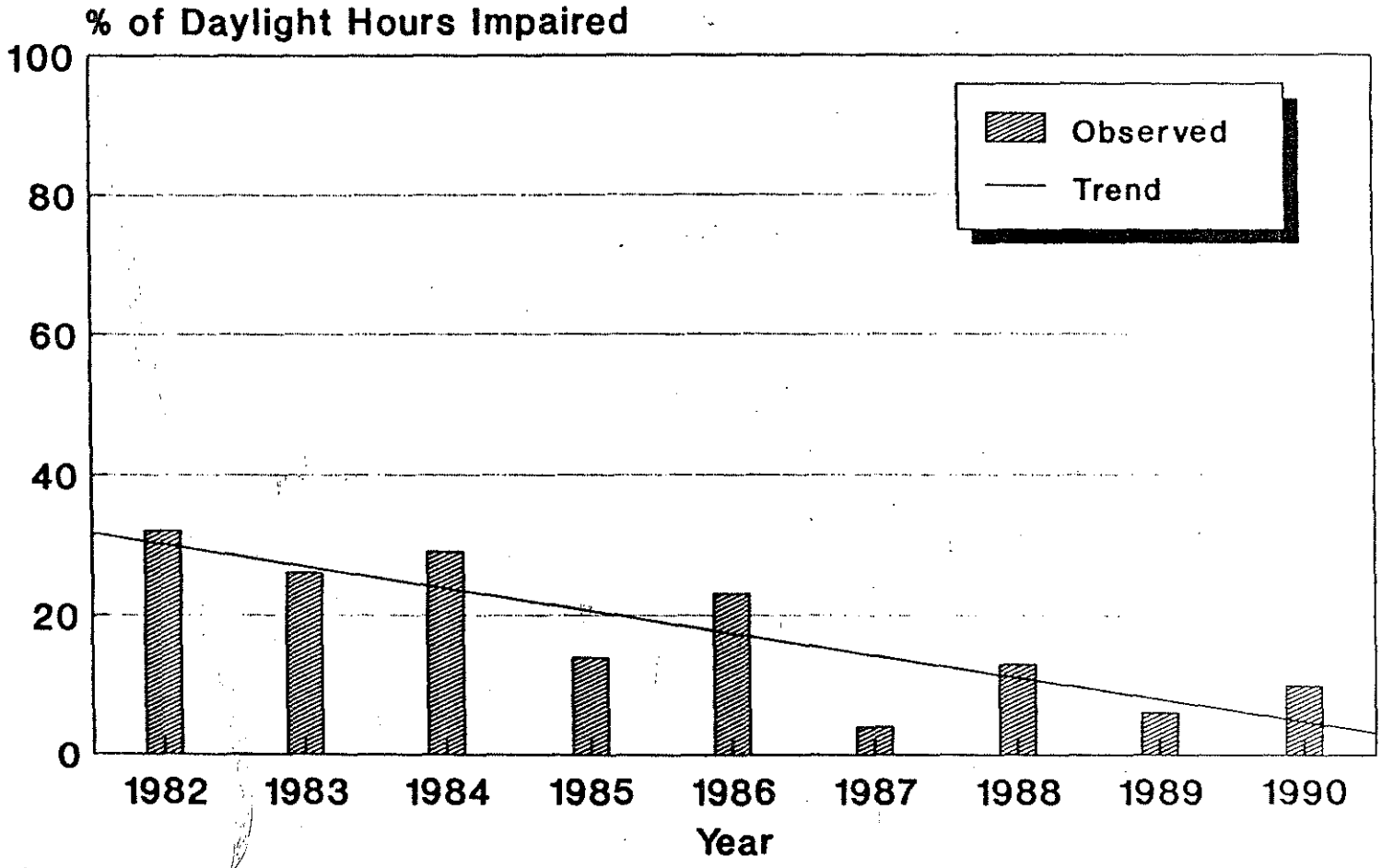
Attachment 2

SMOKE IMPACT HOURS
AVERAGE PER DESIGNATED AREA



Attachment 3

Visibility Impairment Frequency
July 4 - Labor Day Weekends



Average Data for Crater Lake, Mt. Hood, and Central Cascades (From DEQ Data)

Attachment 4

Date: 7-22-92 11:41am
From: Robert Danko:HSW:DEQ
To: fjhansen:od
cc: shallock,bob danko
Subj: Waste Mgt. Tax Credit

In case it comes up at EQC, I have done some calculations on the tax credit #s from Waste Management and how they relate to what we estimated would be claimed when we established the tax credit off-set as a part of the out-of-state solid waste fee.

Briefly, after making some fair and reasonable assumptions, it looks like the claimed costs are about 80% higher than the #s we used in establishing the tax credit portion of the out-of-state fee. So, the tax credit part of the out-of-state fee (which ended up at $.66\ton) in actuality should have been about $.50\ton higher.

Waste Management has diposed of about 600,000 tons of out-of-state waste for the period from 1\1\91 to 6\30\92 (1\1\91 being the first date that the out-of-state fee applies). During the last quarter (4-6\92) waste was arriving at the rate of 1.2 million tons per year with a 57% in-state, 43% out-of-state split.

NORTHWEST ENVIRONMENTAL ADVOCATES

National Whistleblower Center
517 Florida Ave., N.W.
Washington, D.C. 20002
202-667-7515

Columbia/Willamette RIVERWATCH
133 S.W. 2nd Ave. #302
Portland, OR 97204

July 17, 1992

The Honorable Barbara Roberts
Governor of Oregon
State Capitol Building
Salem, OR 97310

Dear Governor Roberts:

By this letter I am submitting my resignation as a member and co-chair of the Steering Committee for the Lower Columbia River Bi-State Water Quality Program. I do this with regret and with reluctance because I am not eager to abandon mid-stream what has been Northwest Environmental Advocates' very significant participation in this effort. However, given the decision that you made in March, and the subsequent reaffirmations of that decision, I see little choice. It was in March, of course, that you and Governor Gardner announced that, in addition to rejecting the opportunity to nominate the Columbia River to the National Estuary Program (NEP), you and he intended to increase the states' commitments to the Bi-State Program.

This supposed increase in commitments has included a variety of proposed changes, nearly all of which are a superficial response to the serious criticisms leveled at the Bi-State Program by my organization and many others since the Committee was first proposed. These so-called "improvements" are intended to make the Bi-State Program look more like the NEP, thereby deflecting the disappointment felt by many citizens over the rejection of this substantial federal program. Appearance does not reflect reality in this instance, nor can it make up for much-needed federal dollars.

I feel strongly that these proposed changes will have little substantive effect in rectifying the problems of the Bi-State program. They will however, as they are intended to, mislead the public. For example, in the face of concerns -- shared by every member of the Committee -- that current funding levels are inadequate to expand the geographic or substantive scope of the studies, let alone do a credible job assessing water quality in the current study area, you have made a commitment to expand the study scope. In response to criticisms of the composition of the Committee, based primarily on the strings-attached funding mechanism associated with the participation of the lower river's primary polluters, the weakness of the Committee representatives of some constituencies, and the absence of many major players, you now propose to add a few agency representatives. And, in spite of the unrepresentative character of this Committee, you now propose to give the Committee some responsibility for management planning. These

are but a few examples of how the states are now proposing to "remedy" the mistake made in 1989, and compounded in 1992, when the NEP was rejected and this Committee was formed.

These remedies, and the Bi-State Program itself, are like band-aids stuck on a gaping wound. What is needed for the Columbia River Estuary, and the entire Columbia River Basin, is a program like the NEP -- with substantial federal involvement and funding and ambitious program goals -- which will break the stranglehold the ports and pulp & paper industry have on this great river system. Until Oregon and Washington are willing to recognize that the Columbia River is a public resource, not a private one controlled by these and other vested interests, little progress can be made in studying the river's problems, in planning for solutions, and in implementing remedies.

Unfortunately, the Bi-State Committee is not merely some right-minded interim measure that will gather useful data between now and whenever a more complete program is established. Instead, the Bi-State Committee is being used -- by the states, the public ports, and the pulp & paper industry -- to forestall any more meaningful approach to the Columbia's environmental problems. This was the case in 1989, it was the case in 1992, and it will again be the case when a proposal is made for an NEP or some other program that threatens the status quo. Today's superficial bolstering by the states of the Bi-State Program will make tommorrow's attempts to make progress even more difficult. By making the Bi-State <u>appear</u> to be everything that the river needs, the Governors perpetuate industry's stranglehold.

This stranglehold has and will continue to compromise the credibility of this program. It is obvious to the public that the Bi-State Committee is being used to provide credibility for a process that is controlled by industry and the ports. The key element missing from this process is a spirit of good faith to do what is right for the <u>river</u>, not right for these special interest groups. That is the difference between how we in the Pacific Northwest treat the Columbia and how state governments elsewhere treat the Great Lakes, Chesapeake Bay and others. One need only have sat through one discussion at the Bi-State Committee -- where Committee members viciously criticized the U.S. Fish and Wildlife Service for doing its job (conducting studies) and even discussed attempting to prevent Congress from funding studies done by the Service that were not directed by the Bi-State Committee -- to realize that this is not a group with the best interests of the river at heart.

To compound the problem, the states are not in a position to make good on their promises. I have been told repeatedly that the unspoken agenda of the states is to reduce the role

of the Steering Committee to that which the law already has made it -- namely advisory to the agencies -- under the theory that the agencies have the technical staff to do the work. Under this scenario, the Committee would merely provide comments on a quarterly basis to the agencies. Likewise, the states have renewed their commitment to "public involvement," another staff-intensive activity which the Bi-State Program is in no position to implement. To date the agencies have not provided sufficient technical or administrative staff -- in fact, are severely limited -- yet we are now expected to believe that, even in this Ballot Measure 5 era, substantially more state staffing and resources will come to bear on this effort. I do not believe this, and I will not be a party to promoting the idea that the states of Oregon and Washington are doing all that is necessary for the Columbia River, particularly at a point when resources for the Bi-State Program are actually being reduced.

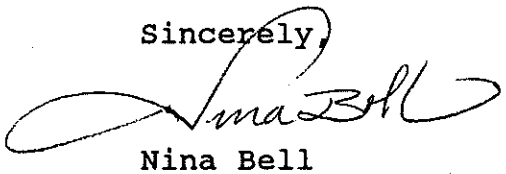
Some of the remedial measures proposed are simply too little, too late. For example, we argued strenuously for participation by the U.S. Fish and Wildlife Service when the Bi-State Program was being negotiated. We were told in no uncertain terms that the industry representatives, upon whose participation substantial funding was contingent, would not agree to the Service. Now, over two years later, the states want to add this agency to give the Committee the aura of completeness. This is not leadership; this is policy making by tokenism.

The treatment I have received during my tenure as Co-Chair of the Bi-State Committee does not encourage me either. I, and the other environmental representative on the Committee, have come under personal attack by port and industry representatives on the Committee. During the debate this spring over the 1992 NEP nomination, I was told several times by port officials and commissioners, in the course of public meetings, that I had a "conflict of interest" in being on the Committee and advocating for the NEP. During that same period of time, notwithstanding my investment in this program and the Washington constituency of my organization, representatives of Governor Gardner refused to meet with me to discuss the Bi-State Program and the NEP. This treatment underscores my belief that all parties are not participating in the Bi-State Program in good faith.

The establishment of a body of public policy whose participants had to be approved by private industry because private industry was providing partial funding for its work, was a serious mistake made in 1989. I cannot in good conscience continue to participate in such a program in the wake of repeated announcements by government leaders that this program will do what everybody admits cannot be done

with its current constituents and its current minimal funding. I cannot and will not be a party to deceiving the public. Most of all, I will no longer be a party to a process that continues to deny this great river the remedies it needs to restore its quality and its spirit.

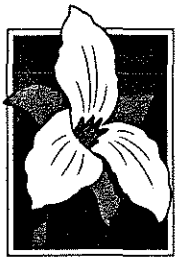
Sincerely,



Nina Bell
Executive Director

cc: Anne Squier
Fred Hansen, DEQ Director
Governor Booth Gardner
Senator Dick Springer
Senator Ron Cease
Representative Bob Pickard
Representative Nancy Rust
Congressman Ron Wyden

NORTHWEST ENVIRONMENTAL ADVOCATES



National Whistleblower Center
517 Florida Ave., N.W.
Washington, D.C. 20002
202-667-7515

Columbia/Willamette
RIVERWATCH
133 S.W. 2nd Ave. #302
Portland, OR 97204

July 17, 1992

To: Members of the Steering Committee
From: Nina Bell
Re: My participation in the Bi-State Program

Today, I submitted my resignation as a member and co-chair of the Bi-State Steering Committee to Governor Roberts and Fred Hansen. I have enclosed a copy of my letter to them. I want to add a few words here to shed any additional light I can on the reasons for my resignation in the hope that I can avoid any misunderstandings that might arise.

At the outset I want to say that I am not resigning because of any unhappiness with work products of the Committee, the agencies or Tetra Tech, although such unhappiness exists. I am not resigning because the Governors chose to reject the opportunity to nominate the Columbia to the National Estuary Program (NEP) earlier this year, although I think this choice was misguided in the extreme. I am not resigning because the Bi-State Committee takes a lot of work, is frustrating, or any other personal reasons. I am resigning for the reasons stated in my letter.

In response to a memo sent out by Jerry Heller, regarding a policy group meeting that I was unable to attend, I want to also make clear that I had not already "dropped out" over the last few months. During that period, I was unable to attend Committee meetings, or go anywhere for that matter, because of severe symptoms of early pregnancy. I had no choice in the matter. I was unable to attend the policy group meeting because I had to be out of town to settle a lawsuit. I find the insinuation that I have not participated in the Bi-State Committee over the last few months for any other reason, to be insulting. As I presume Committee members well know, I have invested a tremendous amount of time in this program since its inception and have not shirked the duties that came along with the assignment. In recent weeks I have spent days reviewing the Task Reports and providing extensive comments to the staff -- a job I would not have done in the absence of an on-going sense of commitment to my position.

I look forward to attending future Committee meetings as a member of the public.

cc: Anne Squier
Fred Hansen

Parking Regulations/Add One

One of the elements of the parking policy is a restriction on the number of parking spaces that can be provided per thousand square feet of any new development in the Central Business District as it existed in 1975. But since the rules have not applied east of the river, new developments in the Lloyd District can provide more automobile parking spaces per thousand square feet of office space.

"Cars in the Lloyd District have as much impact on the air we all breathe as cars in other parts of the Central Business District," said Bartholomew. "If parking regulation makes good environmental sense west of the river, and all evidence suggests it does, then it makes sense in the rapidly growing Lloyd District, as well."

Bartholomew pointed out that the Lloyd District was not seen as a major area for high-density business expansion in 1975 when the parking policy was adopted, nor was there contemplation of a MAX light rail line. But since then, he said, policy makers and the business community have adopted the Central City Plan, expanding the Central Business District to include the Lloyd District.

"If the boundaries are going to expand for business, then they need to expand for environmental protection as well," Bartholomew asserted. "To the person breathing toxic fumes in central city areas, it makes no difference whether those fumes came from east or west of the Willamette River."

The unequal application parking restrictions imposes unfair economic consequences to businesses located west of the Willamette River, said Russell.

"The parking restrictions amount to a cost placed on business to improve air quality," Russell said. "Right now, that cost is being paid by some businesses and not others. That hurts some downtown businesses simply because they are located west of the Willamette River."

DEQ has 30 days to either deny the petition in writing or to initiate rulemaking.

(more)

The application of the parking policy has become an issue because of a 1376-car parking garage being proposed in conjunction with a new office tower in the Lloyd District. The new garage would provide more than double the number of parking spaces allowed under the Central Business District parking policy.

In regard to that specific garage, the coalition has asked the Department of Environmental Quality to scale down the permit to comply with the parking policy. The coalition contends that the parking structure should have no more than 800 spaces in order to be consistent with the rest of the Central City.

Bartholomew said the coalition hopes the EQC approves a temporary rule expanding the parking policy to the Lloyd District before DEQ takes final action on any new parking garage permit.

"We hope the commission sends a clear signal that air pollution control rules apply to everyone in the Central City," Bartholomew said. "That will make the permitting process much less complicated -- and certainly less contentious -- for everyone."

Charles noted that there are a number of transportation studies under way in the Portland Metropolitan area aimed at reducing reliance on the automobile. He argued that it would be premature to approve such a large parking structure before the study results are in.

"This parking garage would be the largest commuter parking lot in the State of Oregon," Charles said. "At a time when traffic congestion is reaching crisis proportions in some areas, it is hard to see how the public could benefit from having such a huge garage to attract more automobile traffic to the Lloyd District, an area that already has some of the best transit service in the Metropolitan area."

-- xxx --

1991 ENFORCEMENT CASE STATISTICS

148 TOTAL CASES **$669,740**

%	NO. CASES	TYPE	ORIGINAL ASSMT.	NOW
53	78	PAID	$158,580	
31	46	SETTLED	$229,230	$155,740 (68% return)
4	6	UNRESOLVED (Hearing Pending)	$235,500	
11	16	OTHER (Liens/Defaults, Withdrawn, etc.)	$ 36,980	
1	2	CONTESTED	$ 1,600	$ 320 (20% return)

(1990 cases)		CONTESTED	$ 33,200	$ 11,000 (33% return)

QUESTIONS AND ANSWERS ABOUT PARKING

Q: What is the Central Business District Parking Policy?

A: The Downtown Parking and Circulation Policy established a ceiling on parking spaces in the Central Business District in Portland and limits addition of parking spaces for new development to a maximum ratio of parking space for each 1,000 square feet of building floor space.

Q: Why was the parking policy adopted?

A: The policy was adopted primarily to achieve compliance with the federal Clean Air Act. During the early 1970s, Portland exceeded federal standards for carbon monoxide about one day out of three. The parking policy was adopted as part of a larger strategy to reduce auto traffic in downtown Portland and increase use of mass transit. Other parts of the strategy included federal tailpipe standards for automobiles and an automobile inspection and maintenance program.

Q: Have the air pollution control strategies been successful?

A: Yes. Since the parking policy was adopted, traffic growth in the downtown area has been minimal. The number of carbon monoxide exceedences has dropped from roughly one every three days to zero. The last exceedence was reported in 1988.

Q: Why doesn't the parking policy apply to the Lloyd District?

A: At the time the policy was adopted, the Central Business District did not extend east of the Willamette River. Several years ago, the Lloyd District was added to the Central Business District -- but the parking restrictions were not included.

Q: Isn't this a regional issue that extends even beyond the Lloyd District?

A: Yes it is. In 1975, when the parking policy was adopted, 90 percent of the multi-tenant office buildings in the region were located in what was then defined as the Portland Central Business District. Today, the Central Business District's share is only 50 percent. The other 50 percent has sprawled out to other areas. This has led to serious traffic congestion in suburban areas and worsening air quality throughout the region.

Q: Is anything being done to address the regional issues?

A: Yes. Three studies are currently under way:

(1) The Central City Transportation Management Plan study is scheduled for completion in early 1993. Among other things, this study will determine if there is a carbon monoxide problem in the Lloyd District. According to DEQ, this study is expected to lead to a comprehensive parking policy for the entire central city area -- including the Lloyd District.

(2) The Governor's Task Force on Motor Vehicle Emissions in the Portland area is developing a regional strategy to maintain air quality standards, with emphasis on the regional ozone problem. Their work may lead to legislation. Parking standards are among the strategies that will be examined.

(3) Metro is conducting a Region 2040 study in cooperation with local jurisdictions to examine local land use plans for compliance with the Department of Land Conservation and Development Transportation rule. The LCDC rule requires a 10 percent reduction in per capita vehicle usage in the Metro region.

Q: Why do environmentalists and some business owners favor downscaling the 1400-car parking garage in the Lloyd District?

A: The parking structure would be the largest commuter garage in the state of Oregon, adding more than double the number of automobile parking spaces allowed elsewhere in the Central Business District under the parking policy. The environmental groups and developers who oppose the garage argue that it should have to comply with requirements affecting the rest of the Central Business District -- at least until key regional studies are completed to address the air quality and parking issues region-wide.

RUSSELL DEVELOPMENT COMPANY, INC.

STATEMENT BY JOHN W. RUSSELL

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

July 24, 1992

Good morning. My name is John Russell. I'm President of Russell Development Company and the owner of a number of properties within the Portland downtown business district. Also speaking today are Keith Bartholomew staff attorney of 1000 Friends of Oregon, and John Charles, Executive Director of Oregon Environmental Council.

We are here to formally propose adoption of this temporary rule that we believe is necessary to protect the air quality of our Central Business District. The temporary rule would extend current parking regulations to developments east of the Willamette River. It would close a loophole that currently allows virtually unlimited parking for new developments in the Lloyd District. This rule was requested in testimony by 1000 Friends of Oregon in January.

The need for a temporary rule is critical because a permit application has been submitted to DEQ to build in the Lloyd District the largest commuter parking garage in Oregon. This high-rise garage would contain 1376 parking spaces -- more than double the number allowed for the same type of development west of the Willamette River. We believe that DEQ, with EQC's guidance through adoption of a temporary rule, should revise this permit to comply with parking limits that apply west of the Willamette River. Such a revision would still allow some 800 parking spaces.

To illustrate how massive the proposed garage is, I have a picture here of the existing Morrison East City Parking Garage, with lines showing how large it would have to be to accommodate 1376 parking spaces.

The Parking and Circulation Plan adopted in 1980 currently limits parking for new office developments in the downtown business district west of the Willamette River. But the same requirements do not yet apply east of the river, even though the central business district was expanded to include the Lloyd Center District under the Central City Plan adopted by the Portland City Council several years ago.

200 MARKET BUILDING, SUITE 1515 PORTLAND, OREGON 97201 503•228•2500 FAX (503) 228•3204

The parking regulations were among several measures adopted to improve air quality in the Portland downtown area. As development and automobile traffic increase, it is essential that rules to protect public health -- and the cost of complying with those rules -- be extended throughout the Central City.

In addition to its public health implications, parking regulation is also an issue of economic fairness. The City of Portland is committed to a thriving and vital downtown and has extended that commitment to both sides of the Willamette River. For example, the density zoning for most of the Lloyd District is identical to this very site. Unequal application of parking ratios creates an economic disparity between downtown west of the Willamette River and those areas immediately east of the river. Until this loophole is closed, DEQ has the worst of all possible policies: a partial regulation. Needless to say, with partial regulations, economic activity is encouraged in the unregulated area.

In effect, the parking restrictions amount to a cost placed on business to improve air quality. Right now, that cost is being paid by some businesses and not others. That hurts some downtown businesses simply because they are located west of the Willamette River.

The temporary rule is by no means a comprehensive solution to parking and traffic issues in the Portland Metropolitan area. Bigger solutions are in the works in the form of several major studies. This rule would merely apply reasonable parking policies to the unregulated portion of the Central City until comprehensive studies are complete.

We urge your favorable consideration of the temporary rule.

Thank you. I would be happy to answer any questions.

State of Oregon
Department of Environmental Quality **Memorandum**

Date: May 12, 1992

To: Environmental Quality Commission

From: Director

Subject: Information Report on Proposed Parking for the 600 Holladay Building

The purpose of this memo is to provide the Commission with general information on parking policies in the region in light of the proposed 600 Holladay Building parking project, which was initially brought to the attention of the Commission at the January 23, 1992, meeting. Specific information on the 600 Holladay Building parking facility proposal is presented along with a brief summary of the Indirect Source Program and alternatives for dealing with the permit application.

General Background

During the early 1970's, the 8-hour carbon monoxide standard was exceeded in downtown Portland approximately one out of every three days. In 1973 Governor Tom McCall submitted the Portland Transportation Control Strategy (TCS) to the U.S. Environmental Protection Agency as a follow-up response to the Clean Air Act of 1970. The TCS included a fledgling Indirect Source review program and also outlined measures to reorganize and manage the supply of parking in downtown Portland. The TCS indicated that the Department was prepared to take over management of parking under the Indirect Source Program if the City of Portland did not produce an acceptable management plan.

In response to the Department's initiative, the city adopted the Downtown Parking and Circulation Policy in 1975. The main thrust of the parking policy was to stabilize the parking supply with an emphasis on developing and encouraging transit access, while still providing limited new parking for development projects. The keys to management of the parking supply were the adoption of an initial ceiling on spaces and maximum ratios of parking to building floor space for new developments. With parking stabilized, traffic growth in the downtown would be minimized in order to take maximum advantage of the federal tail pipe program on new cars and Oregon's vehicle inspection and maintenance program.

Under the parking policy (subsequently updated in 1980 and last updated in 1985), traffic growth in the downtown was minimal and there was rapid progress toward meeting the 8-hour carbon monoxide standard. Although singular exceedances (once in a year) have been recorded as recently as 1988 in the downtown, two

or more exceedances, constituting a standard violation, have not occurred since 1984.

Even though the downtown parking policy has been an apparent success in fostering clean air, the parking ceiling and to some extent the maximum parking ratios as applied in the downtown have been a continuing source of controversy, particularly among the business community. In the rest of the region, including areas of the city outside the Central Business District (CBD), parking is essentially unregulated. Indeed, most jurisdictions specify minimum parking ratios instead of maximums, and typically, developers generously exceed those minimums.

To augment the downtown parking supply, while still maintaining air quality, the Commission in 1990 adopted a parking offset program for the downtown. This has bolstered the number of spaces available for new development. However, new developments in the downtown must still meet the maximum parking ratio requirements, and this has become an issue of concern with respect to office developments, such as in the nearby Lloyd District and elsewhere in the region, that do not have to meet such requirements, but compete for tenants in essentially the same market.

600 Holladay Building--Background Information

Mary Kile McCurdy, representing 1000 Friends of Oregon, brought the 600 Holladay Building (parking) project to the attention of the Commission in the Public Forum segment of the January 23, 1992, meeting. She requested that the Commission direct the Department to extend the regulations of the downtown Portland parking policy to the area of the Lloyd Center by Temporary Rule. In response to the concerns raised by 1000 Friends, the Director made a commitment to review and sign future Portland area Indirect Source permits and to examine the Indirect Source Rules for possible changes.

Policy Issues

The basic issue that was drawn at the January 1992, meeting was the apparent disparity in regulatory treatment of office projects, for the downtown area versus the Lloyd District, with respect to the allowed amount of associated parking. Under the City of Portland's parking policy, which has been incorporated into the State Implementation Plan, new office developments in the CBD are allowed a maximum of 0.7 to 1.0 space per 1,000 sq. ft. of gross floor area, depending upon location within the CBD. By contrast, the 600 Holladay Building would have a parking ratio of 2.9 spaces per 1,000 sq. ft. of gross floor area, assuming

that all the spaces in the garage were made available only to the tenants of the new office structure. (The developers, however, have indicated in the Conditional Use application to the city that the effective ratio would be approximately 1.3 spaces per 1,000 sq. ft. of gross floor area, after accounting for parking space usage by non-tenants.)

Beyond the apparent regulatory disparity between the downtown and the Lloyd District, though, there is a larger issue of an office market that has dramatically changed from the 1970's. As an example of this change, in 1970 Washington County had approximately 1% of the space then occupying downtown Portland. By 1990 Washington County office space was equal to approximately 76% of downtown office space. Accordingly, from an air quality perspective there is concern that restrictive parking policies in the central city area may only serve to move air quality problems to the east side, or the suburban areas of the region. (In 1989 and 1990 the highest 8-hour levels of carbon monoxide were measured at 82nd Avenue.) Suburbanization of the office market may also have ramifications on the generation of ozone precursor emissions, not yet well understood.

The change in the office market provides added impetus to take a regional approach to parking/transportation/air quality issues. There are three significant planning studies under way that may have some bearing on the development of new, regionally based policies. However, the 600 Holladay Building, by virtue of the large size of the parking garage, may have impacts before these studies are completed.

1) The Central City Transportation Management Plan study is expected to result in a comprehensive parking policy for the entire central city area, including the Lloyd Center commercial district.

2) The Governor's Task Force on Motor Vehicle Emissions in the Portland area has begun work to develop a regional strategy, including a broad examination of parking issues, to maintain air quality standards.

3) Region 2040 by Metro in cooperation with local jurisdictions will examine local land use plans, with particular emphasis on addressing the Department of Land Conservation and Development, Transportation Rule, which includes a requirement for a 10% reduction in per capita parking in the Metro region.

The Central City study, to be completed early next year, will determine if there will be any carbon monoxide problem in the

Lloyd District. This study should result in a Parking and Traffic Circulation Plan that will insure maintenance of the carbon monoxide standards for at least twenty years. The Governor's Task Force will determine the extent of the regional ozone problem and make recommendations to address them by October 1992.

600 Holladay Building (Indirect Source) Permit Issuance Alternatives

The initial Indirect Source Program in the Portland TCS was changed to operate statewide on a permit issuing basis in 1975, somewhat similar to the industrial permitting program. Certain large parking projects (150 or more spaces within the city limits of Portland) are required to secure a construction permit from the Department. A significant provision of the Indirect Source Rules is for the development of Parking and Traffic Circulation Plans (P&TCP's). Currently, the only P&TCP in effect is for the area of the downtown governed by the city's parking policy.

The Department received a permit (Indirect Source) application for the proposed 600 Holladay Building and associated parking garage facility on March 15, 1992. The garage would have a total of 1,376 spaces, but the net increase in on-site parking would be 926 spaces, due to the demolition of the existing two-level, 450-space facility, which exclusively serves the existing 500 Lloyd building. The applicant was notified that the application would not be processed until a completed Land Use Compatibility Statement (required by Department of Land Conservation and Development, Administrative Rule) was received by the Department.

In the Conditional Use application, required by the city, the developers of the 600 Holladay Building have indicated that 450 spaces in the new parking structure replace the existing two-level parking on the site, and the 450 spaces would be reserved for the exclusive use of the existing 500 Lloyd building. Additionally, 306 spaces would be held for general commercial use. If those spaces are subtracted from the total, then the parking ratio for the new building would be approximately 1.3 spaces per 1,000 sq. ft. of gross floor area (compared to the CBD's 0.7 to 1.0 space per 1,000 sq. ft. of gross floor area). According to the developers, the existing office parking demand in the Lloyd District is approximately 2 spaces per 1,000 sq. ft. of gross floor area, which is satisfied in part by existing area surface lots.

The following alternatives for regulatory action appear to be relevant in light of the above information:

1) Issue a relatively unrestrictive permit for the proposed project, given there is no known existing carbon monoxide problem in the area.

2) Place restrictions on parking for the 600 Holladay Building project that limit parking to the ratios allowed in the Portland downtown area, or ratios appropriately scaled to the level of future Lloyd District transit service. This could be accomplished through extending the boundary of the present Parking and Traffic Circulation Plan (the CBD parking policy) to encompass the Lloyd District.

3) Restrict the parking to the uses proposed as a part of the Conditional Use application to the city.

4) Limit the parking of the 600 Holladay Building and future new facilities through changing the Indirect Source Rules to develop a regionally based schedule of maximum parking ratios. The intent would be to make the Indirect Source Rules compatible with the parking space per capita reduction required by the Department of Land Conservation and Development, Transportation Planning Rule. In order to gain the time necessary to develop the ratios and apply the appropriate one to the proposed project, the Department would need to apply OAR 340-14-020(4)(b), which allows the Director to invoke additional measures to gather facts regarding a permit application.

5) Wait until recommendations of the Governor's Task Force are complete before considering regional parking ratios, since this is one of the strategies under deliberation by the task force.

Additional Considerations/Evaluation

1) Uncertainty will remain for at least a few more months until the air quality modeling work on the Central City Transportation Management Plan study is completed as to whether there could be future, localized air quality problems in the Lloyd District.

2) Limiting parking use to the developer's proposal to the city (i.e., 756 spaces = 450 for existing Lloyd Tower + 306 "General Commercial" would not be made available to tenants of the new office tower) would come close, but still exceed the CBD maximum parking ratio.

3) Even if the Lloyd District parking ratios for new development were made equal to those in effect for the CBD,

such action would still not address the larger regional problem and equity issues posed by suburban office parking.

4) Several months of technical work would be necessary to determine a reasonable set of regional parking ratios that would be compatible with the Department of Land Conservation and Development, Transportation Planning Rule. The following major tasks would need to be accomplished in order to derive a set of regional parking ratios:

   1) Determine the existing inventory of commercial parking spaces and the corresponding per capita ratio (2 to 3 months);

   2) In coordination with Tri-Met and Metro, determine future mode shares on a subregional basis for transit and carpooling (2 to 3 months);

   3) Based on steps 1 and 2 and the 10% reduction in per capita parking, determine a set of regional parking ratios for new developments (1 to 2 months).

   Steps 1 and 2 could take place concurrently. Thus, the necessary fact finding process could probably be accomplished within a five-month period.

5) The Governor's Task Force holds its third meeting on June 2, 1992 to receive presentations on similar types of studies conducted elsewhere in the country. The remaining schedule of task force meetings is listed below.

   June 25 (First look at potential vehicle emission reduction strategies)

   July 22 (Presentation of evaluation and analysis of potential vehicle reduction strategies)

   August 27 (Consideration of selected strategy packages and draft recommendations)

   September 22 (Final recommendations)

6) In consideration of time periods in the above outlined items 4 and 5, the 600 Holladay Building and others could be held up under OAR 340-14-020(4)(b) while fact finding measures are undertaken to determine the appropriate parking ratios.

Legal Authority

ORS 468A; OAR 340-20-100 through 20-135; OAR 340-14-020(4)(b)

Recommendation

The Department recommends that we seek clarification on the use of the 306 non-tenant, "General Commercial" parking spaces. In addition, we recommend that we coordinate with Tri-Met, Metro and the City of Portland regarding any additional appropriate requirements which should be attached to any permit issued and attach such conditions to the permit, including restrictions on the 306 spaces. We recommend proceeding with these actions while not awaiting the actions in the above listed items 4 and 5.

News Release

Friday, July 24, 1992

Contact: Ginny Burdick
244-1444

John Pihas
222-3100

ENVIRONMENTAL GROUPS, BUSINESSMAN JOIN IN PETITION TO EXTEND DOWNTOWN PARKING REGULATIONS TO LLOYD CENTER DISTRICT

PORTLAND -- A coalition of environmental organizations and a Portland office building owner asked the Oregon Department of Environmental Quality (DEQ) today to close a major loophole in air pollution rules that currently allows virtually unlimited parking for new developments east of Willamette River.

Appearing before the EQC were Keith Bartholomew, staff attorney for 1000 Friends of Oregon; John Charles, executive director of the Oregon Environmental Council; and Portland businessman John Russell.

They submitted a petition asking the EQC, the policy and rule making board for the Department of Environmental Quality, to adopt a temporary rule placing the same parking restrictions on the Lloyd Business District as currently apply in the Central Business District west of the Willamette River. The Lloyd District was designated part of the Central Business District several years ago under the Portland Central City Plan.

The parking policy is aimed at reducing pollution from automobiles. It has been in effect in the Central Business District west of the Willamette River since 1975. The policy was part of a strategy to bring the City of Portland into compliance with federal Clean Air Act standards.

(more)

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May 29, 1992

Chairman William Wessinger
Environmental Quality Commission
c/o Department of Environmental Quality
811 SW 6th Avenue, 6th Floor
Portland, OR 97204

Re: Indirect Source Permit - 600 Holladay Building

Dear Chairman Wessinger and Fellow Commissioners:

This office represents S-PAC, a joint venture consisting of Schlesinger Company, Inc. and Pac Properties (a subsidiary of PacifiCorp), the developer of the 600 Holladay Building located in the Lloyd District of Portland. We understand that the Commission has expressed interest in the parking facility for this project with regard to its relationship to air quality and transportation objectives for the District and metropolitan region. To this end, Mr. Hansen has provided you with a memorandum dated May 12, 1992 on parking policies in the region and the status of our pending Indirect Source permit application for consideration at your upcoming meeting on June 1, 1992. The purpose of this letter is to provide the Commission with background information regarding the 600 Holladay Building project and to address certain policy issues raised in Mr. Hansen's memorandum.

The 600 Holladay Building project, which consists of approximately 491,737 gross square feet of commercial office and retail space and an adjacent parking facility containing 1,376 spaces. The site currently supports a 450 space parking facility serving the Lloyd 500 office building. The existing parking structure will be removed to allow for construction of

Approval of an adjustment to allow service vehicles to back out of the facility into a public right-of-way at N.E. 6th Avenue, north of Hassalo Street, subject to the following condition:

L. Prior to occupancy, an audible warning device to alert pedestrians to the presence of vehicles entering the right-of-way from the loading facilities shall be installed in the building.

Basis for Decision: Staff Report in 92-00164 CU, Exhibits A through J 3, and the hearing testimony of Jerry Brock (Bureau of Planning), Rich Cassidy (Bureau of Parking Management), and Steven Pfeiffer (Applicant's Representative).

Phillip E. Grillo
Hearings Officer

Decisions of the Hearings Officer may be appealed to City Council. Unless appealed, this Decision of the Hearings Officer is effective on MAY 23, 1992, the day after the last day to appeal.

ANY APPEAL OF THIS ACTION BY THE HEARINGS OFFICER MUST BE FILED AT THE PERMIT CENTER ON THE FIRST FLOOR OF THE PORTLAND BUILDING, 1120 S.W. 5TH AVENUE, 97204 (796-7526) NO LATER THAN 4:30 P.M. ON MAY 22, 1992. **An appeal fee of $616.00 will be charged (one-half of the application fee for this case).** Information and assistance in filing an appeal can be obtained from the Bureau of Planning at the Permit Center.

Failure to raise an issue by the close of the record at or following the final hearing, in person or by letter, precludes appeal to the Land Use Board of Appeals (LUBA) based on that issue.

Failure to provide sufficient specificity to allow the review body to respond to an issue raised precludes appeal to LUBA based on that issue.

Recording the final decision. If this proposal is approved, it must be recorded at the City Auditor's office within 14 days of final approval. **If the decision is not recorded, it will be void.** The applicant, builder, or their representative can record the decision by going to the City Auditor's office in City Hall, 1220 S.W. 5th Avenue, Room 202; Portland, Oregon. The Auditor will charge a fee, and will record this decision with the County Recorder. A building or development permit will be issued only after this decision is recorded.

CITY OF

PORTLAND, OREGON

HEARINGS OFFICE

Hearing Date:	April 27, 1992
Decision Mailed:	May 8, 1992
Last Date to Appeal:	May 22, 1992
Effective Date (if no appeal):	May 23, 1992

REPORT OF HEARINGS OFFICER DECISION IN UNCONTESTED CASE

File No.: 92-00164 CU

Applicant: S-PAC, c/o Paul Schlesinger, Schlesinger Company, Inc., 610 S.W. Alder Street, #1221, 97205.

Owner: Pacific Development (Property), Inc. and Lloyd 500 Building Partners, Ltd. (Mary Oldshue, Officer), 825 N.E. Multnomah, #1275, 97232.

Location: 600 Holladay Street, bounded by N.E. Holladay Street, 6th Avenue, 7th Avenue and Multnomah Street.

Legal Description: TL 1 of Blocks 80 and 81 and Lots 3-6 Block 81, Holladay's.

Quarter Section: 2931. Neighborhood: Lloyd/Coliseum District.

Zoning/Designations: CXd, Central Commercial with design overlay.

Land Use Review: Conditional Use and Adjustment for a parking structure.

Decision: It is the decision of the Hearings Officer to adopt the facts, findings, and conclusions of the Bureau of Planning in Sections I, II, and III of their Staff Report and Recommendation to the Hearings Officer dated April 17, 1992, and to issue the following approval:

Approval of the Conditional Use request for commercial parking, subject to the following conditions:

A. Prior to occupancy S-PAC will submit a plan to the Parking Manager to determine the priority by which the 306 commercial parking spaces will be made available to multiple users, visitors or other district events.

B. S-PAC will submit an annual report on the Transportation Demand Management (TDM) and parking management programs to the Parking Manager beginning on July 1 or January 1, whichever is at least six months following occupancy, and thereafter annually on the same date. The report will include parking supply allocation, short-term (under four hours) and long-term parking and the carpool utilization of spaces, parking rates, an evaluation of TDM measures implemented, and annual mode split or AVR survey results.

C. S-PAC will submit a TDM Update five years after the first annual report which reflects changes in the district and includes new Average Vehicle Ridership (AVR) goals.

D. PacifiCorp will conduct a baseline employee/contractor travel survey usingat their current locations for employees/contractor to be located in the building (using, as a minimum, the City of Portland survey (see Exhibit G1, Figure 2) and submit the results to the Parking Manager in order to determine existing travel mode split data before moving to the new location as a consideration in determing potential future long-term AVR goals for PacifiCorp at the 600 Holladay site.

E. The applicant is required to implement the Committed TDM measures, as described in the Kittelson TDM Report dated February 1992:

1. On-site Transportation Coordinator
2. Provision of on-site services (i.e., retail, health club, banking)
3. Fleet vehicles
4. Bike parking and bicyclist service facilities
5. Constrained parking
6. Parking rates
7. Transit oriented building entrances
8. Carpool parking at preferred location
9. On-site transit ticket sales
10. Work to improve bus route service

F. The owner/applicant will include in the on-site transportation coordinator's duties (as set forth on reference page 15 of the applicant's TDM) the responsibility of providing extensive information to tenant's employees regarding Tri-Met's rideshare program.

G. Prior to occupancy, stops for any shuttle operated for users of the 600 Holladay garage for event or employee parking will be reviewed by the City Traffic Engineer, to assure traffic safety and proper on-street parking utilization.

H. Prior to the issuance of building permits, the applicant will submit a plan for review and approval by the Portland Department of Transportation (PDOT) to address the potential problem of service vehicles access/egress routes crossing the MAX tracks and N.E. Holladay Street sidewalks.

I. All improvements within the public right-of-way will be designed and constructed in accordance with the requirements of the City Engineer under a street improvement permit from the Bureau of Transportation Engineering.

J This decision must be recorded at the City Auditor's Office, as described below.

K. A building permit, occupancy permit, or development permit will be obtained before carrying out this project. At the time they apply for a permit, or as indicated in the above conditions, permittees will demonstrate compliance with:

- All conditions imposed here.
- All applicable development standards, unless specifically exempted as part of this land use review.
- All requirements of the Building Code
- All provisions of the Municipal Code of the City of Portland, and all other applicable ordinances, provisions and regulations of the City.

the new project. The 600 Holladay Building will be located on the southern portion of the two-block site adjacent to the Holladay light rail station. The building portion of the project consists of two subgrade levels and 21 above grade levels of office, retail and support space. The office building and parking facility have received all necessary land use approvals from the City of Portland, including Design Review for the entire project and Conditional-Use approval for the 306 commercial spaces in the parking facility.

In his memorandum of May 12, Mr. Hansen identifies two issues of potential interest to the Commission. The first issue pertains to the difference in parking regulation for office development in the Central City and the second issue relates to the implications of the 600 Holladay project for ongoing planning activities pertaining to regional air quality. We offer the following comments and information regarding key attributes of the project for your consideration.

Parking Regulation within the Central City.

The City of Portland adopted the Downtown Parking and Circulation Policy of 1975 to address air quality concerns affecting the west side of the Central City. This policy (updated in 1988 and 1989) establishes a maximum ratio of 0.7 to 1.0 parking spaces per 1,000 square feet of gross floor area of new office development within the affected area. Due to the availability of superior transit service and the development of numerous parking structures within the west Central City, office and retail development has continued under this policy.

Although the Lloyd District and other parts of the metropolitan area have historically exceeded the above ratios, it is a result of the reduced transit service and availability. Indeed, under the current Tri-Met survey and Metro's model mode split estimate for the Lloyd District, tenant parking demand for the 600 Holladay project is approximately 1,058 spaces. However, and as noted by Mr. Hansen, parking availability within the facility for building tenants has deliberately been reduced to a total of 450 spaces in an effort to encourage transit ridership. In addition to these limited tenant spaces, the remaining spaces within the parking facility are allocated as follows:

Lloyd 500 Building (Adjacent)	450 spaces
Fleet Parking for Major Tenant	100 spaces
Short Term Visitor Parking	30 spaces
Handicap Parking	20 spaces
Leased Tenant Reserved Parking	20 spaces
Commercial Parking (non-tenant)	306 spaces

Compliance with this allocation will be assured through tenant lease agreements in conjunction with monitoring procedures imposed by the City of Portland

Under the above parking allocation, the number of parking spaces available to tenants of the 600 Holladay Building is limited to 620 spaces, or 1.26 spaces per 1,000 square feet of gross floor area. The provision of 450 spaces in the Holladay structure will replace the existing parking spaces for tenants of the Lloyd 500 Building. The parking ratio for this adjacent office building is currently and will be 1.33 spaces for 1,000 square feet of gross floor area. While these parking ratios are slightly higher than the ratios applicable to the west Central City area, these numbers reflect a substantial reduction from historic ratios within the Lloyd District of 3.5 spaces per thousand in 1985, and 2.2 spaces per thousand in 1992. Moreover, the relatively low parking ratio available to the 600 Holladay Project is particularly significant in light of the well known and documented current disparity in transit service between the Lloyd District and the west Central City area.

For the above reasons, we believe that the proposed parking supply to be made available to the 600 Holladay Project and the adjoining Lloyd 500 Building is favorable in comparison to the ratios applicable to the west Central City and, accordingly, is consistent with the parking policy codified in the Downtown Parking Circulation Policy. The relatively low tenant parking ratios associated with the project, together with the extensive transportation demand management and transit incentive measures imposed by the City of Portland, serve to further the Commission's goal of reducing vehicle miles traveled and increasing reliance upon transit service.

Indirect Source Permit - Air Quality and Transportation Objectives

Citing pending planning studies addressing regional air quality and transportation issues, Mr. Hansen raises the

question of what impact, if any, approval of the Indirect Source Permit for the 600 Holladay parking structure may have upon eventual implementation of these analyses. We recognize and support the goal of the Department and the Commission to maintain air quality and reduce vehicle miles traveled within the metropolitan region. We believe that the 600 Holladay parking facility is consistent with these objectives, and may simplify any implementation of the analyses.

To assure increased transit ridership and maintain a favorable mode split for the 600 Holladay project and the immediate developed area, S-PAC and the City of Portland have developed to be implemented an aggressive Transportation Demand Management Program as a condition of project development. The mandatory conditions contained in the Hearings Officer's Order include, in part, the following measures:

> *Prior to occupancy, S-PAC will submit a plan to the Parking Management to determine the priority by which the 306 commercial spaces will be made available to multiple users, visitors or other district events.*
>
> *S-PAC will submit an annual report on the Transportation Demand Management (TDM) and parking management programs to the Parking Manager beginning on July 1 or January 1, whichever is at least six months following occupancy, and thereafter annually on the same date. The report will include parking supply allocation, short-term (under four hours) and long-term parking and the carpool utilization of spaces, parking rates, and an evaluation of TDM measures implemented, in annual mode split or ABR survey results.*
>
> *The applicant is required to implement the Committed TDM measures, as described in the Kittelson TDM report dated February 1992:*
>
> *1. On-site Transportation Coordinator;*
>
> *2. Provision of on-site services (i.e., retail, health club, banking);*
>
> *3. Fleet vehicles;*

4. *Bike parking and bicyclists' service facilities;*

5. *Constrained parking;*

6. *Parking rates;*

7. *Transit oriented building entrances;*

8. *Carpool parking at preferred location;*

9. *On-site transit ticket sales; and*

10. *Work to improve bus route service.*

A copy of the Hearings Officer's written order is attached for your review and reference.

As you can see, the City of Portland has taken substantial steps to assure that current and future use of parking within the 600 Holladay structure remains transit oriented. As Mr. Hansen notes in his recommendation to the Commission, it is appropriate to ensure that the 306 commercial parking spaces within the facility are utilized primarily for non-tenant parking. Citing this same concern, the Hearings Officer imposed the initial condition noted above to provide a specific means of implementing this policy objective over the life of the facility.

For the above reasons, S-PAC supports the Department's recommendation that the Indirect Source permit be issued in the ordinary course, subject to coordination with the City of Portland regarding implementation of the above referenced condition regarding the 306 commercial spaces. The extraordinary transportation demand management and transit incentive measures imposed by the City of Portland set a new standard for the area and there is no basis for a conclusion that the proposed 600 Holladay parking structure is inconsistent with current regulations regarding parking and air quality. To the contrary, we belive that the parking facility and the project as a whole are transit supportive and will be instrumental in encouraging the improvement of current transit service and mode splits for the Lloyd District.

Thank you for the opportunity to present these comments. We would be happy to answer any questions the Commission may have at the upcoming public meeting on June 1, 1992 or during any subsequent proceedings.

Very truly yours,

Steven L. Pfeiffer

SLP:bak
cc: Mr. Fred Hansen (by messenger)
Mr. Steve Greenwood (by messenger)
Mr. Howard Harris
Mr. Robert Stacey
Ms. Elsa Coleman
Mr. Larry Knudsen (by messenger)

1000 FRIENDS OF OREGON

July 2, 1992

Mr. Fred Hansen
Director, Department
of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

Re: Indirect Source Permit for 600 Holladay Building

Dear Fred:

Enclosed are the comments we presented to the Environmental Quality Commission in January, expressing our concern about the air quality and transit impacts of the 600 Holladay Building parking garage. Keith Bartholomew of our office testified before the Commission on the indirect source permit. We assume our January testimony is part of the record on the indirect source permit, but if it is not, we request that it be added to the record.

Thank you.

Very truly yours,

Mary Kyle McCurdy/raf

Mary Kyle McCurdy
Staff Attorney

/raf

enclosure

300 WILLAMETTE BUILDING 534 S.W. THIRD AVENUE PORTLAND, OREGON 97204
(503) 223-4396 FAX (503) 223-0073

Testimony of 1000 Friends of Oregon

before the Environmental Quality Commission

January 23, 1992

Pacific Development recently held a preapplication conference with the City of Portland for a land use permit that, among other items, would allow the construction of an 11-story parking structure containing approximately 1400 spaces. To the best of our knowledge, this structure, if built, would be the largest parking garage in Oregon. Pacific Development has yet to file a formal application for the construction of the garage, but it appears from reports in the press that the application filing is imminent.

1000 Friends of Oregon opposes the erection of this garage. We request the EQC to adopt temporary regulations applying the current parking standards now in place for the Portland Central Business District (CBD) to the entire metropolitan region. We urge the Commission to direct its staff today to prepare draft temporary rules that can be adopted by the Commission at a future meeting.

The corner stone of the State Implementation Plan for Air Quality in the Portland area is the Downtown Parking and Circulation Plan, better known as the "parking lid." The lid, which places strict limitations on the construction of new parking spaces, has been very successful at reducing carbon monoxide (CO) emissions downtown: there has not been a single CO violation recorded since 1984.

The lid, however, is in danger--and all of Portland's air quality with it. Currently, the lid applies only in the limited area of Portland's CBD. At the time of the lid's inception (1975), this may have made sense: approximately 90% of the multi-tenant office buildings in the region were located in the CBD. Because these buildings represented the destination of a significant percentage of the region's workforce, limiting the restrictions on parking to the CBD was logical.

In 1992, however, the picture is quite different. Today, the Central City's share of the region's multi-tenant office market is only 50%--the other 50% has sprawled out, away from the central core of the city and its hub of transit service. The

300 WILLAMETTE BUILDING 534 S.W. THIRD AVENUE PORTLAND, OREGON 97204
(503) 223-4396 FAX (503) 223-0073

result? Massive suburban traffic congestion and worsening regional air quality.

Last year, DEQ reported that in the tri-county metropolitan area the amount of vehicle miles traveled (VMT) on state highways increased by over 40% between 1982 and 1988; the area's population during the same period, however, grew by only 5%. In other words, VMT increase was eight times greater than the increase in population. Where was all of this extra driving occurring? Not in the CBD, but in the far flung reaches of the region.

The air quality impact of these enormous increases in driving has been dramatic. DEQ's 1990 Annual Air Quality Report shows 6 days of ozone excedences between 1988 and 1990: "On hot summer days during 1990, ozone levels rose above the standard four times at an ozone monitoring site southeast of Portland. This represents the worst year in terms of the number of days above the standard since 1981 and the third worst in terms of peak ozone levels (at that site)." The primary cause of these excedences? Automobiles.

If left unchecked, we can expect these dire circumstances only to get worse. It is time we revisit our approach to air quality in the Portland region. Specifically, our air quality strategies must to treat the region as a whole. In short, we must regionalize the parking lid.

The City of Portland's Central City Transportation Management Plan indicates that the uneven application of the parking lid is largely responsible for the office flight from the CBD. It is axiomatic that placing a restriction on a desired activity in one area and providing no restrictions on the same activity in another area will tend to focus the activity were the restrictions are the least. Technical literature and universal experience have shown that the best urban form for alternative modes of transportation is one that is based on a single, high density central core.

If the region and the state wish to promote decentralization of the Portland area, and thereby increase the amount of automobile driving and ozone pollution, the answer is simple. Do nothing; the uneven application of the parking lid appears to be a sufficient incentive to assure continued flight from the CBD. If, however, we wish to reverse the current trends of increased driving and decreased air quality, we must start treating the region uniformly. The first and most obvious step is to apply parking restrictions region-wide.

The proposal by Pacific Development is a good starting place for EQC. The proposed parking lot is located in the Lloyd District, just outside of the CBD and its parking lid. It is immediately adjacent to a station on the Banfield MAX line and is within walking distance of the Colosseum Transit Center. With this abundance of transit service, the opportunities for transit-oriented development on the site are enormous. Allowing the construction of a 1400 space parking is probably the worst thing that could happen for this property. First, it will greatly reduce the amount of land available for transit-oriented development. Second, it is likely that the lot would serve as a remote parking site for downtown businesses, thereby reducing the effectiveness of the existing CBD parking lid.

Currently, builders of parking structures containing more than 150 spaces must obtain an indirect source permit from DEQ. Because there are very few standards that apply outside of the CBD, however, the process of getting an indirect source permit for an extra-CBD site is not much more than a formality. The Central City Transportation Management Plan is designed to develop a series of regionwide strategies for air quality management. That process, however, is likely to take two years or more before the new standards are in place. In the meantime, there is a policy vacuum.

To fill that vacuum and to ensure that the region does slide further into ozone polluted sprawl, 1000 Friends of Oregon urges the EQC to adopt temporary regulations covering indirect source permits for parking structures. For the sake of simplicity and expediency, we recommend that the Commission adopt the current standards now in place for the Portland CBD, and apply them to the entire metropolitan region. We urge the Commission to take the first step in this direction today by directing its staff to prepare draft temporary rules that can be adopted by the Commission at an upcoming meeting.

Thank you.

EQC/DEQ BRIEFING DOCUMENT

COMBINED SEWER OVERFLOW MANAGEMENT PROGRAM

STATUS REPORT

CITY OF PORTLAND
BUREAU OF
ENVIRONMENTAL SERVICES

JULY 24, 1992

RESOLUTION No.

Establish a Clean River Funding Task Force to recommend policies and principles to govern the allocation of costs for the City of Portland's Combined Sewer Overflow (CSO) Control Program.

WHEREAS, the City of Portland has embarked upon a program to address the water quality problems associated with untreated overflows from the City's combined sewer system; and

WHEREAS, the City of Portland has entered into an agreement with the Environmental Quality Commission to control CSO's in accordance with the terms of a Stipulation and Final Order signed on August 5, 1991; and

WHEREAS, consulting engineers are working at the direction of the Bureau of Environmental Services to prepare a facilities plan which evaluates alternative methods for abating pollution attributable to CSO's; and

WHEREAS, all known or potential methods of complying with the terms of the Stipulation and Final Order are estimated to cost in excess of $500 million; and

WHEREAS, during the deliberation of the Cost Alternatives Task Force on Mid County sewer construction financing, there was considerable discussion of cost sharing equity among old and new sewer ratepayers;

WHEREAS, a financial plan will be prepared and will accompany the facilities plan when submitted by the City of Portland to the Environmental Quality Commission; and

WHEREAS, the CSO control program represents a significant financial obligation to the City and to those who will enjoy the benefits of this program, regardless of which abatement strategy is approved for implementation and the Council wishes to assure the equity of financing plans for the construction and operation of the City's sewer utility;

NOW, THEREFORE, BE IT RESOLVED that the City Council establishes a Clean River Funding Task Force with purpose, scope of work, and membership as outlined in Exhibit A. This Task Force will advise the Bureau of Environmental Services on the policies and principles to be incorporated in the financial plan which allocates costs of the CSO control program.

RESOLUTION No.

BE IT FURTHER RESOLVED that:

1. the Bureau of Environmental Services will provide staff support to the Clean River Funding Task Force;

2. the Clean River Funding Task Force will submit an initial report to the Bureau of Environmental Services, recommending a philosophy and set of values for funding Portland's CSO control program;

3. the Clean River Funding Task Force will report its draft of specific recommendations to the Bureau of Environmental Services by December 15, 1992;

4. the Clean River Funding Task Force will convene public hearings on the draft recommendations following submittal to the Bureau of Environmental Services; and

5. the Clean River Funding Task Force will submit its final recommendations, as appropriately modified to account for public testimony, to the Bureau of Environmental Services by February 1, 1993.

Adopted by the Council,

Commissioner Earl Blumenauer
MTN:JSB:lda
July 21, 1992

BARBARA CLARK
Auditor of the City of Portland
By

Deputy

EXHIBIT A

Background

The City of Portland's commitment to controlling combined sewer overflows (CSO's) is embodied in an agreement with the Oregon Environmental Quality Commission called the Stipulation and Final Order (SFO). This SFO was enacted August 5, 1991. To meet the terms of this agreement, many concurrent activities must occur. A facilities plan is being prepared to evaluate methods and costs for abating pollution attributable to CSO's. Interim control measures and "fast track" implementation opportunities are also being pursued to reduce the impact of CSO's in the near term. By July 1, 1993, the City will submit to the Environmental Quality Commission a recommended facilities plan. Accompanying the facilities plan will be a program management plan demonstrating the City's capability to implement the facilities plan, and a financial plan showing how the City intends to pay the costs of CSO control.

Task Force Purpose

A key factor in successfully implementing the program will be the financial plan. This Clean River Funding Task Force is expressly created to focus attention on the policies and principles that should govern the allocation of CSO program costs, regardless of which CSO abatement methods are selected. The product of this Task Force's deliberations is not intended to be the financial plan itself. Rather, this Task Force is being asked to prepare for the Bureau of Environmental Service's consideration the policy foundation upon which the financial plan should be constructed. Preliminary program cost estimates will likely be changed and refined as more detailed planning and design information becomes available. Nonetheless, the policies and principles governing the allocation of these costs should be rooted in fundamentally sound policy that will not change as engineering design evolves. The Bureau of Environmental Services seeks the Task Force's advice on what these fundamental cost allocation principles should be, recognizing that in any event the magnitude of such costs is expected to exceed $500 million.

Scope of Work

1. The Bureau of Environmental Services will present to the Task Force a description of the Bureau's current basis for allocating capital and operating costs. This description will address cost of service, applicable federal and state standards for financing the Bureau's programs, bond covenants, etc. In total, these factors represent the principles which guide the allocation of costs. The Task Force is to consider how the application of these principles is expected to affect the allocation of CSO program costs to the various categories of ratepayers. The Task Force is to evaluate the equity of such cost sharing among ratepayers. If in the judgment of the Task Force a more equitable allocation of costs is possible, consistent with cost of service principles and legal requirements, then such suggestions should be included in the Task Force's report. The Bureau of Environmental Services will also provide appropriate staff research and analysis to assist the Task Force. Additional resources are available to the Task Force to acquire expert advice and consultation.

2. Consistent with the Task Force's preferred cost allocation philosophy, the Task Force is to recommend specific policies and principles to be followed by the Bureau when developing its financing plan for the CSO program.

3. The Task Force's draft findings and recommendations should be presented to the Bureau of Environmental Services by December 15, 1992.

4. Following submittal of the draft recommendations to BES, the Task Force will conduct public hearings to receive comments on the proposed recommendations. Final recommendations as appropriately modified relative to public input, will be provided to BES by February 1, 1993.

Task Force Membership

Representation on this Task Force is broadly based to include input from various categories of sewer system ratepayers, impacted segments of the community, and individuals having experience in similar financial matters. Accordingly the Task Force shall be composed of the following individuals who have consented to serve in this capacity:

Gail Achterman, Chair
Allyson Aranoff
Helen Barney
Richard Biggs
Shelly Faigle
Kevin Kiely
James May
Richard Meyer
William Naito
David Pietka
Betty Roberts
Joan Smith

CONTENTS

SECTION 1

SECTION 1

RECAP - WHERE WE WERE ONE YEAR AGO

ONE YEAR AGO

- Nine months into facilities planning
- Negotiating SFO
- Third party lawsuit
- Extent of CSO problem unknown

SFO REQUIREMENTS

Level of CSO control

- 1 in 5 year winter storm
- 1 in 10 year summer storm
- 99+% reduction: from 700 to 3 events in 10 years

Implementation

- Compliance by 2011 (20 year schedule)
- 3 separate phases
- Evaluate 15 year compliance
- 34 milestones

Interim work

- Interim control measures
- Screenings and floatables eliminated - Phase 1 by 1996 (Columbia Slough)
- Dry weather overflow SFO

SECTION 2

SECTION 2

WHAT HAVE WE ACCOMPLISHED IN THE PAST YEAR?

ACCOMPLISHMENTS

- Met or exceeded all 18 SFO milestones
- Implemented River Alert program
- Conducted 15 CSO small group meetings
- Conducted one city-wide CSO meeting
- Distributed three CSO newsletters and numerous other public education materials

ACCOMPLISHMENTS

- **Four DEQ information/status meetings**
- **Implemented long-term water quality monitoring program**
- **Completed 23 facilities planning technical memoranda**

BUREAU OF ENVIRONMENTAL SERVICES
SEWERAGE SYSTEM GROUP

REQUIREMENTS oF SFO No. WQ-NWR-91-75 and NPDES PERMIT No. 100807

DUE DATE	ITEM	REMARKS, Maint Eng. involvement	LEAD PERSON	STATUS
weekly	Item 3 Attachment 1 Inspect all diversion structures (clean as necessary; defects to be repaired within 14 working days; report to DEQ all blockages that result in dry weather discharges; maintain record of diversion structure performance	Inspections by maint, data reviewed by Maint Eng. Inspections scheduled to be by private contractor beginning 7/1/92. W.O. for repairs or modifications prepared under direction of Maint Eng. Monthly reports of CSO overflow by Maint Eng.	Myra	Ongoing
Ongoing	Item 1(e)(2) Schedule A NPDES Permit Maximize in-line storage and maximize flow to the treatment plant by maintaining diversion structure dams at their current heights or greater	W.O. for dam changes at direction of Maint Eng.	Myra	Ongoing
8/91	Item 1 Attachment 1 Clean and/or flush sewers in three demonstration sub-basins.	Cleaning by maintenance in basins 26, 55, and 60. Deposition samples collected by Eric Machero and tested by private lab. Process to be repeated 8/92.	Myra	Milestone achieved
9/1/91	Item 2 Attachment 1 Submit draft sampling program for measuring the impact of intensified street cleaning in three sub-basins	Sampling program prepared by Roger Sutherland of OTAK	Lee	Milestone achieved
30 days from receipt of DEQ comments	Item 2 Attachment 1 Submit final approvable sampling plan for street cleaning demonstration project.	Final plan submitted to DEQ and approved. Implimented by Roger Sutherland.	Lee	Milestone achieved
9/1/91	Item 9(a)(1) Submit draft scope of work for facilities plan	Scope of work being implemented through a contract with CH2M Hill	Lee	Milestone achieved

SFO No. WQ-NWR-91-75 and NPDES PERNIT No.100807

DUE DATE	ITEM	REMARKS, Maint Eng involvement	LEAD PERSON	STATUS
30 days from receipt of DEQ comments	Item 9(a)(1) Submit final approvable scope of work for facilities plan	Final scope of work submitted to DEQ and approved.	Lee	Milestone achieved
9/1/91	Item 8 Attachment 1 Install signs at each CSO location	Temporary Signs have been installed at CSO outfalls. Permanent signs will be installed as part of the public notification process.	Lee	Milestone achieved
9/91 and monthly until 12/92 (or beyond)	Item 2 Attachment 1 Intensified street cleaning in three demonstration sub-basins	Cleaning by maint in basins 27, 38, and 50. Sampling program implemented by Roger Sutherland.	Myra - cleaning Lee - sampling	Milestone achieved
9/1/91	Item 9(a)(20) Submit progress report and report annually thereafter	Review by Maint Eng	Lee	Milestone achieved
10/1/91	Item 9 (a)(2) Submit draft scope of work for interim control measures study	Review by Maint Eng	Lee	Milestone achieved
30 days from receipt of DEQ comments	Item 9 (a)(3) Submit final approvable scope of work for interim control measures study	Review by Maint Eng	Lee	Milestone achieved
10/1/91	Item 10 Attachment 1 Submit draft study plan for evaluating the presence of syringes in CSO discharges.		Lee	Milestone achieved
10/31/91	Item 4 Attachment 1 Modify diversion structures SW55, WC58, SJ31, E5, E7, and EC7 to assure proper hydraulic performance	Diversion modifications have been completed, construction by Maint.	Myra	Milestone achieved

SFO No. WQ-NWR-91-75 and NPDES PERNIT No.100807

DUE DATE	ITEM	REMARKS, Maint Eng involvement	LEAD PERSON	STATUS
12/1/91	Item 5 Attachment 1 Design and install two innovative "low technology" screening methods.	Screens have been fabricated and installed by, Maintenance Bureau, in the structure at outfall #65 (NE 13th Ave.) and diversion MH SJ25 N Edison and Leavitt). Maintenance will be by Maintenance Bureau.	Myra	Milestone achieved
12/31/91	Item 6 Schedule C NPDES Permit Develop a public notification process to inform citizens of when and where untreated sewage discharges occur	The plan for a public Notification process has been submitted to DEQ for approval. The plan calls for a telephone Hot Line (823-2479) which has been implemented. Recorded messages triggered by rain gage data provide warning for 48 hrs after event. The plan also calls for improved signage at the outfalls, along with informational signs and warning systems to be provided at public access points along the receiving waters.	Lee	Milestones achieved
12/31/91	Item 5 Schedule C NPDES Peremit Submit a list of all known locations where raw sewage could be discharged directly to state waters (including but not limited to CSO and pump station bypasses)	List prepared by Maint Eng.	Myra	Milestone achieved
4/17/92	Item 10 Attachment 1 Submit Syringe Study to DEQ		Lee	Milestone achieved
8/1/92	Item 6 Attachment 1 Evaluate feasibility of converting each significant industrial user with batch discharges to dry weather only discharges		Baumgartner	
8/92	Item 1 Attachment 1 Clean and/or flush sewers in three demonstration sub-basins.	Cleaning by Maint.	Myra	
10/31/92	Item 9 Attachment 1 Installation of 17 additional "event monitors" at diversion structures (with one-hour response time to alarms, and reporting of all dry weather discharges)	Overflow detection devices being designed and tested by the Environmental Monitoring Group. Test sight is at SE 10th and Stark. Sites for the additional monitors are being selected. Maint Eng assisting in the selection process.	Lee	

SFO No. WQ-NWR-91-75 and NPDES PERNIT No.100807

DUE DATE	ITEM	REMARKS, Maint Eng involvement	LEAD PERSON	STATUS
12/31/92	Item 9.(a)(4) Submit the portion of the facilities plan that characterizes CSOs	Review by Maint Eng.	Lee	
12/31/92	Item 9.(a)(5) Submit draft interim control measures study			
30 days from receipt of DEQ comments	Item 9.(a)(6) Submit final approvable interim control measures study	Review by Maint Eng.	Lee	
6/1/93	Item 9.(a)(8) Submit draft facilities plan	Review by Maint Eng.	Lee	
6 months from receipt of DEQ comments	Item 9.(a)(9) Submit final approvable facilities plan.	Review by Maint Eng.	Lee	
3/31/95	Item 1.(e)(4) Schedule A NPDES Permit Eliminate dry weather CSO discharges	Design input and review by Maint Eng.	Myra	
10/1/96	Item 9.(a)(10) Submit final approvable facilities plan. Remove all large solids and floatables from discharges to Columbia Slough		Lee	
12/1/97	Item 9.(a)(11) Submit final engineering plans & specs for elimination of discharge violations at 20 CSOs (including all CSOs to Slough)	Two outfalls are currently slated for elimination as CSO outfalls by separation and/or removal of diversions; #8, SW Clay st. and #8A SW Jefferson st..		
5/1/98	Item 9.(a)(12) Begin construction of corrections at the 20 CSOs as per approved plans and specs.			
12/1/01	Item 9.(a)(13) Eliminate discharge violations at the 20 CSOs			

SFO No. WQ-NWR-91-75 and NPDES PERNIT No.100807

DUE DATE	ITEM	REMARKS, Maint Eng involvement	LEAD PERSON	STATUS
12/1/01	Item 9.(a)(14) Submit final engineering plans & specs for elimination of discharge violations at 16 additional CSOs			
12/1/02	Item 9.(d) Demonstrate (my means approved by DEQ) that the initial 20 CSOs are in compliance with applicable waterquality standards			
5/1/03	Item 9.(a)(15) Begin construction of corrections at 16 additional CSOs per approved plans and specs.			
12/1/06	Item 9.(a)(16) Eliminate discharge violations at 16 additional CSOs			
12/1/06	Item 9.(a)(17) Submit final engineering plans & specs for elimination of discharge violations at all remaining CSOs			
12/1/07	Item 9.(d) Demonstrate (by means approved by DEQ) that the 16 additional CSOs are in compliance with applicable water quality standards			
5/1/08	Item 9.(a)(18) Begin construction of plans & specs for corrections at all remaining CSOs			
12/1/11	Item 9.(a)(19) Eliminate discharge violations at all remaining CSOs			
12/1/12	Item 9.(d) Demonstrate (by means approved by DEQ) that all CSOs are in compliance with applicable water quality standards			

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

1120 S.W. Fifth Room 400 Portland, Oregon 97204 . (503) 796-7740 FAX: (503) 796-6995

December 31, 1991

Ms. Lydia Taylor
DEQ
811 SW 6th Avenue
Portland, OR 97204

Dear Ms. Taylor:

The National Pollutant Discharge Elimination System Waste Discharge Permit, No. 100807 issued to the City of Portland on August 8, 1991 requires the City submit a written public notification process. The requirement is outlined in Schedule C, Compliance, Schedules and Conditions, Section 6.

The section reads:

By December 31, 1991, the permittee shall develop a public notification process to inform citizens of when and where untreated sewage discharges occur. The process shall be submitted in written form to the Department for approval. The process shall be implemented upon written approval from the Department. The process shall include:

a. A mechanism to alert people using the Willamette River and Columbia Slough of the occurrence of untreated sewage discharges; and
b. A system to determine the extent and duration of condition that are potentially unhealthful for users of the Willamette River and Columbia Slough due to untreated sewage discharges.

Attached is the public notification process outlined by the Bureau of Environmental Services for your review and approval. Please note that the signs and flag design attachments are indicated as a draft. This portion of the program will be considered draft until the City has had the opportunity to receive comment from environmental groups, other governmental agencies and a variety of river user groups.

Sincerely yours,

Mary T. Nolan

Mary T. Nolan
Bureau Director

PUBLIC NOTIFICATION PROCESS SUBMITTAL

NPDES
PERMIT NUMBER: 100807
FILE NUMBER: 70725

SCHEDULE C
SECTION 6

DECEMBER 31, 1991
ENVIRONMENTAL SERVICES
CITY OF PORTLAND

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
1120 S.W. Fifth Room 400 Portland, Oregon 97204 . (503) 796-7740 FAX: (503) 796-6995

City of Portland
Bureau of Environmental Services
Public notification process for untreated sewage discharges.
December 31, 1991

Goal

Create broad citizen awareness of combined sewer overflow events, impacts of overflows on public waterways, and how Portland's combined sewer system must be reconfigured to reduce combined sewer overflows.

Objective

Develop an active and multifaceted communication network that effectively issues warnings of combined sewer overflow occurrences to Portland residents and river users.

Strategy

Implement the RIVER ALERT combined sewer overflow warning program fully by July 1, 1992.

RIVER ALERT
Program Components

I. Interpretive signage and flag system at public parks and boat ramps.
II. Notification procedures
III. Create a private-public partnership
IV. Interagency alliances
V. Develop a consistent and comprehensive signage design to maximize all signage elements.
VI. Combined Sewer Outfall Signage
VII. Dry weather discharge signage.
VIII. Media announcements
IX. Percent for Art Participation

I. Interpretive signage and flag system at public parks and boat ramps.

Interpretive signage will be placed at public parks and boat ramps along the Willamette River and Columbia Slough. The interpretive signage will be referred to as RIVER ALERT Stations. Each station will explain how Portland's sewer system works, how and why combined sewers overflow, and what the City is doing to eliminate water quality problems caused by combined sewer overflows. This signage will explain the use of a specially designed Combined Sewer Overflow (CSO) flag as an indicator of a combined sewer overflow. A conceptual prototype of the RIVER ALERT Station interpretive signage is located in Attachment A.

The interpretive signs will be designed to display the combined sewer overflow notification flag. The flag will be displayed when a sanitary sewage overflow is verified and also whenever rainfall in a basin or sub-basin exceeds a level that can be expected to cause the combined sewers to overflow.

II. Notification procedures

The City's computerized rainfall and sewer monitoring network—the HYDRA system—issues an alarm condition when the monitors indicate a rainfall amount that is likely to cause an overflow. Current information indicates that this threshold is rainfall greater than two tenths of an inch over a two-hour period. This level may be revised up or down as more informaiton becomes available or as modifications to the existing system add effective storage capacity. When this alarm goes off the RIVER ALERT phone message is switched by the treatment plant operator to indicate that there has been a combined sewer overflow.

The operator in charge at the treatment plant will then telephone the RIVER ALERT contractor. This contractor will be on call 24 hours a day, 7 days a week from June 1 to Oct. 31. The contractor will then manually display flags at every River Alert Station along the Willamette River and

Columbia Slough. Current information suggests that flags should remain in place for 48 hours after the rainfall levels drop below thresholds. Recommended RIVER ALERT Station locations are listed in Attachment B.

The River Alert phone number will be in operation 24 hours a day, 365 days a year. The flagging system will operate from June 1 to Oct 31. From Nov. 1 to May 31 the River Alert phone system will be in use. The flagging system will not. A major media advisory will be issued in late October announcing the winter status and reminders will be sent to the major media outlets monthly.

The city's HYDRA system continuously monitors an extensive rainfall gauge network as well as water surface elevations within the sewer system. The city currently has no reliable way to directly monitor the frequency, duration, or volume of overflows discharging to the river or to measure the water quality impacts resulting from the overflows.

The city currently monitors rainfall accumulations and makes a determination that wet weather overflows are occurring when the rainfall gauges indicate that more than two tenths of an inch of rain has fallen within any two hour period. The city then initiates the public notification process.

Since the relationship between this amount of rainfall and overflows has not been clearly established, the city will be refining its procedures for determining when overflows are occurring as more information becomes available.

The city is developing sophisticated computer models of the combined sewer system and the receiving waters. This will enable the City to estimate the amount of combined sewage that overflows during a storm event and the resulting impacts on the water. These computer models also will be used to estimate the number of hours that water contact should be avoided after a particular storm event.

In addition to the modeling predictions, the city is required by the SFO to install 30 monitoring stations that will indicate when overflows are occurring. The data collected from these monitoring stations will be used to validate the combined sewer system models.

The city is currently assuming that water quality impacts from wet weather overflows continue 48 hours after the storm event ends. This duration was based on conservative assumptions, but may not accurately reflect the actual impacts.

With the continued development of the computer models and the installation of the monitoring stations, the city's capability to determine when wet weather overflows are occurring will be improved greatly. As more information is developed on the impacts of combined sewer overflows on receiving waters, the number of hours that the alert is maintained will be adjusted to more accurately reflect the actual duration of CSO impacts on the receiving water.

The city is initiating a water quality monitoring program on the Willamette River and the Columbia Slough this winter. We will be reviewing that monitoring program with DEQ staff in January, 1992. The data from the monitoring program will be used to validate the receiving water model

predictions. If significant discrepancies between model predictions and actual conditions are noted, the city will initiate a more intense water quality sampling program to better estimate the impacts of untreated sewage on water quality.

III. Create a private-public partnership

The City is working to create a private-public partnership to open a dialogue with the community and to provide for RIVER ALERT Stations on private property that is located in high-traffic waterfront service locations such as marinas, fuel stations and boat launches. The partnership will provide the opportunity for the City to receive information from the public, river-use clubs, environmental groups, and river businesses in order to update and improve the RIVER ALERT program.

IV. Interagency alliances

Form interagency and intergovernmental alliances to enable full implementation of the RIVER ALERT station signage program in key areas not under Environmental Services administration. These alliances include:

- City of Portland Parks and Recreation—Develop and review the RIVER ALERT Stations at public access points in City parks. Key locations are Cathedral Park, Kelly Point Park, Sellwood Park, Willamette Park and Waterfront Park.
- City of Portland Fire Bureau—Review of the RIVER ALERT Station for placement at the Hawthorne Street waterfront station.
- Port of Portland—Review of the RIVER ALERT Station for placement at the Swan Island boat ramp.
- Multnomah County—Explore the development of flagging signage for all primary Willamette River bridges.
- City of Milwaukie—Coordinate a RIVER ALERT Station for the Milwaukie public boat launch and adjacent park.

V. Develop a consistent and comprehensive signage design to maximize all signage elements.

One key to the RIVER ALERT program is a bright, simple and distinctive graphics scheme that can effectively communicate the Bureau's message at a variety of locations. The RIVER ALERT CSO flag should be easily visible and identifiable from a distance—for instance, from a boat in the river passing by a RIVER ALERT Station. The use of a clearly visible color and simple design will enhance recognition. (Possible flag design in Appendix C.)

When fully implemented the RIVER ALERT program will include:

- Combined sewer overflow event warning signage—the RIVER ALERT Stations with a flagging system.
- Media announcements of CSOs caused by rainfall from June 1 to Oct. 31.

- Possible media placement of the CSO flag graphic on television weather reports and the Oregonian weather page.
- Combined sewer outfall signage with RIVER ALERT phone number.
- RIVER ALERT Station media kick-off to unveil the flag and announce the private-public partnership.

VI. Combined Sewer Outfall Signage

The City of Portland Bureau of Environment Services now has signs at the 53 combined sewer outfall pipes listed in Attachment D. The signs are sized at 18 x 24 inches. The bureau has determined the signs at outfall pipes should be larger. The new signs will be 48 x 48 inches and the draft text for the signage is in Attachment E. In areas where the river or slough is accessible by land two signs will be placed at each outfall pipe to ensure that boaters and river users approaching by land will receive warning of the pipe location. The new outfall pipe signs will be in place by July 1, 1992.

Each outfall will be numbered in order to provide an easier way for citizens to report the location of any dry weather overflows (see section VII). The RIVER ALERT telephone number will be included on the sign. Most of the signage will be logo driven which will reduce the need for language translations in most areas. Locations of combined sewer outfall signs are displayed on the map in Attachment D.

VII. Dry weather discharge signage.

Dry weather discharges of untreated sewage typically result from blockage of diversion structures within the combined sewer system. Increased maintenance undertaken by the City has reduced the potential for overflows due to blockage. There have also been infrequent dry weather overflows due to extreme sewage flows that result from unusual industrial discharges.

Dry weather discharges are typically low volume discharges that have receiving water impacts in the immediate vicinity of one outfall. In most cases, the time required to assess the impact of a dry weather discharges and to notify the public will exceed the duration of the receiving water impacts that result from the discharge.

Where a dry weather discharge is of a large volume and is in the vicinity of high recreational use, the city will initiate notification procedures to warn the public to avoid contact with the water.

When dry weather discharges occur, the overflowing outfall site will be marked with the specially-designed buoy topped with the CSO warning flag.

A standard reporting form will be developed for Bureau employees to accept dry weather discharge reports from the public. The report will include the name of the caller, the location of the overflow, particulars about the type of overflow, time of day, etc. When a call is reported a set of standard procedures for investigating the overflow will be followed.

These standard procedures include:

Dispatching the City of Portland Maintenance Bureau emergency sewer crew to the site to investigate the overflow;
If a sanitary sewage overflow is verified, a specially designed buoy, with the CSO warning flag attached, will be set to float in the river near the overflowing pipe;
The buoy will stay in place for 48 hours after confirmation that the overflow problem has been solved.

VIII. Media announcements

The Bureau will send out a media advisory each time the combined system overflows due to heavy rains from June 1 to Oct. 31. This will be standard procedure and the announcement will go to the four major television stations, four major radio stations, the Associated Press office and the Oregonian.

The Bureau will also be working with local television stations to have the RIVER ALERT phone number and flag symbol become a component in the daily weather forecasts. This will also be done with the Oregonian for its weather page.

The media advisory will serve as notification that the number and flag be included in that day's weather forecast.

The Bureau will develop a radio Public Service Announcement campaign to be launched this summer as a way to inform the public about combined sewer overflows, including an element to familiarize the public with the term CSO and to announce the new RIVER ALERT stations and flagging program.

IX. Percent for Art Participation

The Bureau currently has a voluntary Percent for Art program for selected public works projects and is exploring the possibilities for Percent for Art participation in the CSO Public Notification Plan with the Metropolitan Arts Commission. Potential RIVER ALERT Percent for Art projects may include artists' ideas for a mechanical flagging system, a solar-powered (photovoltaic), lighted notification system, and other methods that can incorporate public art into the notification process.

River Alert Signs
Types and Locations

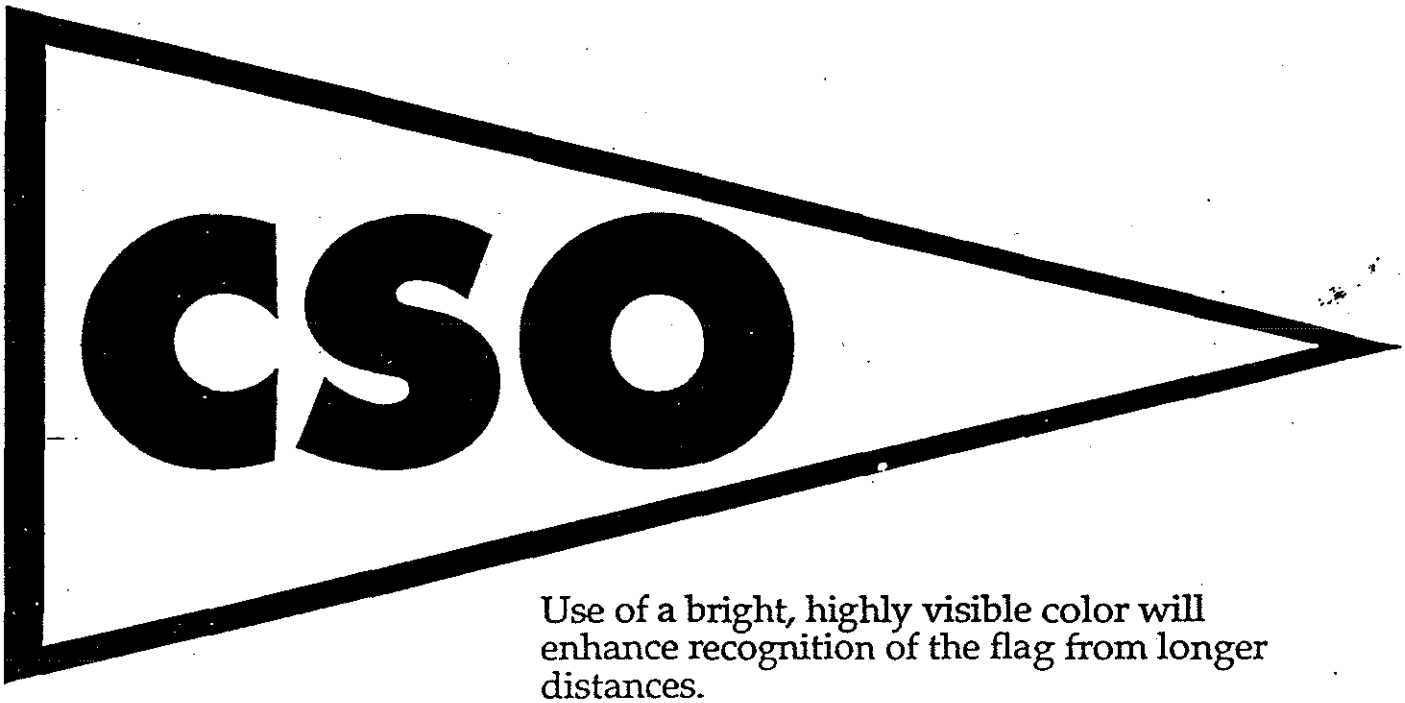
Attachment B

Signs identified with an "A" will receive the interpretive signage with the draft text identified in Attachment A. Sign size will be approximately 48" x 96" sign. When combined sewers overflow the CSO flag will be attached to this sign.

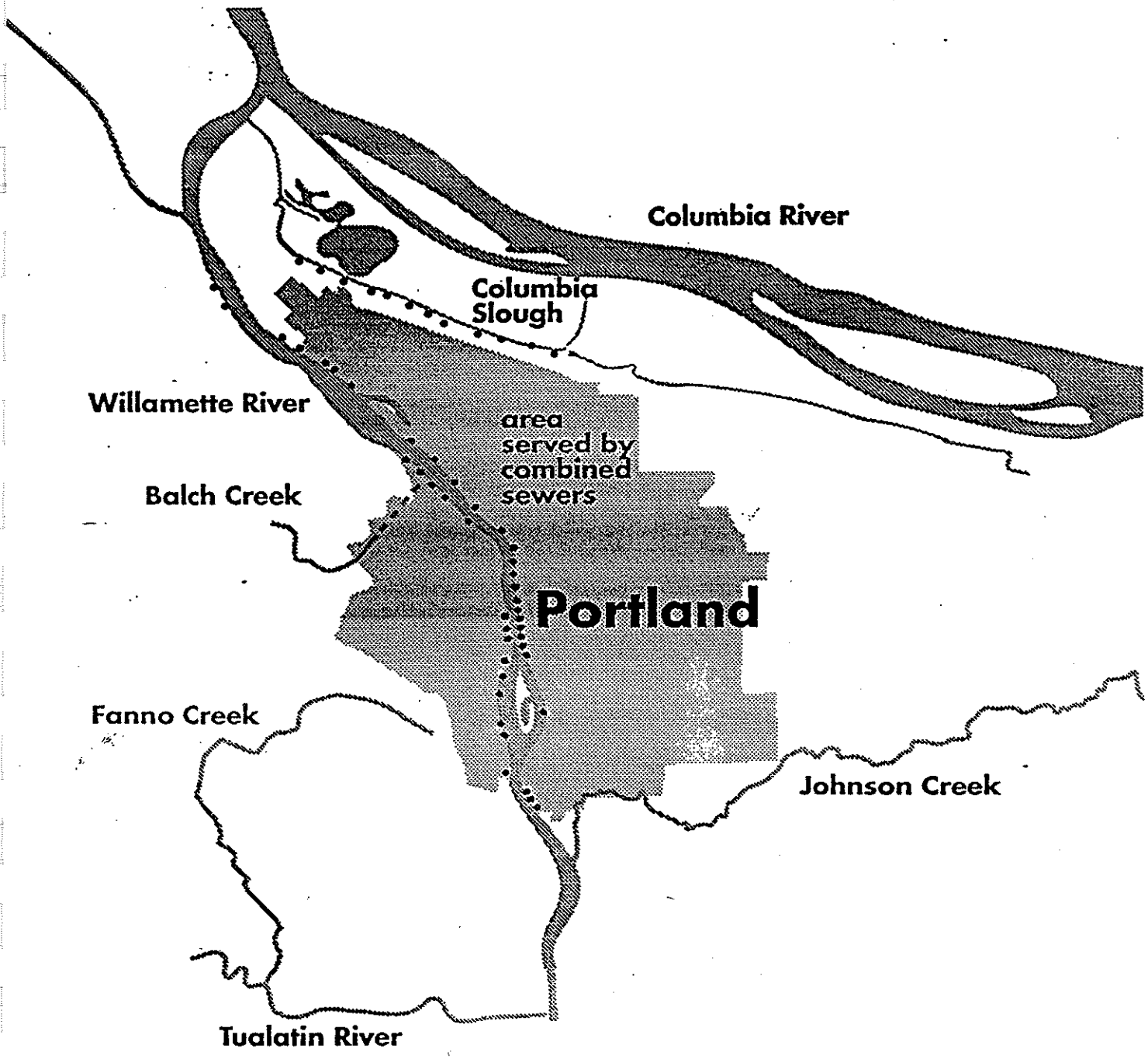
Signs identified with a "B" will receive a smaller version of sign "A". It will be in poster form and used for bulletin boards.

Those signs identified with a "C" will receive a 48"x 48" sign. This sign will have very little text and will be the flag holder sign. These signs will be on pilings and at locations visible for boaters and river users. When combined sewers overflow the CSO flag will be attached to this sign.

1. Milwaukie Boat Ramp "A"
2. Waverly Yacht Club "A"
   This sign will be located near the gas pumps at the club dock.
3. Portland Rowing Club "B"
   This sign will be located on the club shed located on the walkway.
4. Portland Rowing Club piling "C"
5. Sellwood Riverfront Park "A"
6. Staff Jennings "A"
   This sign will be located near the gas pumps on the dock.
7. Oaks Park "A"
8. Oregon Yacht Club "B"
9. Willamette Park "A" and "C"
10. Willamette Sailing Club "C"
    This sign would be located on a piling.
11. Johns Landing Condos "A" located on the walkway and a "C" sign located on a piling.
12. The Landing (near Cals Restaurant) "C"
13. OMSI site (This would be a future site for "A" and "C" signage
14. Riverplace / Cornerstone Development "A" and "C" signage
15. Waterfront Park in three locations (south, central and north) for "A" and "C" signage.
16. Portland Fire Bureau "C" signage
17. McCormick Pier condos "B" signage for condo bulletin board.
18. River Queen Restaurant "A" signage.
19. Station L Rowing club "B" signage
20. Swan Island (on beach near Shennanigans) "A" and "C" signage
21. Swan Island Boat Ramp (in the Swan Island Lagoon) "A" signage (2 signs/one at the Boat Ramp and one at the Beach area)
22. Cathedral Park "A" signage (2 signs/one at the Boat Ramp and one at the park entrance)
23. Multnomah County River Patrol "C"
24. Sign at the Slough entrance "C"
25. Kelly Point Park "A" and "C" signage.
26. Ramsey Lake Wetlands "A"
27. North Portland Road "A"
28. Denver Avenue "A"
29. Thirteenth Avenue "A"



Use of a bright, highly visible color will enhance recognition of the flag from longer distances.


Columbia River
Columbia Slough
Willamette River
area served by combined sewers
Balch Creek
Portland
Fanno Creek
Johnson Creek
Tualatin River

Portland CSO Outfalls

Willamette River

(West Shore)

No.	Location
1	SW California
1B	SW Taylors Ferry Rd
3	SW Carolina Street
4	SW Seymour St
5	SW Lowell St
6	SW Woods St
7	SW Sheridan St
8	SW Clay St
8A	SW Jefferson St
11	NW 9th Ave (Tanner Creek)
12	NW 14th Ave
13	NW 15th Ave
15	NW Nicolai St
17	NW 29th Ave (Balch Gulch)
23	Glen Harbor
24	NW 110th Ave

(East Shore)

No.	Location
26	SE Clatsop St
26A	Garthwick (Waverly)
27	SE Umatilla St
28	SE Insley St
29	SE Woodward St
30	SE Taggart St
31	SE Division Pl
32	SE Harrison St
33	SE Clay St
34	SE Hawthorne Blvd
35	SE Yamhill St
36	SE Alder St
37	SE Stark St
38	SE Oak St
40	NE Glisan St
41	NE Holladay St
43	N Wheeler Pl
4A	N Randolph Ave
46	N Beech St
47	N Riverside (Swan Island)
48	N Van Houten Pl
49	N Van Buren Ave
50	N Salem Ave
51-52	Cathedral Park
53	N Reno Ave

Columbia Slough

(Only on South Shore)

No.	Location
54	N James St
55	N Oswego Ave
56	N Oregonian Ave
57	N Fiske Ave
58	N Chautauqua Pl
59	N Bayard Ave
60	N Delaware Ave
61	N Fenwick Ave
62-62A	N Albina Ave
63	N Vancouver Ave
64	N Willis Blvd
65	N 13th Ave

approximately 48"X48"

WARNING

Combined Sewer Outfall

Avoid water contact in this area during & after rainstorms, or when the CSO warning flag is displayed at a River Alert station

FOR MORE INFORMATION, CALL RIVER ALERT 823-2479

CSO outfall #030

Clean River Program
Bureau of Environmental Services
City of Portland

Clean Rivers

Combined Sewer Overflows

Portland's Next Environmental Challenge

In much of the Portland area, storm water runoff is collected in the same pipes that receive sanitary sewage from buildings. And frequently—nearly every time it rains—some of these combined sewer pipes overflow into the Willamette River or the Columbia Slough.

When heavy rains bring water levels in combined sewer pipes to a certain level, the excess water—and all the pollutants it carries—overflows into local rivers before reaching the treatment plant. This means that raw sewage goes directly into the rivers nearly 170 times every year; sometimes very small amounts, sometimes thousands of gallons.

Some Portland sewer pipes have been in place for more than 100 years. The treatment plant and the overflow system was built in the fifties. They have served the city well. But today the way the system works is unacceptable.

The City of Portland is working on remedies to reduce and eliminate combined sewer overflows—CSOs.

History

Shortly after the people of Stumptown took the tree stumps out of the streets, they recognized the stark truth about their community: Unless they wanted to wade in mud up to their knees, they needed a way to drain water from the city streets.

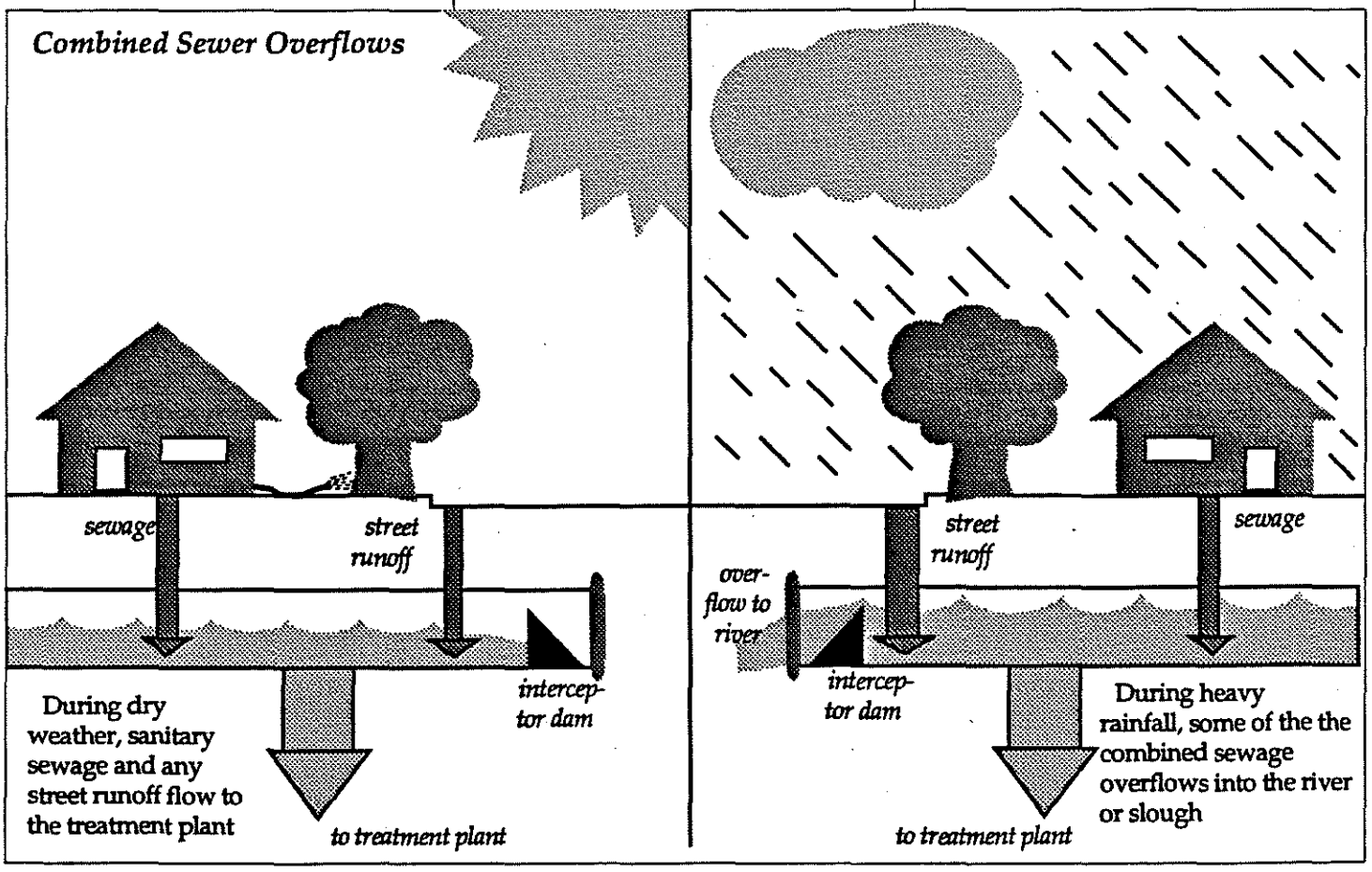
Large wooden pipes collected rain water (and the ever-present horse droppings) from the streets, along with sewage from homes and shops. The pipes drained directly into the city's rivers.

As the city grew, so did the number and size of sewer pipes, and the variety of material that went into the river. Slaughter houses, pulp and paper mills and other industries added their wastes, which were carried through the concrete and brick sewers that replaced the original wooden pipes.

By the 1930s, the Willamette River was a disgrace. A successful initiative drive by the people of Oregon required reduced water pollution and created a state sanitary authority. The City of Portland was the first to take up the challenge of protecting its river by creating a sewage treatment system.

In the forties, engineers designed interceptor sewers—pipes that run parallel to the Willamette River and the Columbia Slough. These pipes were built to collect material from the combined sewers criss-crossing our neighborhoods and divert sewage to the new North Portland treatment plant.

City engineers planned for rain. They created a system that would accommodate three times as much water as



normally flows through the system in dry weather. But they recognized that, at times, even this would not be adequate.

It was not a question of building larger pipes: the system's limiting factor would be the cost of treatment. Providing treatment for all of the storm water entering the sewer system would have been prohibitively expensive.

Rather than risk allowing sewage to back up into streets, basements and yards, the designers left the original pipes leading to the rivers in place. In the event that storm water filled the sewers, the sewage overflow would find its way into the rivers, rather than into people's homes.

More people, more concrete, more storm water

After 1960, as the City of Portland built new sewers they separated the storm water collectors from the sanitary sewer pipes. But this did not prevent development from having an impact on the existing combined sewers.

As the remaining open land was paved over, the volume of rain water finding its way into sewers increased. Where once precipitation landed on absorbent soil, it now rolls off buildings, paved roads, parking lots and driveways into the sewer system.

The volume of water collecting in the sewers could never have been anticipated by the earliest design engineers. Given Portland's growth and increased urbanization, it's little wonder that the sewers overflow regularly.

Why Are We Worrying About it Now?

For many years, Oregonians shunned the Willamette River as a giant waste receptacle. Few viewed the river as a resource to enjoy or protect.

Slowly, the people of the state began to reclaim their river. Little by little, they chipped away at the major pollution sources. They built sewage treatment plants, reducing the volume of untreated sewage introduced into the river by over 90 percent. They worked with the pulp and paper industry to cut back the amount of wastes discharged to the river. Canneries and slaughterhouses stopped using the river as a waste dump.

The tremendous investment in money and energy paid off. The Willamette River became a national model for eliminating water pollution.

And after the river's major clean-up during the 1970s, people's expectations changed. The momentum for improvement continued. We began to see the river as a great source of recreation, an attraction for economic development, and a tremendous natural resource. We began to expect the highest water quality standards, to protect fish, wildlife, and human health and safety.

The next step for Portland to take toward improving water quality is to alleviate the CSO problem. That will keep untreated sewage from overflowing into our rivers and streams.

What's Next?

The City of Portland is committed to eliminating CSOs over the next twenty years. It won't be easy or quick, and it will be expensive, but it's important. Some options for solving the problem include:

- Separate the sanitary sewers from storm water sewers;
- Build large storage tanks to retain high volumes of wastewater until it can be accepted by a treatment plant;
- Build wetlands to provide natural treatment for overflow wastewater;
- Build new facilities to provide some treatment for overflow wastewater prior to its release into rivers;
- Reduce storm water reaching sewers by building sumps —holding areas built into the ground that allow rain water to filter into the soil.

The city's Bureau of Environmental Services already has begun projects to reduce CSO's. In the past five years, the Bureau has spent $32 million to improve sewer capacity, separate combined sewers in particular locations, and remove barriers within the sewers that may cause overflows.

The CSO elimination program will continue during the next twenty years. The completed project will cost between $500 million and $1 billion.

What Can I Do to Help?

The CSO problem is one environmental problem that must be resolved by a major investment of public funds. But individuals can help the City of Portland by:

- Becoming aware of the CSO issue, its history and its implications.
- Avoiding use of household chemicals that can pollute waterways. They may end up in a river before they reach a treatment plant.
- Never flushing hazardous chemicals down toilets, sinks or storm drains. They may flow into a river during a storm, and they have the potential to damage the biological operations of the treatment plant.
- Supporting the City of Portland's efforts to eliminate CSOs.

For more information, contact:

ENVIRONMENTAL SERVICES
CITY OF PORTLAND
1120 SW 5th Avenue, Room 400
Portland, Oregon 97204
796-7740

May 7, 1992

CSO PUBLIC INVOLVEMENT

PROGRESS REPORT

CONCEPT AND IMPLEMENTATION

1. Community Leadership Meetings

A series of meetings will be set up with community leaders to share technical information and learn about their viewpoints and concerns. The first set, scheduled between mid February and late April, described the problem in general as well as possible solutions. The second set (to be scheduled in September/October) will focus on specific solutions under consideration and cost issues.

Multnomah County Board

On February 24 Nolan sent a memo to Board Chair requesting time at an Informal Meeting on March 17or March 24. Offer was declined on March 9

Drainage Districts Board/Staff

Meeting was held on March 31 at 7 p.m.. Letter was sent to all Board members and staff. Attendance: 4

Government Agency Staffs

Meeting was held on March 12 from 2:30-4 in Portland Building. Invititations were sent to E Team members as well as managers and staff of City Bureaus, Metro, Port and ODOT. Attendance: 25-30

Major Sewer System Users/Customers

Meeting was held on April 16 from 2:30-4. Invitation was sent to businesses permitted by Source Control and large commercial customers. (roughly 400) Attendance: 7

Neighborhood Organization Leaders

Meeting was held on March 10 from 9:30-10:15 a.m. at Portland Cable Access on Martin Luther King Blvd. with District and City Coordinators Attendance: 11

League of Women Voters
Meeting was held on February 11
Attendance: 40-50

City Club Energy and Environment Committee
Possible meeting dates are under discussion with Committee Chair, Doug MacCourt

Interest Groups (2)
Meetings were held on April 15 and 16 from 7:30-9 p.m. Invitations were sent to roughly 400 business associations, fishing organizations, environmental groups, friends groups. Attendance: 5

2. City Wide Public Meetings

In order to reach the general interested public, several public meetings will be organized. The first one focused on the problem as well as possible solutions. The second one in the fall will focus on specific solutions under consideration and cost issues.

Spring Public Meeting
Meeting was held on May 6 from 7-9 p.m.. Invitation was sent to all neighborhood associations, Confluence participants and interested citizens on the Bureau mailing list (roughly 5000). Meeting announcements were in the Oregonian and Willamette Week. Attendance: 15

3. Evaluation of the Concept and Implementation

At the conclusion of the first set of meetings relevant BES staff will meet to evaluate and critique the concept and implementation as well as to brainstorm ideas for maximizing contact with members of the community between May 1992 and July 1993.

4. Other Requested Meetings

The CSO presentation has been requested by/presented to other groups.

N. Portland Rotary	January 14
Society for Professional Engineers	March 10

Montevilla Kiwanis	March 24
BES Budget Advisory Committee	March 25
DEQ (first monthly progress report)	March 31, 8-10 a.m.
City Council Meeting	April 22
120 Day Club	May 13
ECHO Business Group	May 14

Staff will continue to respond to these requests for presentations.

PORTLAND COMBINED SEWER OVERFLOWS: PROBLEM UNDERSTANDING

DEPARTMENT OF ENVIRONMENTAL QUALITY
MARCH 31, 1992
8:00 A.M. TO 10:00 A.M.

AGENDA

1. Introduction
    - Meeting purpose
    - Future meeting topics
    - Program progress and update
2. Summary of existing water quality
3. Understanding the problem: the tools
    - Modeling overview
    - Hydraulics
        - SWMM models
        - CSO behavior
    - Pollutant generation
        - SIMPCSO and SIMPTM models
        - Pollutant loadings
    - Receiving water quality
        - Columbia Slough model
        - Willamette River models
        - Forecast
4. Solutions to the problem: probable technologies
    - Stormwater inflow reduction
    - Pollutant source reduction
    - Storage
    - Treatment technologies
5. Conclusions and discussion

INFORMATION MEETING NO. 2

PORTLAND CSO MANAGEMENT PLAN -- STATUS

DEQ/BES

MAY 19, 1992 -- 1:00 TO 3:00 P.M.

1. SFO COMPLIANCE STATUS REPORT

2. MODELING RESULTS UPDATE -- WHAT ADDITIONAL HAVE WE LEARNED?

3. TECHNOLOGY APPLICATION -- WHAT'S APPROPRIATE WHEN AND WHERE?

4. HOW DO WE GET THE "RIGHT" COMBINATION OF TECHNOLOGIES?

5. BASIN IMPROVEMENTS -- SOLVING BASEMENT FLOODING AND CSO's

6. CONCEPTUAL SYSTEM CONFIGURATION OPTIONS -- WHERE AND HOW CAN FACILITIES BE SITED?

7. FUTURE MEETINGS -- WATER QUALITY BENEFITS OF DIFFERENT SYSTEM OPTIONS

River Alert

The City of Portland's Combined Sewer Overflow Public Notification Program

River Alert uses innovative signs to tell river users when a CSO has occurred. Bob Eimstad, Joan Saroka, and Jim Dixon from Portland's Environmental Services will explain how River Alert works and show you the different signs.

Wednesday, June 10, 3 pm
Room 10A

MEETING
WATER QUALITY IMPACTS OF CSOs
JULY 20, 1992
9:00 to 11:00
OREGON DEQ - ROOM 9A

AGENDA

9:00 - 9:15	**SFO update**	Bob Eimstad, City of Portland
	Summary of linked hydraulic/loading/water quality models	Claudia Zahorcak, Brown & Caldwell
	Basis of wet weather analysis ▸ SFO storms ▸ Continuous simulation ▸ Test conditions · No action · CSO capture/treatment · Sewer separation	Claudia Zahorcak, Brown & Caldwell
9:15 - 9:40	**Pollutant load predictions** ▸ SIMPCSO · Data sources/ranges · Concentration functions ▸ SIMPTM · Data sources/ranges · Concentration functions ▸ Test conditions results	John Houle, OTAK
9:40 - 10:40	**Assessment of instream impacts** ▸ Overview of near-field and far-field models ▸ Upcoming improvements · Willamette River · Columbia Slough ▸ Calibration ▸ Model forecasts for test conditions · Longitudinal profiles--SFO storm · Time sequence at key locations --SFO storm · Statistical summary--SFO storm and continuous simulation · Comparison of test conditions	John Marr, Limno-Tech
10:40 - 10:55	**Questions and answers**	CSO Team
10:55 - 11:00	**Future meeting topics**	Bob Eimstad, City of Portland

DRAFT

(Under Revision 7/92)

CITY OF PORTLAND
COLUMBIA SLOUGH MONITORING PROGRAM

March 17, 1992

I. PURPOSE

The aim of the monitoring program is to provide baseline data of water quality for the Columbia Slough. Presently, the majority of the City of Portland's sewer system is combined, carrying both sanitary and stormwater to the wastewater treatment plant. During times of heavy precipitation the carrying capacity of the pipes may be exceeded and a portion of the flow is diverted to the Willamette River and Columbia Slough through a combined sewer overflow (CSO). The City has received a Stipulated Final Order (SFO) from the Department of Environmental Quality (DEQ) to fix the problem. This is scheduled to take nearly 20 years and employ a variety of measures to eliminate the impact of the CSOs. The baseline data generated from this monitoring program will be used to assist in evaluating the effects on water quality that the implemented measures have.

The data may also be used in other programs and studies that the City initiates in evaluating the water quality of the Upper and Lower Slough.

II. SCOPE

The monitoring program will be an on-going, year round program performed by the City of Portland, Bureau of Environmental Services or its' designee. Samples will be taken at six points along the Upper and Lower Columbia Slough. The Upper Slough does not have any CSOs discharging into it. Four sample points have been designated along this portion of the slough. The Upper Slough is fragmented in its' flow. The water from the Upper Slough is separated from the lower slough. Water is pumped from the Upper Slough into the Lower Slough at a pump station controlled by Multnomah Co. Drainage District. One of the four sample points in the Upper Slough is located at the inlet to the pump station. The Lower Slough is in the area of CSOs. Two sample points have been designated along this stretch of the slough. The analyses are scheduled to be performed by the City Water Pollution Control Lab (WPCL).

III. PROJECT MANAGEMENT

Project Administrator:	Bob Eimstad, CSO/Stormwater Program Manager
Project Leader:	Eugene Lampi, Environmental Engineer
	Michael J. Pronold, Environmental Specialist
Lab Supervisor:	Jim Cooke, WPCL Superviser

IV. SAMPLE POINTS

Samples will be collected at four points along the Upper Slough and two points along the Lower Slough. One of the points in the Upper Slough will be the inlet to the pump station that discharges the water into the Lower Slough. The other three points are located at 33rd Ave and two points at 47th Ave. where the road crosses two stretches of the slough.

There are two sample points located on the Lower Slough. One point is at Portland Road and the second point is at Lombard Ave. near the mouth of the slough. For an overview of the sampling locations please refer to the attached map.

V. FREQUENCY

Bi-weekly sampling at each sample point. Initially, the times of sampling will be independent of storm events. The frequency and time of sampling is subject to review and amendments as data are tabulated.

VI. SAMPLING METHODOLOGY

Initially, sampling at each site shall consist of mid-stream sampling. The depths shall be up to 10 feet deep where possible. Bureau personnel shall use a bailer to draw the samples from the river. The bailer is three feet long and can be extended with one foot sections to a total of ten feet. This will allow a depth integrated sample to be taken of the flow to a designated depth. Samples shall be collected in the field with appropriate preservative if necessary, stored in a cooler with blue ice, and transported to the lab the same day. Sampling for bacterial analysis shall be conducted using sterile sampling jars, and taken at mid-stream.

All sample points are accessible from bridge crossings except the pump station. Field measurements shall be performed on samples taken from the river with the bailer. Dissolved oxygen will be performed in place except at Portland Road and Lombard Ave. because of the distance to the water surface from the bridge. At these two sites, DO will be performed on the collected sample. At the pump station, samples will be taken off a pier at the inlet to the pump station. All field measurements will be in place at this location.

Using this methodology, a labeling scheme has been developed to easily refer to samples and where they were collected. The six sites on the river have been designated M, N, O, P, Q, and R going from downstream (Lombard Ave.) to upstream (47th Ave. N.). The site designation is followed by a "b" indicating mid-stream. If discreet samples are taken across the slough, "a" and "c" will refer to points 1/4 and 3/4 across the slough from the south shore. The site designation and distance across the stream is followed by a numerical designation which indicates the depth of sampling at the location.

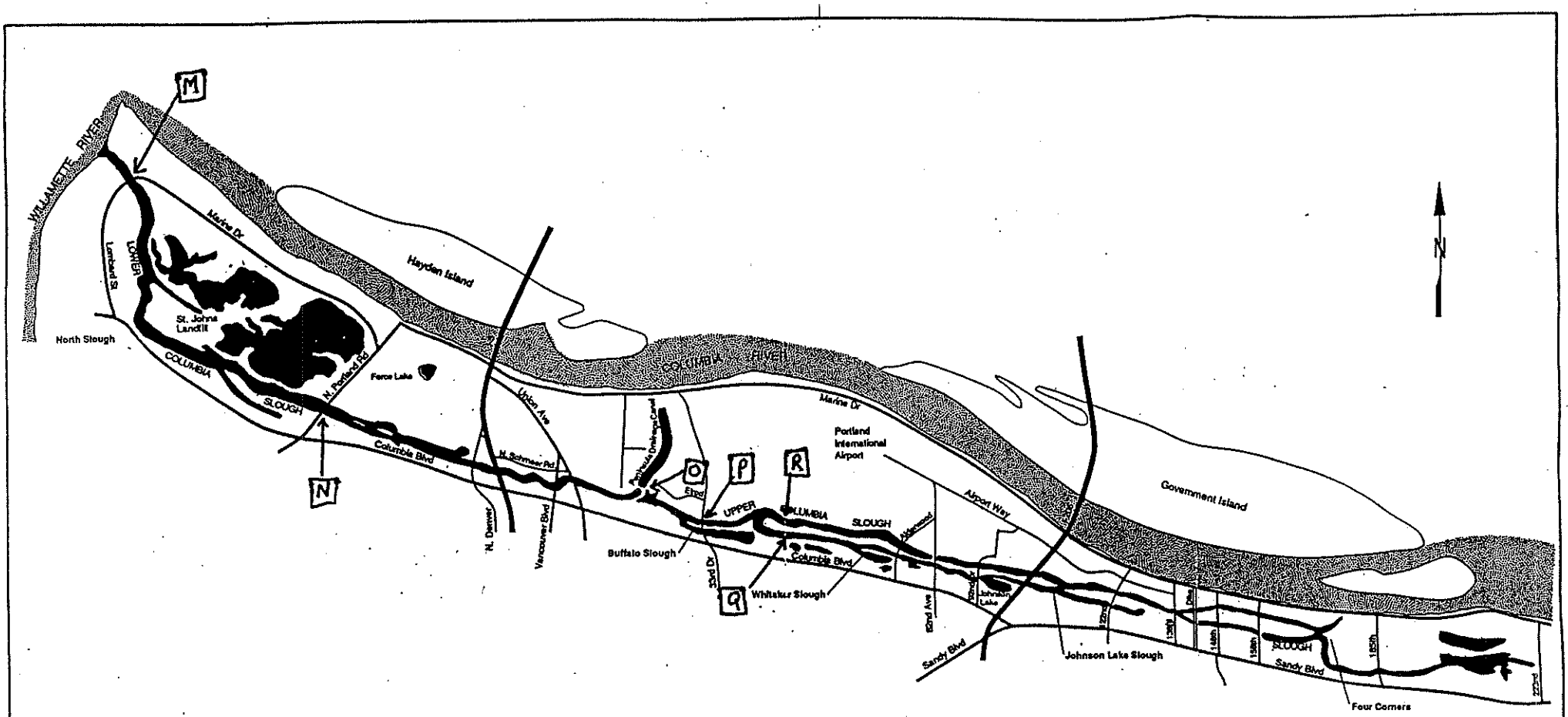
VII. ANALYSES

Listed below is the initial suite of analyses to be performed on the samples. The Bureau will be using the in-house testing services of the Water Pollution Control Lab to perform the analyses.

Field Tests:
- Dissolved Oxygen
- pH
- Temperature
- Conductivity

Lab Tests:
- Alkalinity
- Hardness
- Fecal Coliforms
- Total Suspended Solids
- Biochemical Oxygen Demand
- Total Phosphate
- Ortho Phosphate
- Ammonia Nitrogen
- Nitrate and Nitrite Nitrogen

This is an initial list of analyses and is subject to review and amendment as data become available. In addition to the lab tests, observations shall be made and recorded on the field sheet that include weather, river stage, and appearance. Attached is a copy of the field log sheet.



M - LOMBARD St.
N - N. PORTLAND RD.
O - PUMP STATION
P - 33rd AVE.
Q - 47th AVE. S.
R - 47th AVE N.

Not To Scale
For Location Purposes Only

FIGURE 1 Columbia Slough Study Area

COLUMBIA SLOUGH MONITORING PROGRAM
FIELD LOG SHEET

SITE_____ DATE_____

TIME_____ SAMPLER_____

WEATHER_____

SLOUGH CONDITIONS_____

SAMPLE POINT	pH	DO	TEMP	COND	LAB ID#

COMMENTS_____

COLUMBIA SLOUGH MONITORING PROGRAM
FIELD LOG SHEET

SITE_____ DATE_____

TIME_____ SAMPLER_____

WEATHER_____

SLOUGH CONDITIONS_____

SAMPLE POINT	pH	DO	TEMP	COND	LAB ID#

COMMENTS_____

CITY OF PORTLAND
WILLAMETTE RIVER MONITORING PROGRAM

January 17, 1992

I. PURPOSE

The aim of the monitoring program is to provide baseline data of water quality for the Willamette River. Presently, the majority of the City of Portland's sewer system is combined, carrying both sanitary and stormwater to the wastewater treatment plant. During times of heavy precipitation the carrying capacity of the pipes may be exceeded and a portion of the flow is diverted to the Willamette River through a combined sewer overflow (CSO). The City has received a Stipulated Final Order (SFO) from the Department of Environmental Quality (DEQ) to fix the problem. This is scheduled to take nearly 20 years and employ a variety of measures to eliminate the impact of the CSOs. The baseline data generated from this monitoring program will be used to assist in evaluating the effects on water quality that the implemented measures have.

II. SCOPE

The monitoring program will be an on-going, year round program performed by the City of Portland, Bureau of Environmental Services or its' designee. Samples will be taken at four points along the Willamette River. One will be upstream of any City Combined Sewer Overflow (CSO), two will be taken in the areas of CSOs, and the final sample point will be downstream of any CSO. The majority of the analyses will be performed by the City Water Pollution Control Lab (WPCL) and a portion by a contract lab.

III. PROJECT MANAGEMENT

Project Administrator:	Bob Eimstad, CSO/Stormwater Program Manager
Project Leader:	Eugene Lampi, Environmental Engineer
	Michael J. Pronold, Environmental Specialist
Lab Supervisor:	Jim Cooke, WPCL Superviser

IV. SAMPLE POINTS

Samples will be collected at four points along the Willamette River. The first sample point will be upstream of any CSO. The point of sampling will be just downstream from the Tryon Creek Wastewater Treatment Plant in front of the railroad bridge. The bridge is used as a identifiable reference point. The second sample point will be located just upstream of the Morrison Bridge in the downtown area. Again the bridge is used as a reference point. The third sample point is located just south of the railroad bridge which is 3/4 mile upstream from the St. Johns Bridge. The fourth sample point is downstream of all CSOs and is located off of Kelly Point Park prior to the Willamette River confluence with the Columbia River and upstream of where the Columbia Slough enters the Willamette River.

For an overview of the sampling locations please refer to the attached map.

V. FREQUENCY

Bi-weekly sampling at each sample point. Initially, the times of sampling will be independent of storm events. The frequency and time of sampling is subject to review and amendments as data are tabulated.

VI. SAMPLING METHODOLOGY

Initially, sampling at each site shall consist of mid-stream sampling at three different depths. The depths shall be 0-5, 5-10, and 10-15 feet. Bureau personnel shall use an automatic sampler pump to draw the samples from the river. Samples shall be collected in the field with appropriate preservative if necessary, stored in a cooler with blue ice, and transported to the lab the same day. Sampling for bacterial analysis shall be conducted using sterile sampling jars, and taken two feet below the surface at mid-stream.

In addition, this same sampling protocol can be extended to a total of three points across the river. The data generated will be used to assist in the determination of the extent of sampling that is to be performed. This would continue until enough data have been generated to be able to make a determination on the extent of the sampling.

Using this methodology, a labeling scheme has been developed to easily refer to samples and where they were collected. The four sites on the river have been designated A, B, C, and D going from upstream to downstream as described earlier. 1, 2, 3, and 4 refers

to the sampling points across the river at each site. "1" is 1/4 across the stream,"2" is 1/2 across the river, and "3" is 3/4 across the river going from east to west. "4" is a composite of the three points. a, b, c, and d refer to depths. "a" is 0-5 feet, "b" is 5-10 feet, "c" is 10-15 feet, and "d" is a composite.

VII. ANALYSES

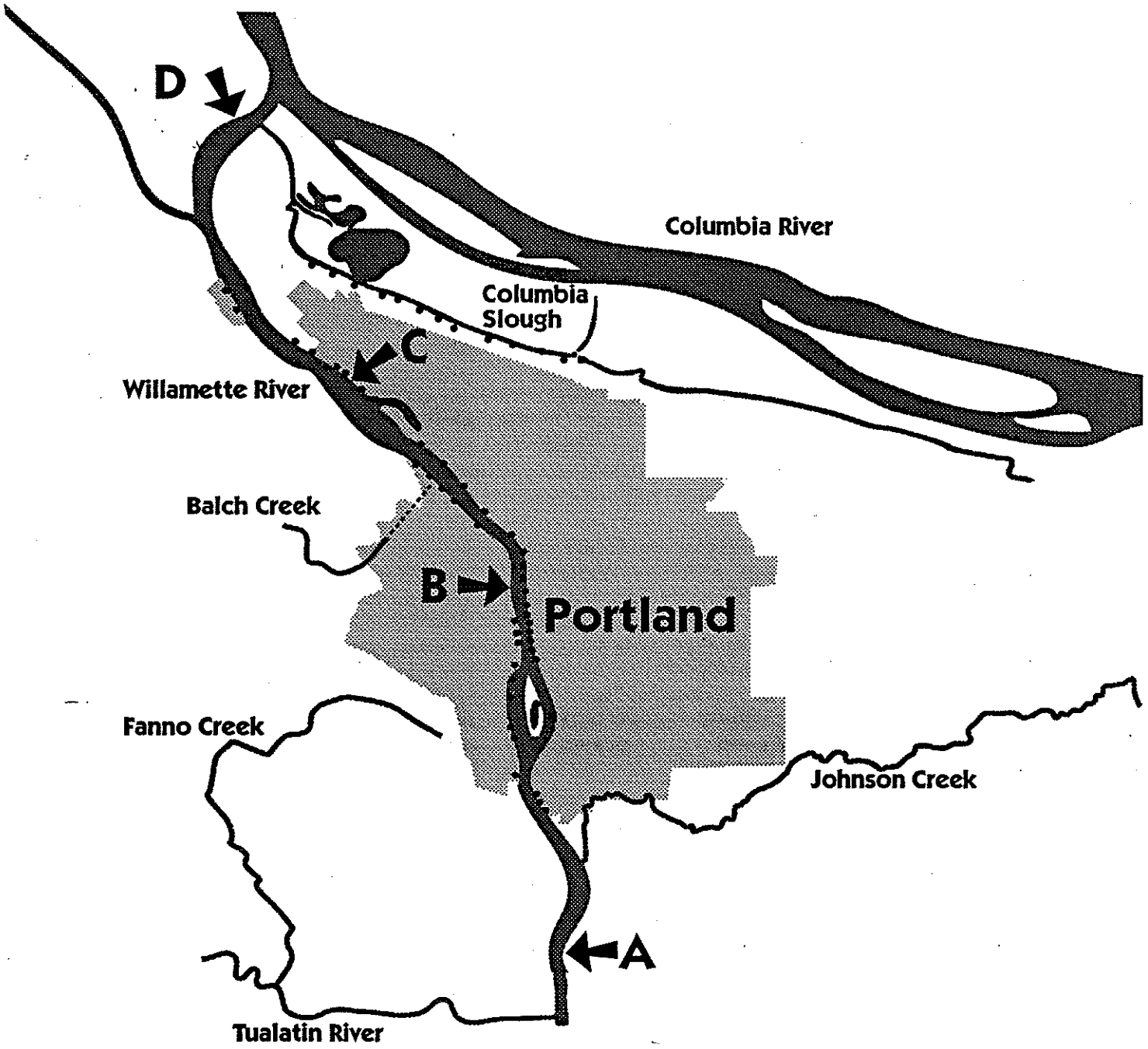
Listed below is the initial suite of analyses to be performed on the samples. The Bureau will be using the in-house testing services of the Water Pollution Control Lab for the majority of the analyses. A portion of the analyses shall be performed by an contract lab until the Bureau lab is outfitted to perform all analyses. These are indicated below. Samples sent to outside labs shall be depth integrated composites at each site. The use of an outside lab will allow the Bureau to split samples in addition to the normal QA/QC performed by the labs.

Field Tests:
- Dissolved Oxygen
- pH
- Temperature
- Conductivity

Lab Tests:
- Alkalinity
- *Turbidity
- Hardness
- Fecal Coliforms
- Enterococcus
- Total Suspended Solids
- Biochemical Oxygen Demand
- *Total Organic Carbon
- Total Phosphate
- Ortho Phosphate
- *Total Kjeldahl Nitrogen
- Ammonia Nitrogen
- Nitrate and Nitrite Nitrogen

* To be performed by a contract lab.

This is an initial list of analyses and is subject to review and amendment as data become available. In addition to the lab tests, observations shall be made and recorded on the field sheet that include weather, river stage, and appearance. Attached is a copy of the field log sheet.



Legend

- • CSO LOCATION
- A Tryon Creek Bridge
- B Morrison St. Bridge
- C St. Johns RR Bridge
- D S. Kelly Point Park

WILLAMETTE RIVER MONITORING PROGRAM
FIELD LOG SHEET

SITE_____ DATE_____

TIME_____ SAMPLER_____

WEATHER_____

RIVER CONDITIONS_____

SAMPLE POINT	pH	DO	TEMP	COND	LAB ID#

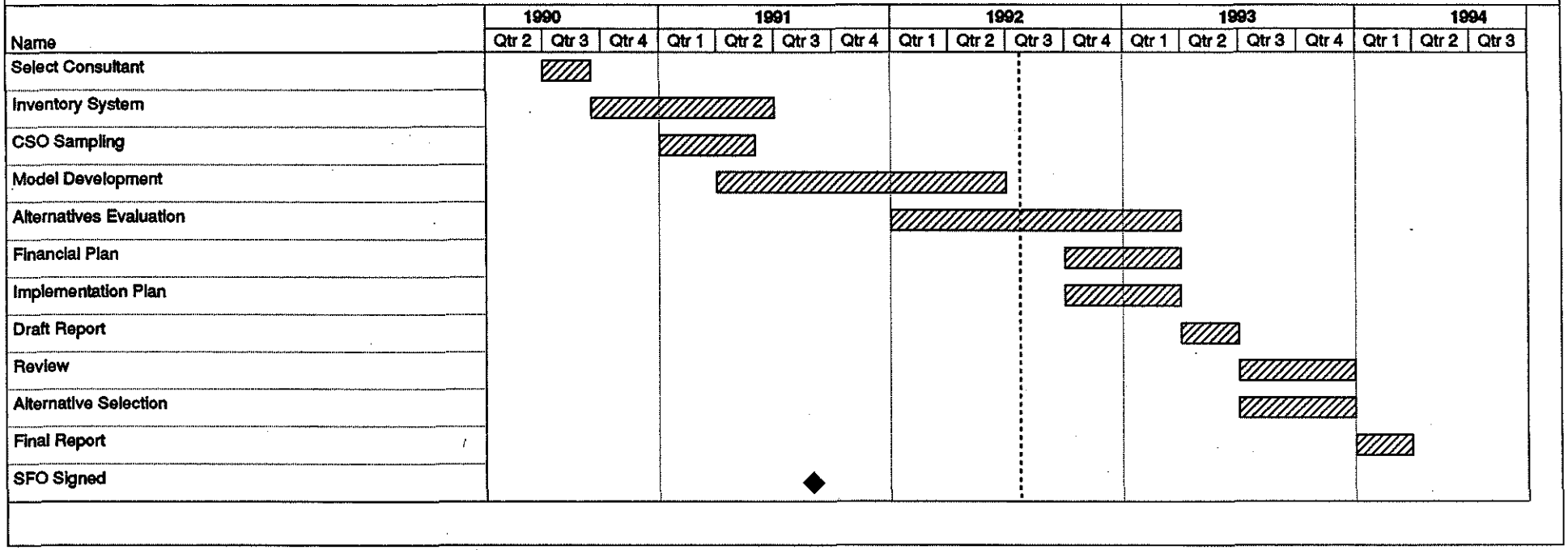
COMMENTS_____

SECTION 3

SECTION 3

FACILITIES PLANNING PROGRESS

SUMMARY SCHEDULE
CSO MANAGEMENT PLAN
CITY OF PORTLAND



SECTION 4

SECTION 4

PLANNING APPROACH: WHY MODELS?

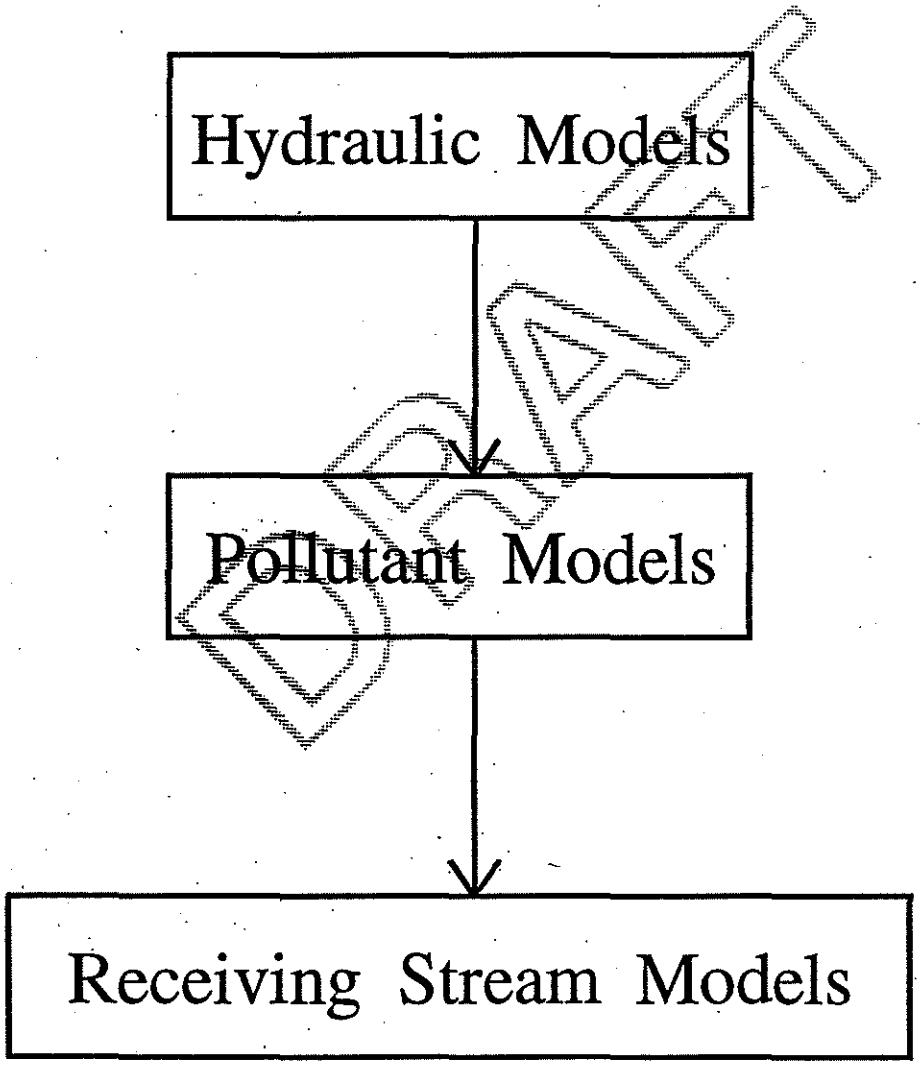
PLANNING APPROACH

- Accurate, diagnostic and predictive models
  - Hydraulic models
  - Pollutant load models
  - Water quality models
- Single event and long term continuous modeling capacity
- 53 outfalls and 192 diversion structures inventoried
- 40 basin hydraulic models and interceptor models fully calibrated
- 2 storms sampled for loadings and instream water quality
- CSO reduction technologies researched and screened

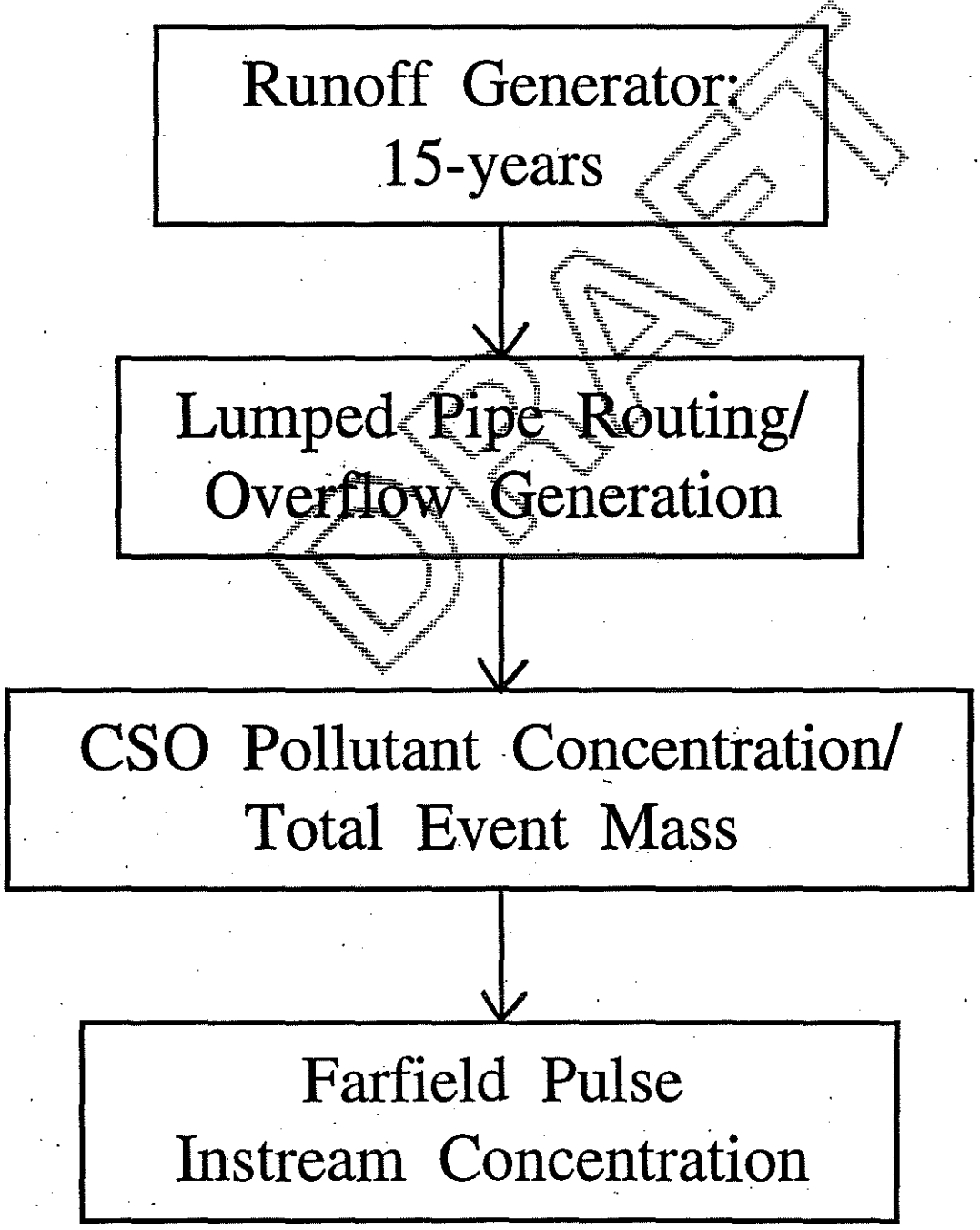
PURPOSE OF MODELING

- Provide accurate representation of cause and effect relationships
- Develop tool for determining causes of problems
- Develop tool for examining benefit of alternatives

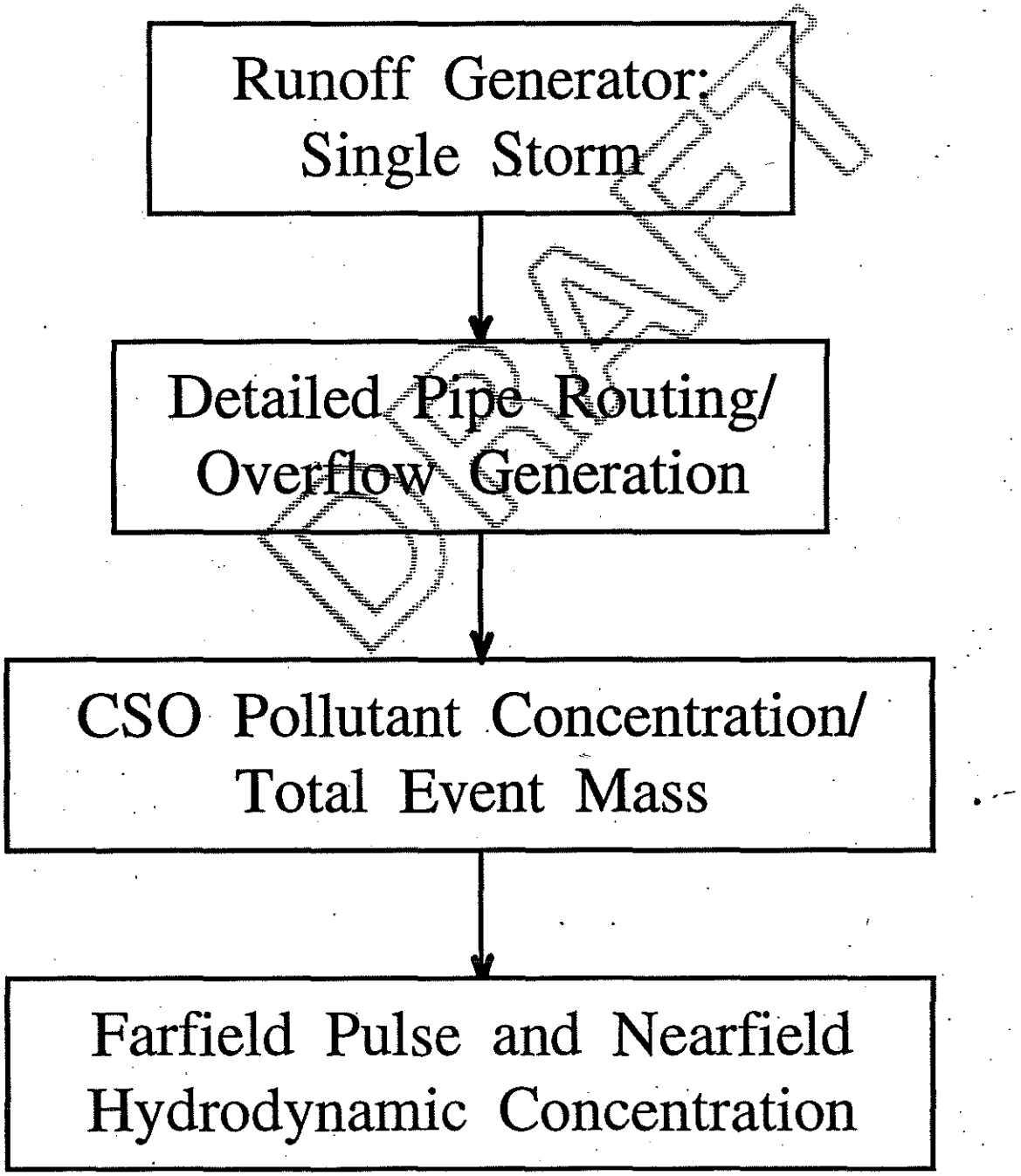
MODELING FLOW



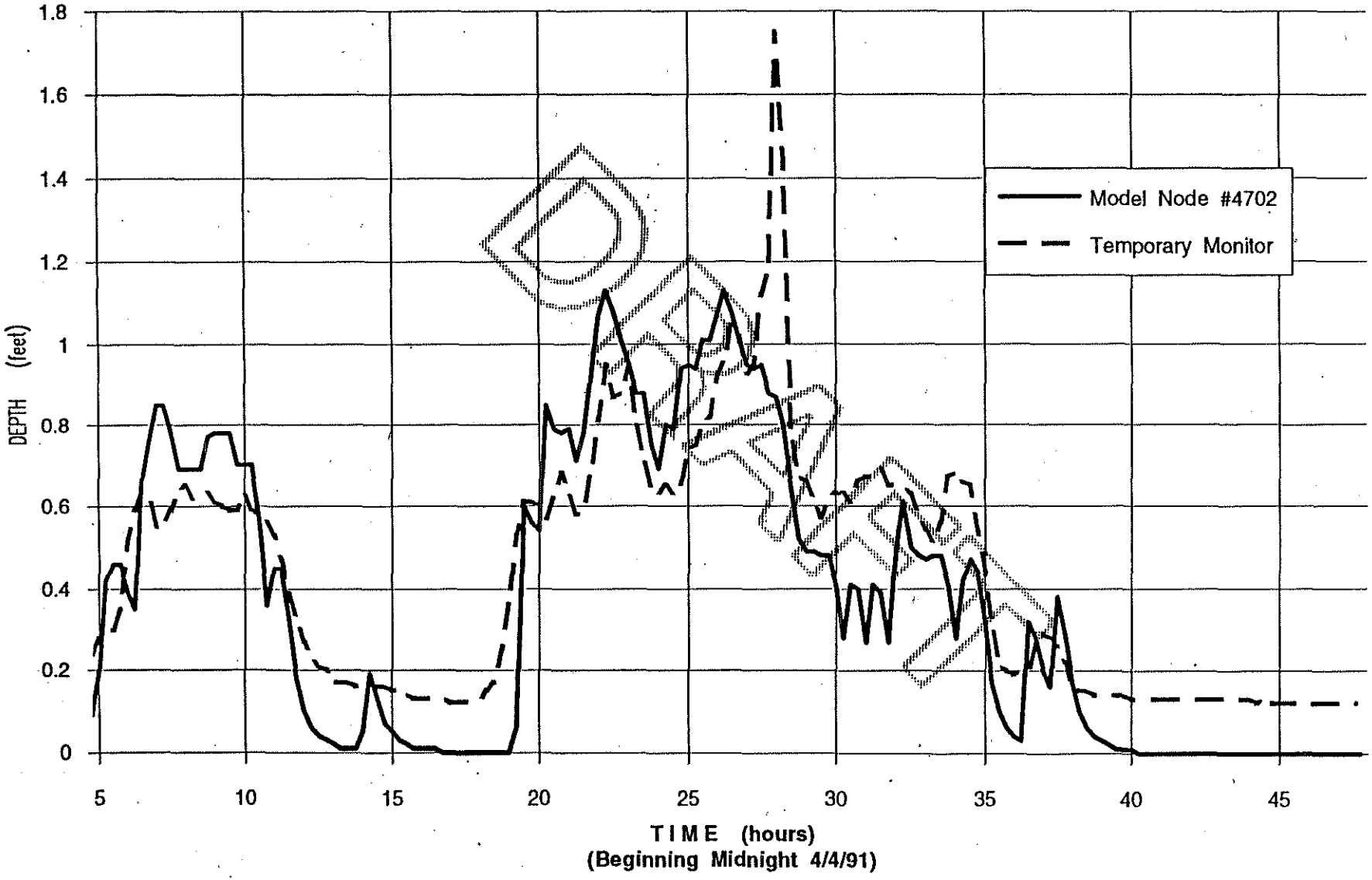
APPLICATION OF MODELS: LONG-TERM SIMULATIONS



APPLICATION OF MODELS: SINGLE-EVENT SIMULATIONS



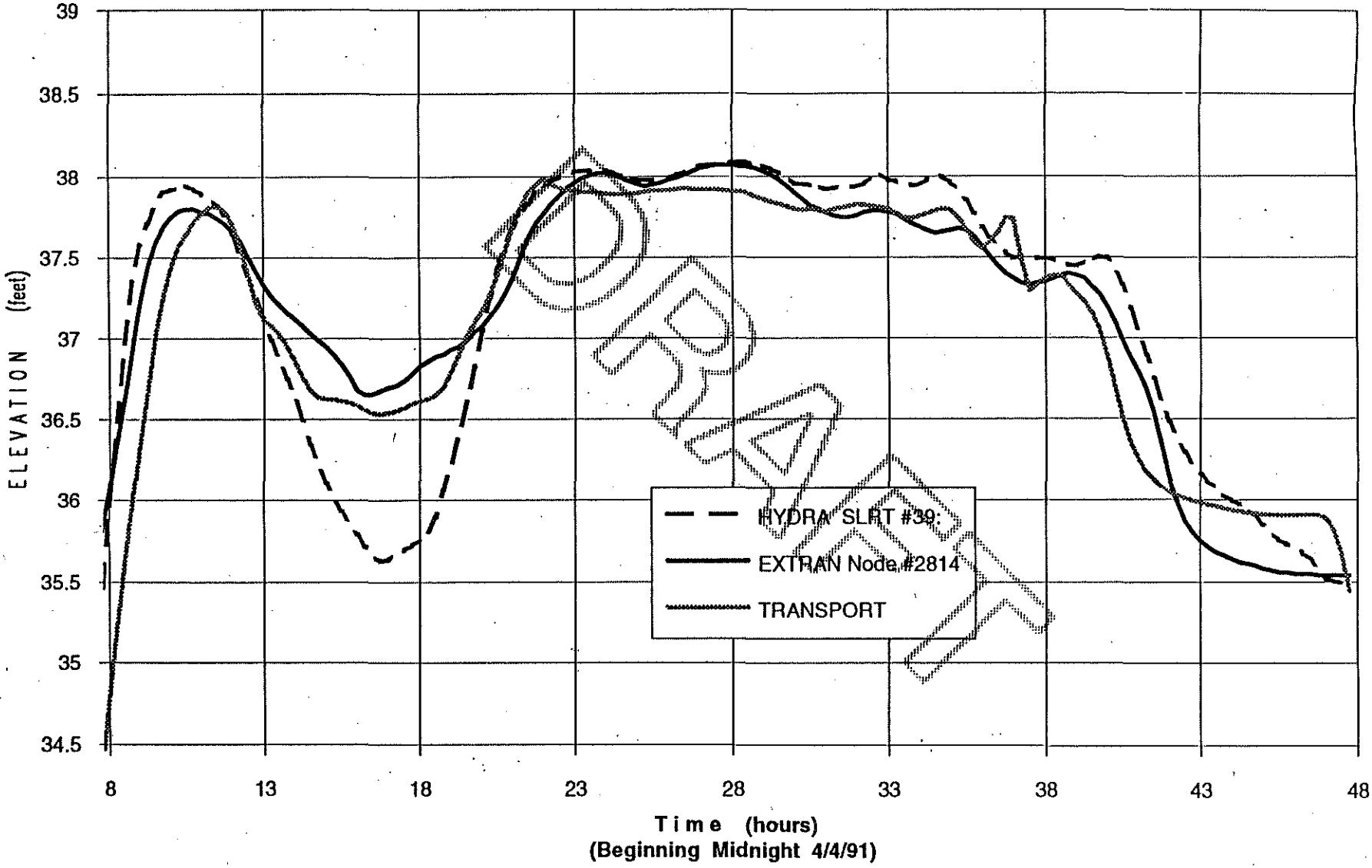
TEMPORARY MONITOR vs EXTRAN for North-Side Interceptor System
April 4-5, 1991 Storm: Calibration of Kenton Overflows



491_OF60.XLS Chart 1

5/29/92

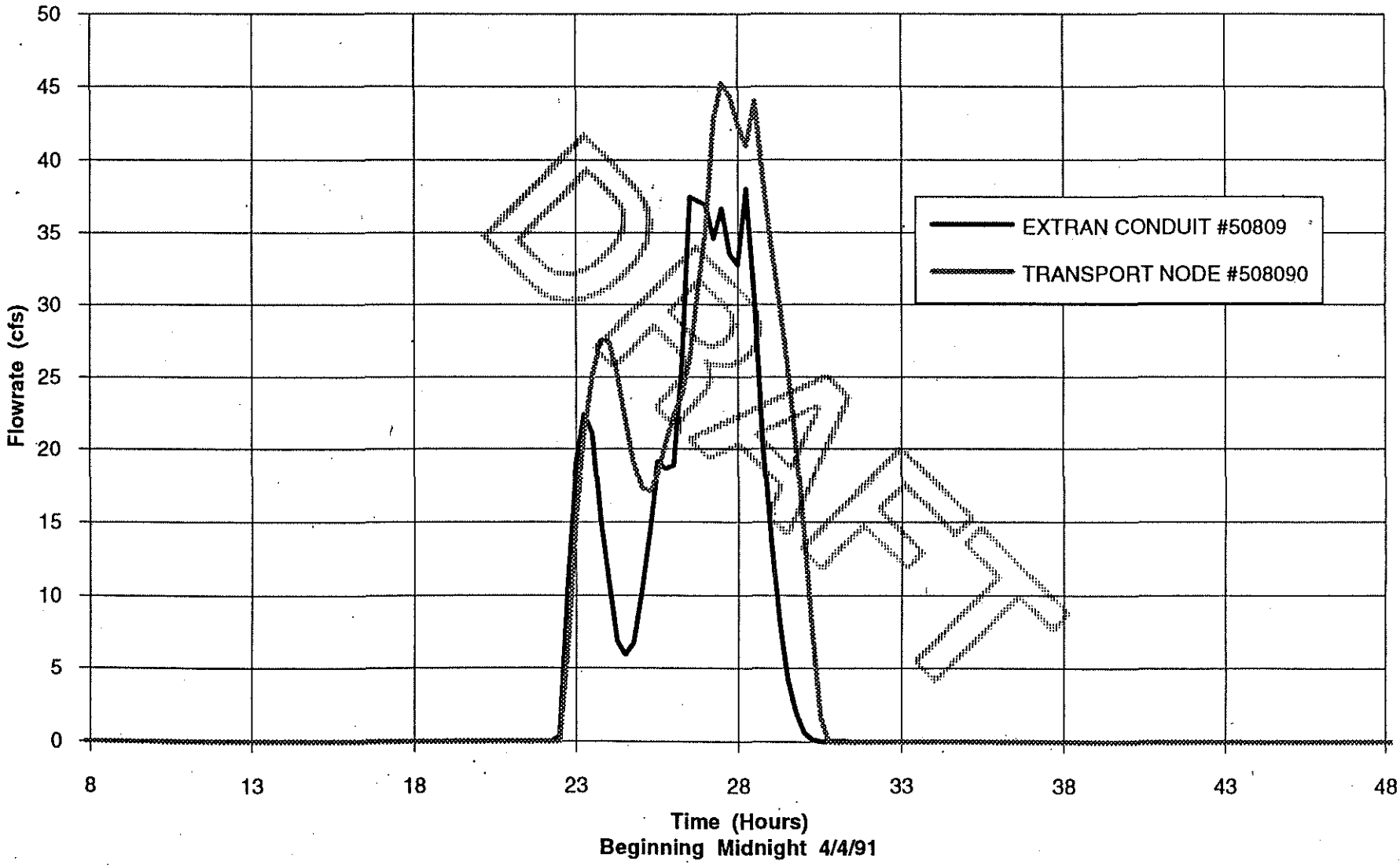
SLRT vs MODEL for North-Side Interceptor System
April 4-5, 1991 Storm: Calibration of North-Side Interceptor at SLRT 39



491_39.XLS Chart 3

5/29/92

ANKENY PUMP STATION OVERFLOW
EXTRAN vs. TRANSPORT
April 4-5, 1991

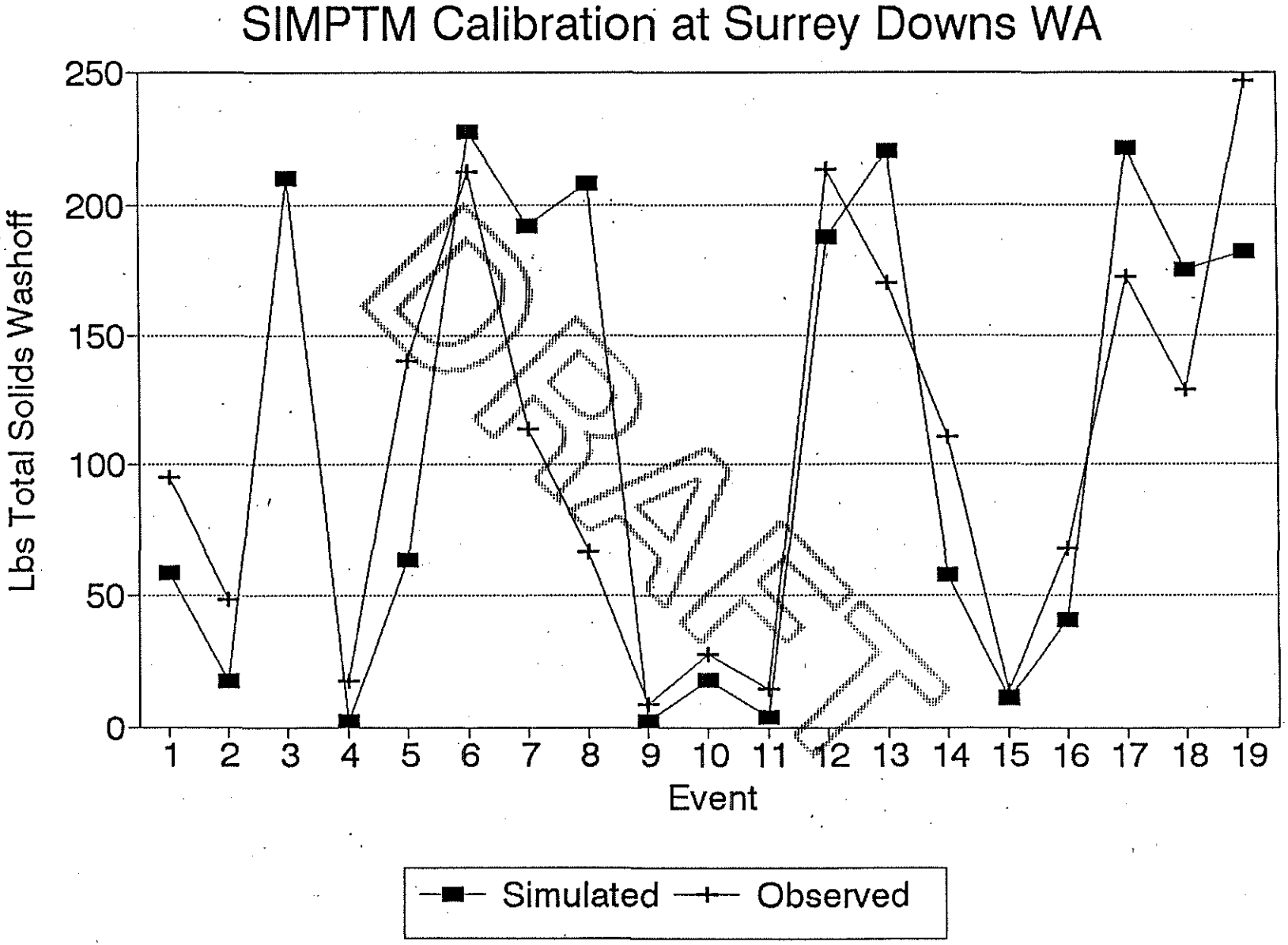


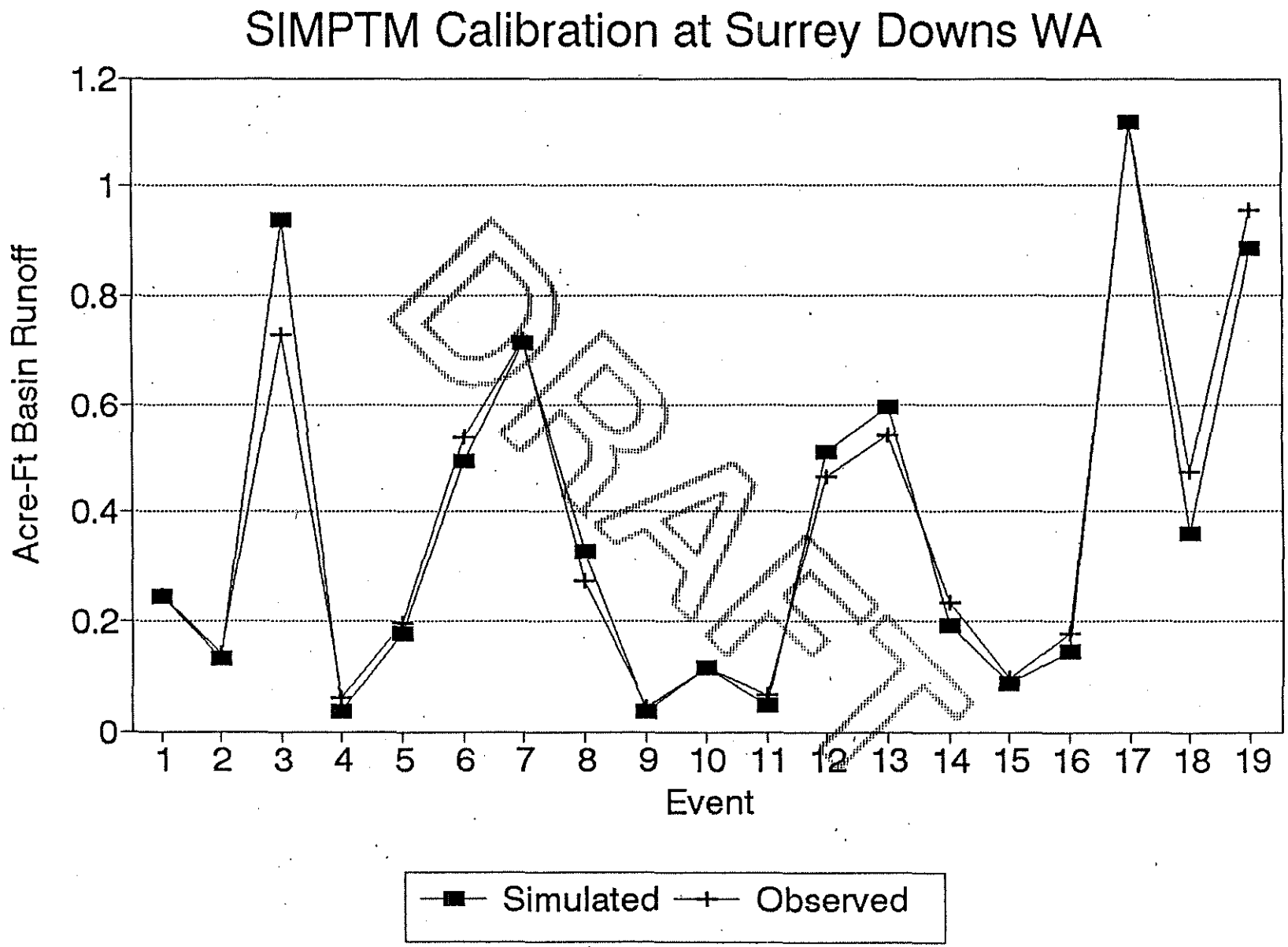
491ANKOF.XLS Chart 1

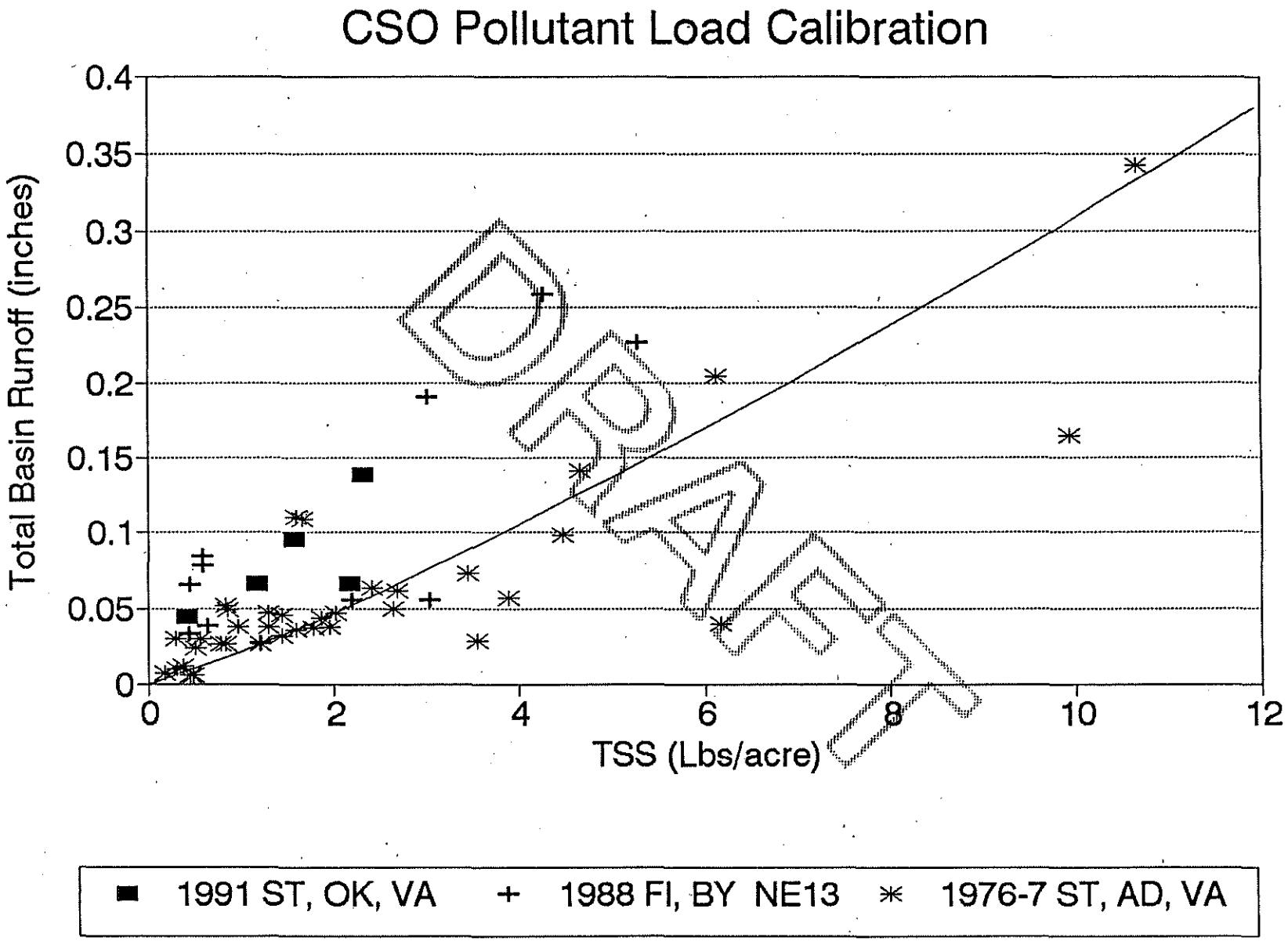
5/26/92

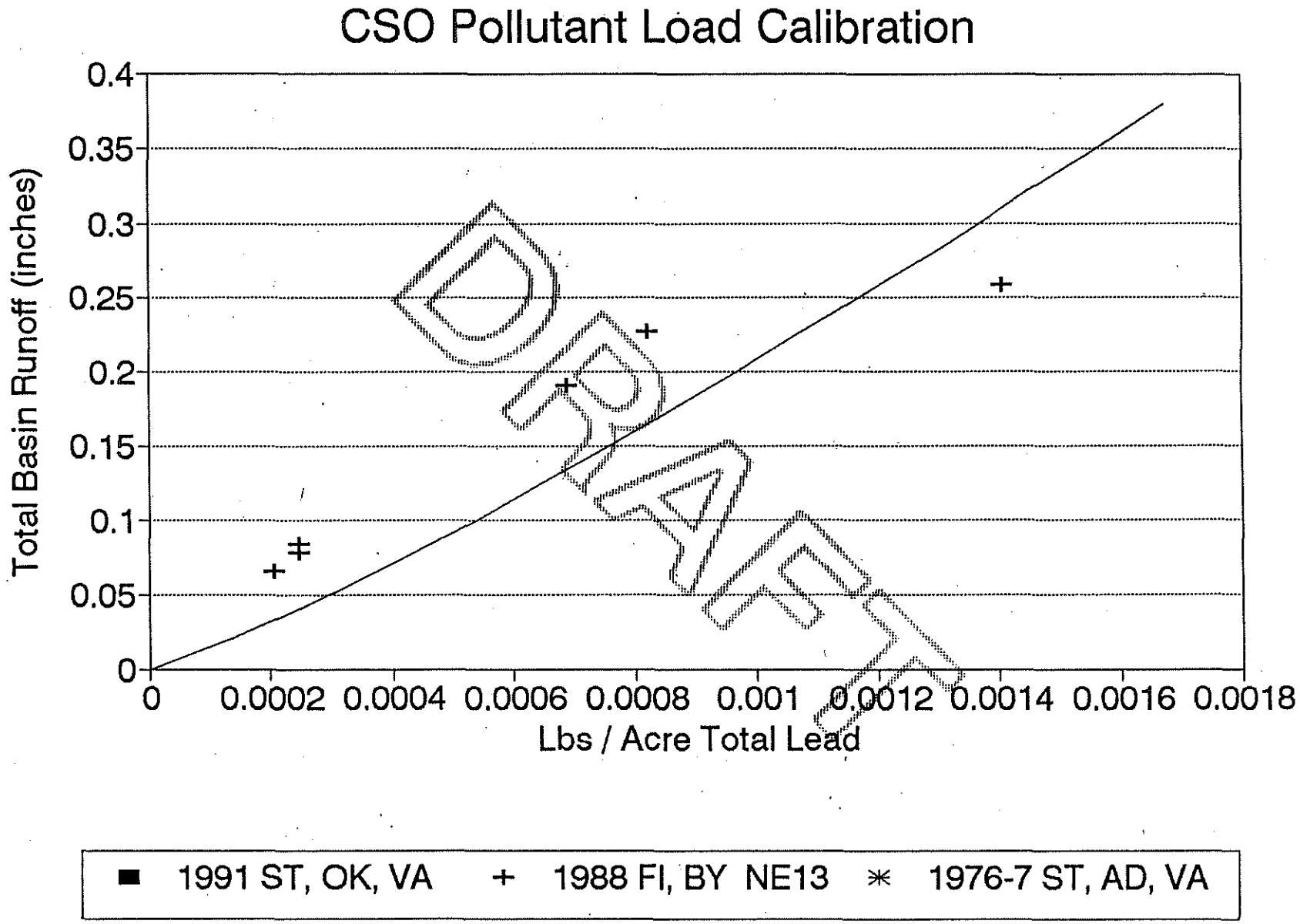
OTAK Inc. Urban Runoff Pollutant Model
SIMPTM SIMplified Particulate Transport Model

- Estimates "runoff volumes", "pollutant mass loadings", and "event mean concentrations"
- Simulates many storm events in series
- Includes a Rainfall Data Analyzer
- Can estimate the pollutant reduction benefits of:
  - Street cleaning
  - Sediment trapping catch basins
  - Cleaning of catch basins
  - On-site retention


SIMPTM Calibration at Surrey Downs WA
Lbs Total Solids Washoff
250
200
150
100
50
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Event
Simulated
Observed


SIMPTM Calibration at Surrey Downs WA
Acre-Ft Basin Runoff
1.2
1
0.8
0.6
0.4
0.2
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Event
Simulated
Observed


CSO Pollutant Load Calibration
Total Basin Runoff (inches)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
2
4
6
8
10
12
TSS (Lbs/acre)
1991 ST, OK, VA
1988 FI, BY NE13
1976-7 ST, AD, VA

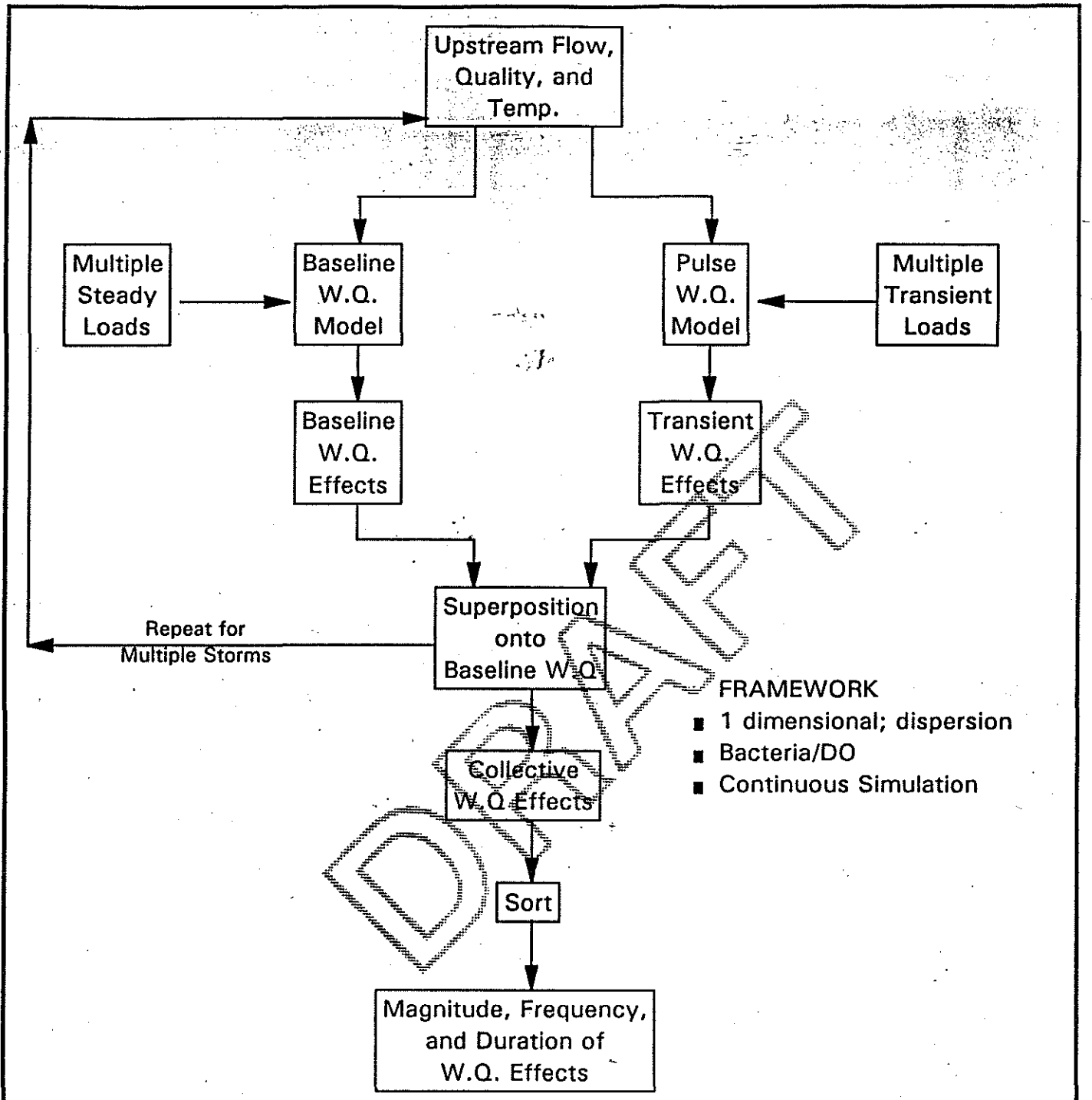

CSO Pollutant Load Calibration
Total Basin Runoff (inches)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.0002
0.0004
0.0006
0.0008
0.001
0.0012
0.0014
0.0016
0.0018
Lbs / Acre Total Lead
DRAFT
1991 ST, OK, VA
1988 FI, BY NE13
1976-7 ST, AD, VA

Water Quality Models

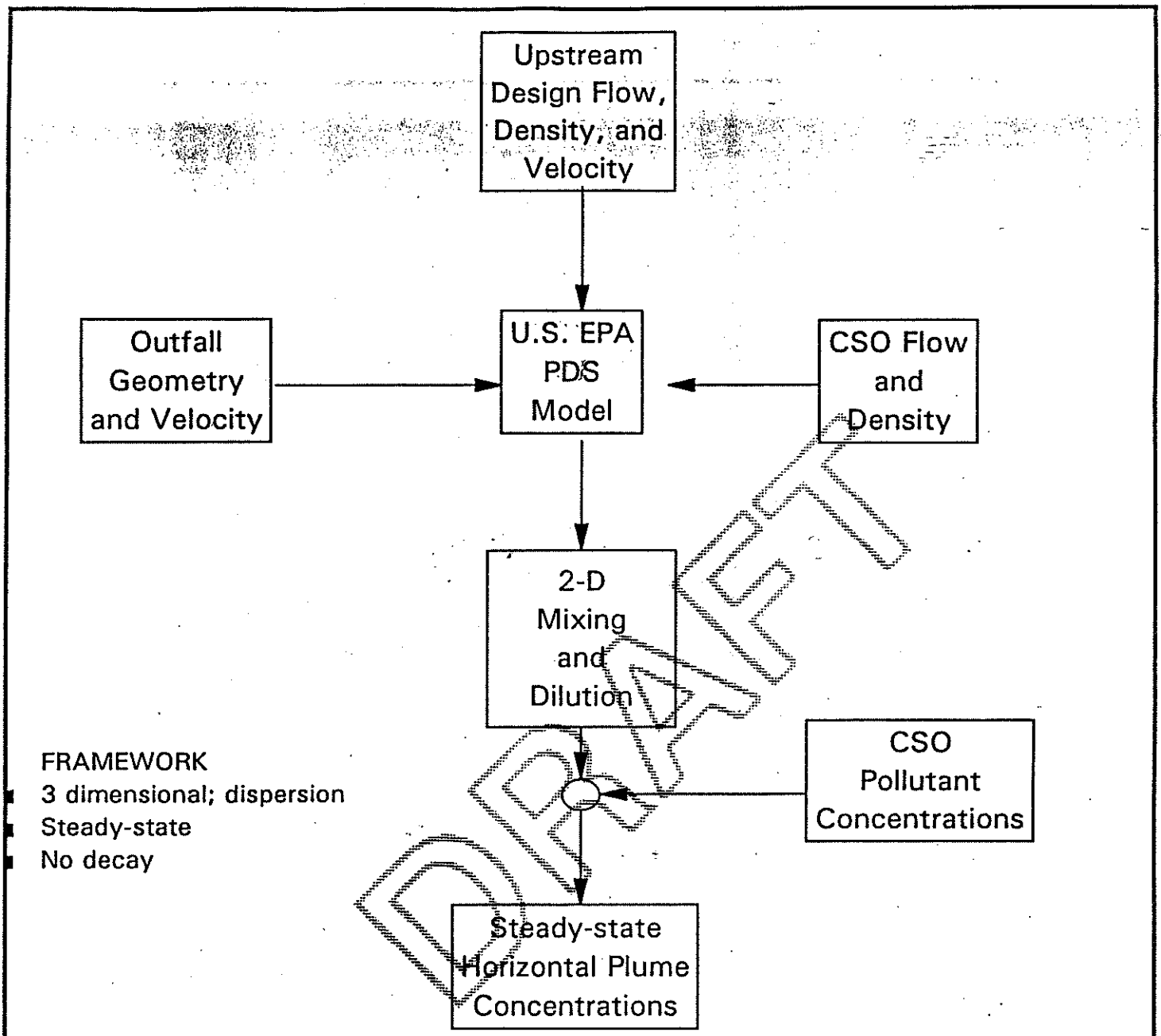
PDS - "Near-Field"

PULSEQUAL - "Far-Field"

	PDS	PULSEQUAL
Parameters	Toxics, Bacteria	Bacteria, D.O.
Spatial	0 to ~1,000 yds.	>1,000 yds.
Timescale	Minutes-Hours	Hours-Days
Dimensions	2D	1D
Kinetics	None	Decay;Settling
CSO Effects	Individual (5 typical outfalls)	Combined (10 groups)
Simulation	Winter/Summer	Continuous

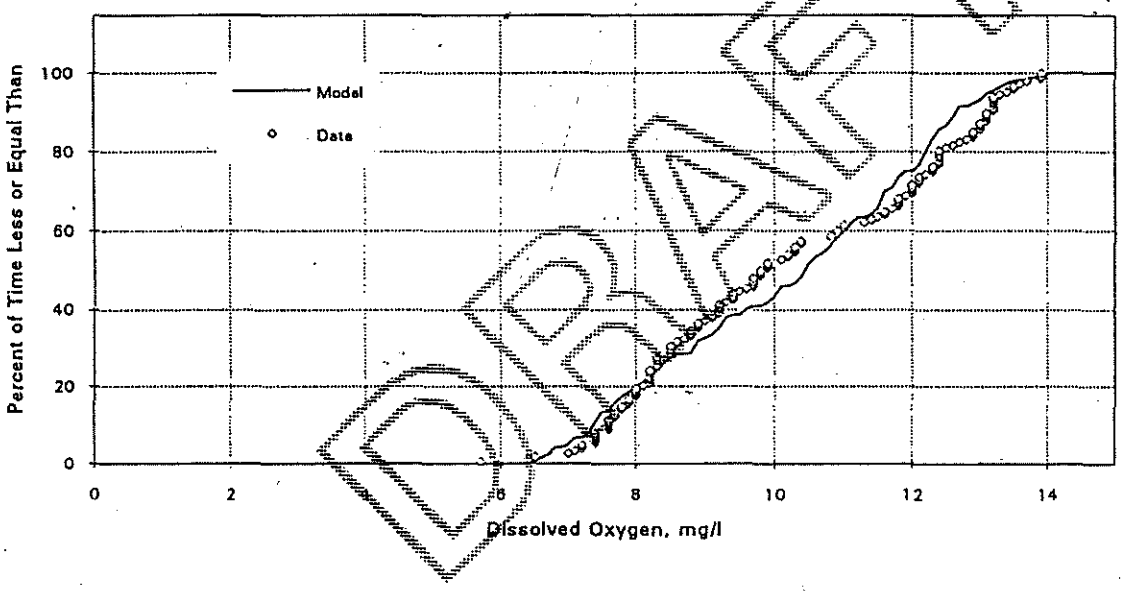


SIMPLIFIED DIAGRAM OF PULSE MODEL FRAMEWORK

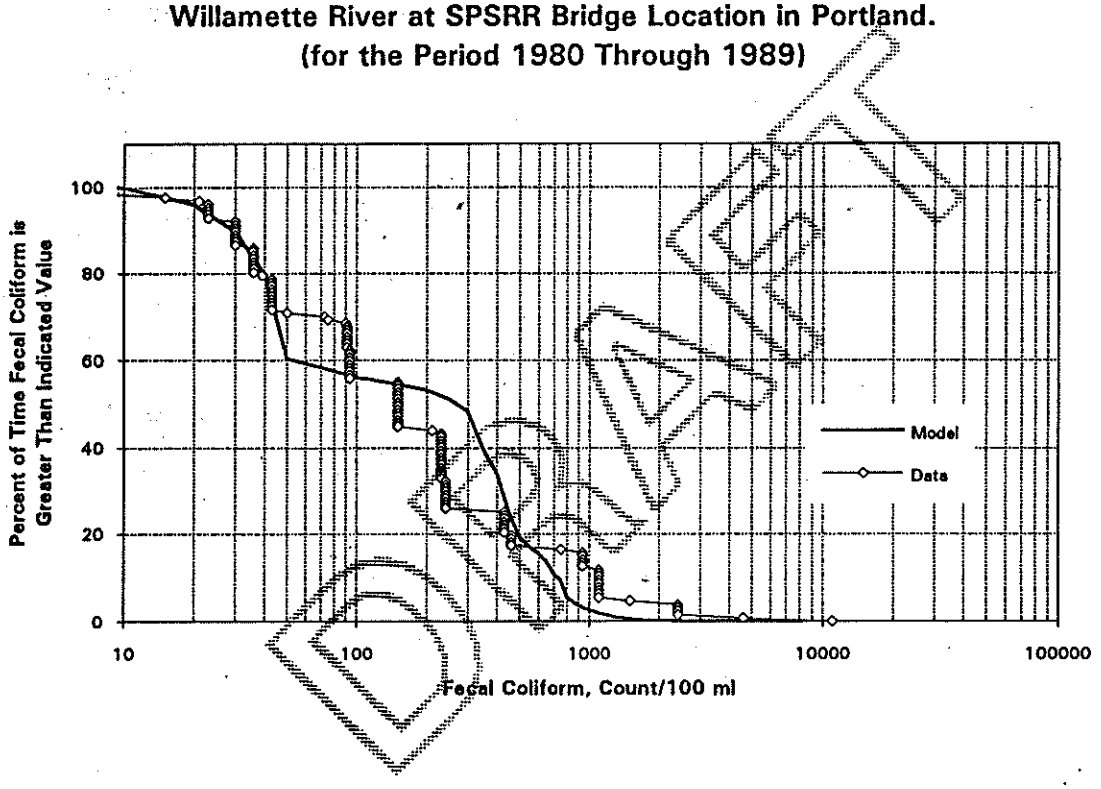


SIMPLIFIED DIAGRAM OF MIXING ZONE MODEL FRAMEWORK

Validation of PULSEQUAL Model to the Dissolved Oxygen Data in the Willamette River at SPSRR Bridge Location in Portland
(for the Period 1980 Through 1989)



Validation of PULSEQUAL Model to the Fecal Coliform Bacteria Data in the Willamette River at SPSRR Bridge Location in Portland. (for the Period 1980 Through 1989)



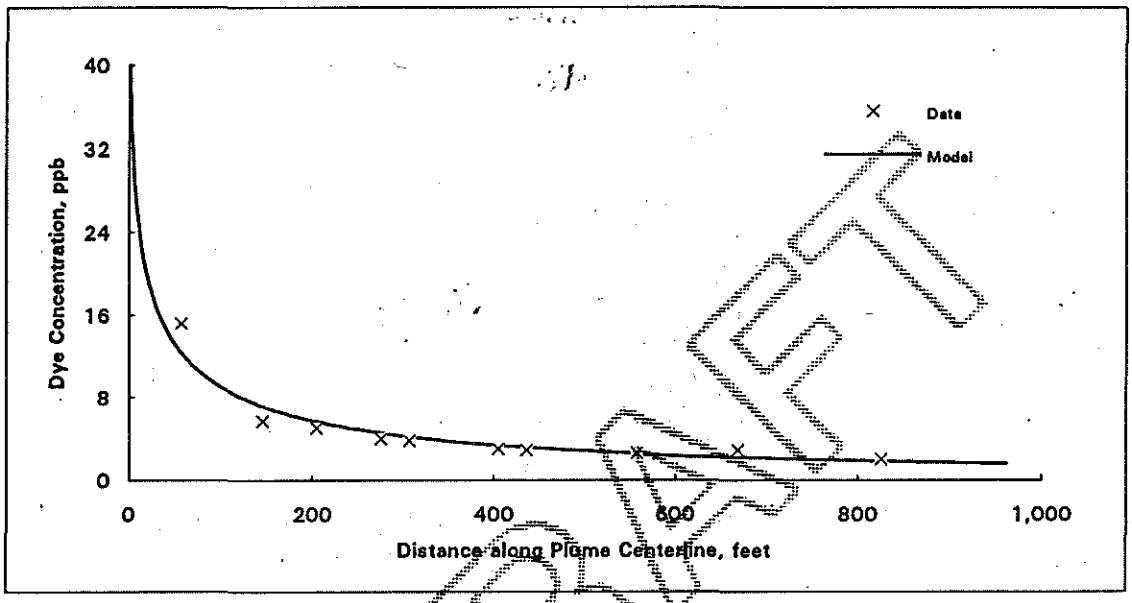


FIGURE 5

PDS Calibration Results for the Willamette River CSO Outfall #37

SECTION 5

SECTION 5

WHAT HAVE WE LEARNED?

PRELIMINARY FINDINGS

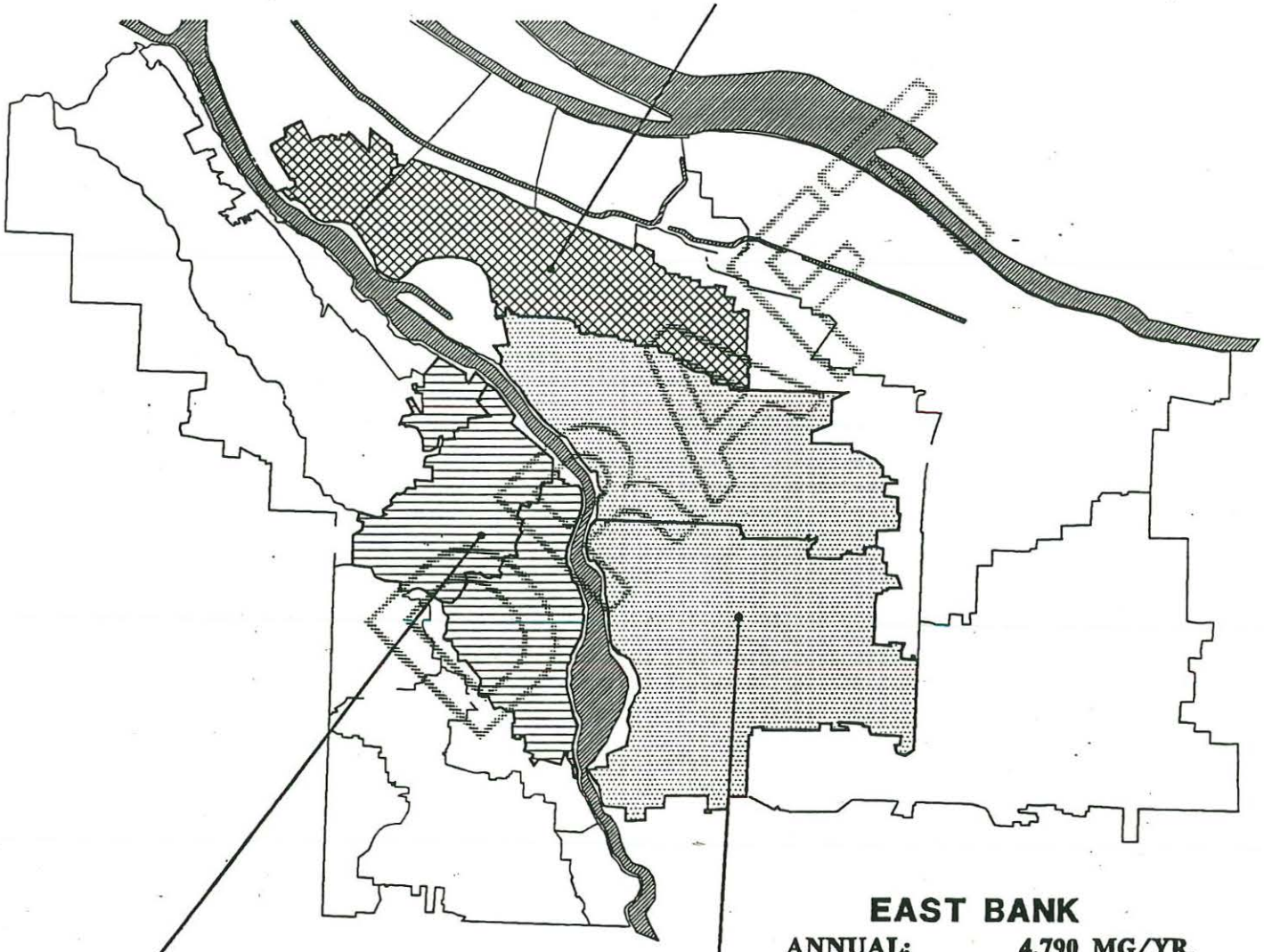
- Annually 7,210 million gallons of CSO
- 5-year storm generates 2,340 million gallons of CSO
- Columbia Slough receives 20% of CSO volume
  Willamette River receives 80% of CSO volume
- Typically 50 to 60 overflows per year, many lasting several days
- Outfall discharges are highly variable

# of Outfalls	Days per Discharge
4	Less than 75
30	Between 75 and 125
8	More than 125

# of Outfalls	Annual Discharge Volume, Million Gallons
25	Less than 100
13	Between 100 and 400
4	More than 400

- 60% of rainwater in combined areas is captured and treated
- Upstream conditions often exceed water quality standards
- Bacterial contamination is the predominant CSO pollutant of concern

CSO VOLUME: FUTURE BASE CONDITIONS ANNUAL AVERAGE AND SFO STORMS



COLUMBIA SLOUGH

ANNUAL:	1,350 MG/YR.
5-YR. STORM:	430 MG
10-YR. STORM:	280 MG

EAST BANK

ANNUAL:	4,790 MG/YR.
5-YR. STORM:	1,580 MG
10-YR. STORM:	1,010 MG

WEST BANK

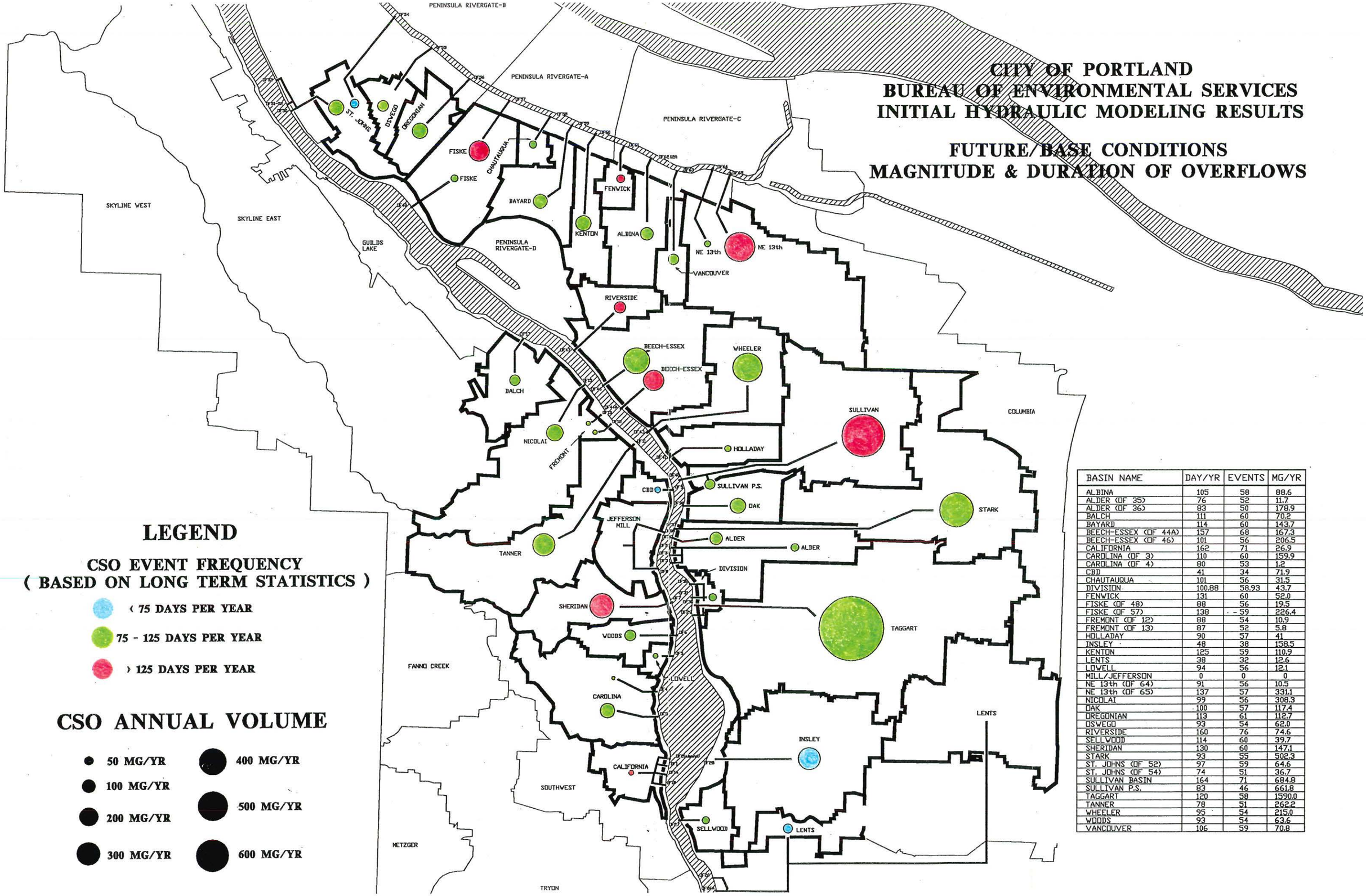
ANNUAL:	1070 MG/YR.
5-YR. STORM:	330 MG
10-YR. STORM:	225 MG

TOTAL

ANNUAL:	7,210 MG/YR.
5-YR. STORM:	2,340 MG
10-YR. STORM:	1,510 MG

CITY OF PORTLAND
BUREAU OF ENVIRONMENTAL SERVICES
INITIAL HYDRAULIC MODELING RESULTS

FUTURE/BASE CONDITIONS
MAGNITUDE & DURATION OF OVERFLOWS



LEGEND

CSO EVENT FREQUENCY
(BASED ON LONG TERM STATISTICS)

- ‹ 75 DAYS PER YEAR
- 75 - 125 DAYS PER YEAR
- › 125 DAYS PER YEAR

CSO ANNUAL VOLUME

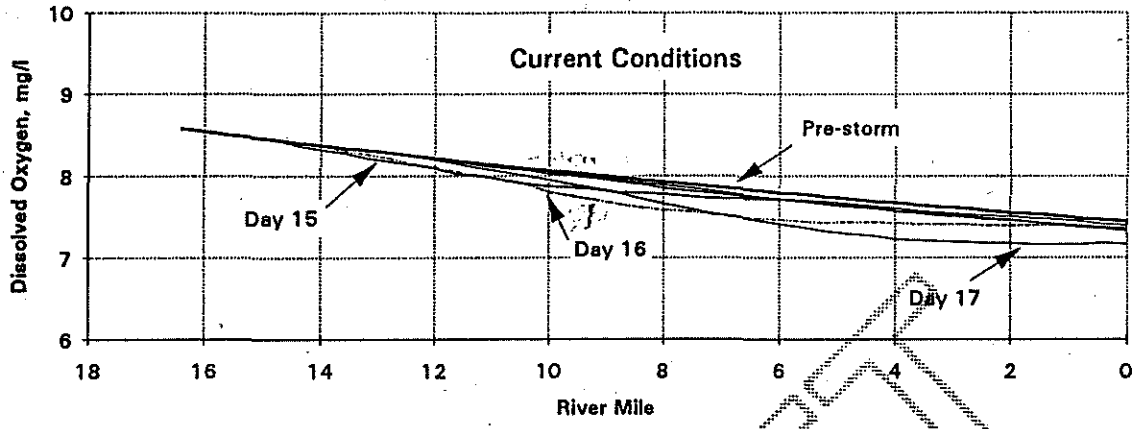
- 50 MG/YR
- 100 MG/YR
- 200 MG/YR
- 300 MG/YR
- 400 MG/YR
- 500 MG/YR
- 600 MG/YR

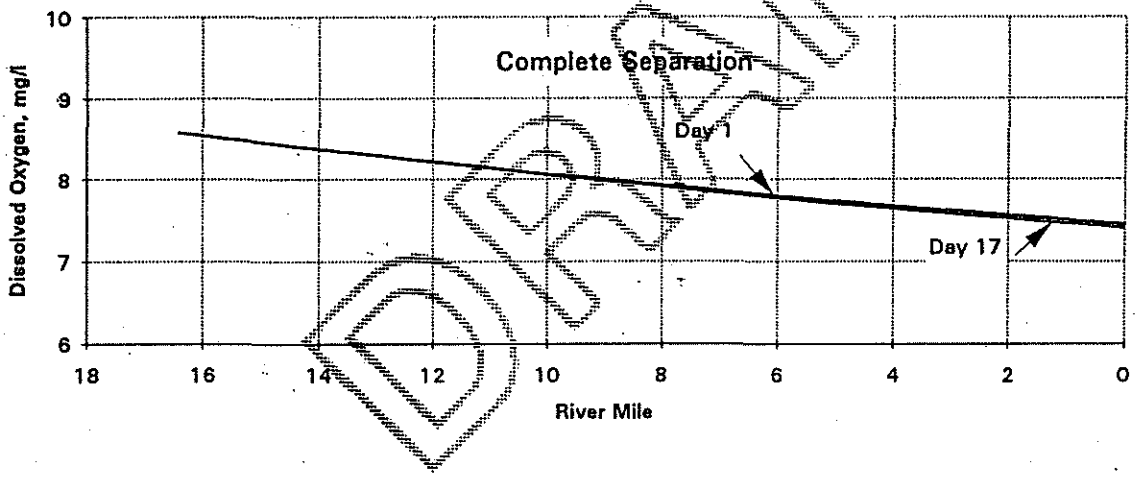
BASIN NAME	DAY/YR	EVENTS	MG/YR
ALBINA	105	58	88.6
ALDER (DF 35)	76	52	11.7
ALDER (DF 36)	83	50	178.9
BALCH	111	60	70.2
BAYARD	114	60	143.7
BEECH-ESSEX (DF 44A)	157	68	167.3
BEECH-ESSEX (DF 46)	101	56	206.5
CALIFORNIA	162	71	26.9
CAROLINA (DF 3)	110	60	159.9
CAROLINA (DF 4)	80	53	1.2
CBD	41	34	71.9
CHAUTAUQUA	101	56	31.5
DIVISION	100.88	58.93	43.7
FENWICK	131	60	52.0
FISKE (DF 48)	88	56	19.5
FISKE (DF 57)	138	59	226.4
FREMONT (DF 12)	88	54	10.9
FREMONT (DF 13)	87	52	5.8
HOLLADAY	90	57	41
INSLEY	48	38	158.5
KENTON	125	59	110.9
LENTS	38	32	12.6
LOWELL	94	56	12.1
MILL/JEFFERSON	0	0	0
NE 13th (DF 64)	91	56	10.5
NE 13th (DF 65)	137	57	331.1
NICOLAI	99	56	308.3
OAK	100	57	117.4
OREGONIAN	113	61	112.7
OSWEGO	93	54	62.0
RIVERSIDE	160	76	74.6
SELLWOOD	114	60	39.7
SHERIDAN	130	60	147.1
STARK	93	55	502.3
ST. JOHNS (DF 52)	97	59	64.6
ST. JOHNS (DF 54)	74	51	36.7
SULLIVAN BASIN	164	71	684.8
SULLIVAN P.S.	83	46	661.8
TAGGART	120	58	1590.0
TANNER	78	51	262.2
WHEELER	95	54	215.0
WOODS	93	54	63.6
VANCOUVER	106	59	70.8

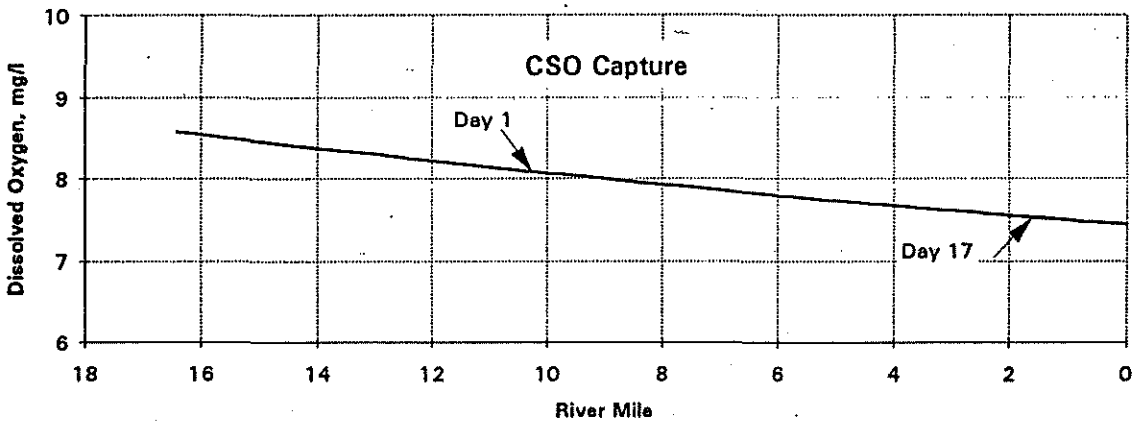
OBSERVED AND POTENTIAL CSO RELATED PROBLEMS

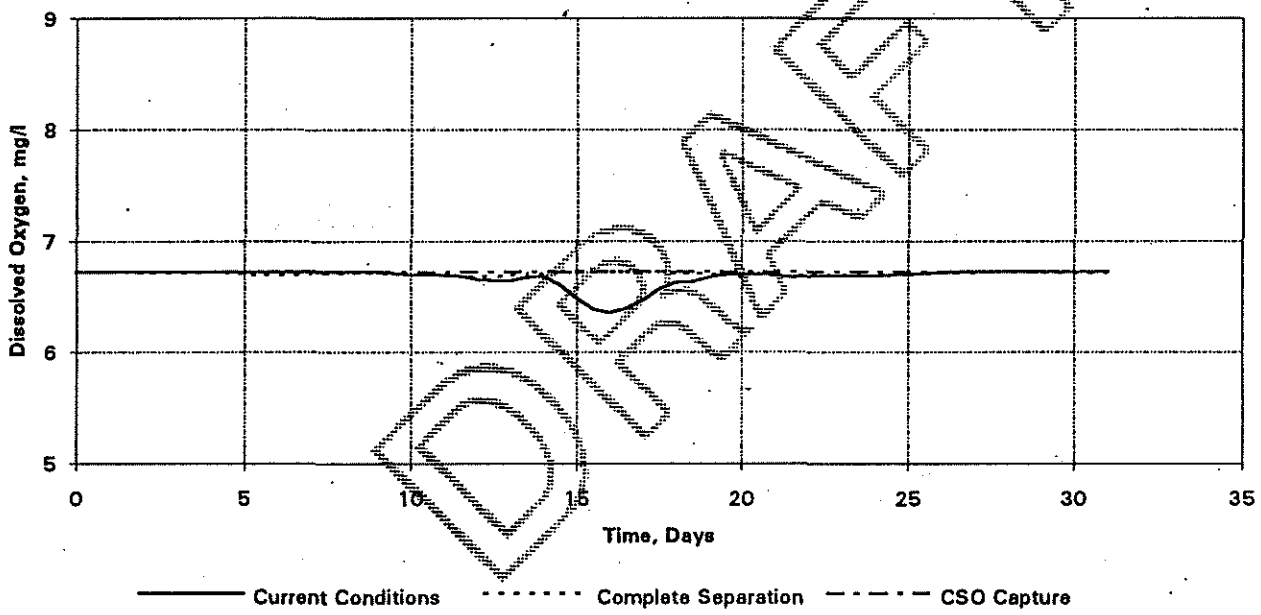
	Willamette River	Columbia Slough
Dissolved Oxygen	Maybe	Maybe
Bacteria	Yes	Yes
Eutrophication	No	Yes
Water Borne Toxics	Maybe	Probably
Sediment Toxics	Maybe	Probably
Aesthetics	Yes	Yes

SFO Summer Storm Effects: D.O.

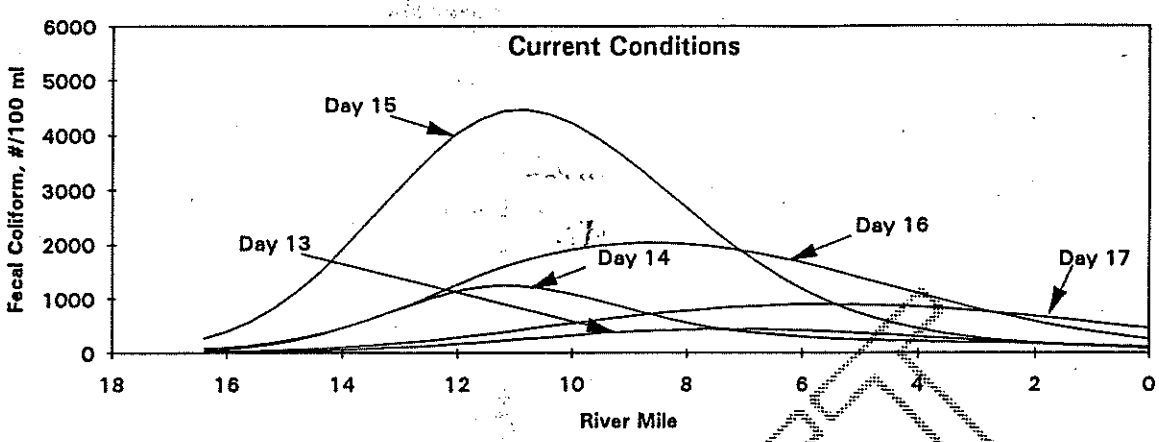


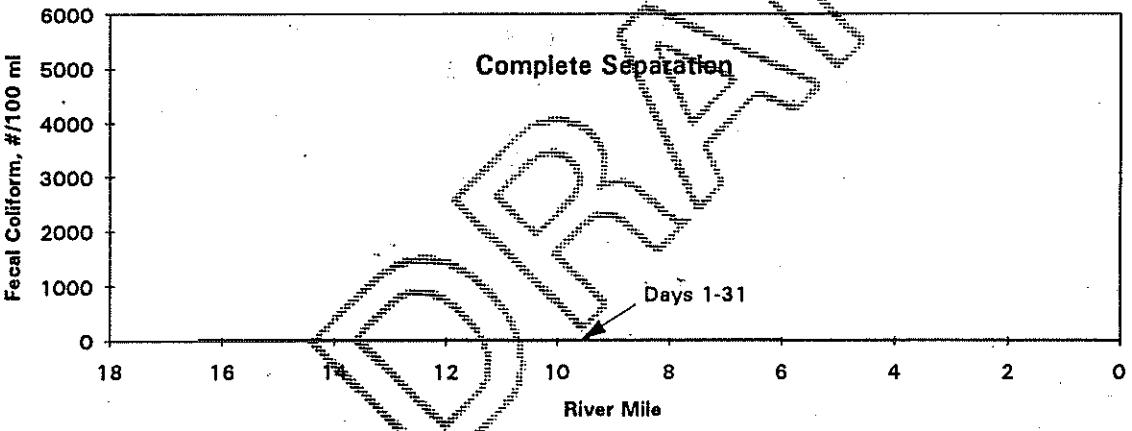


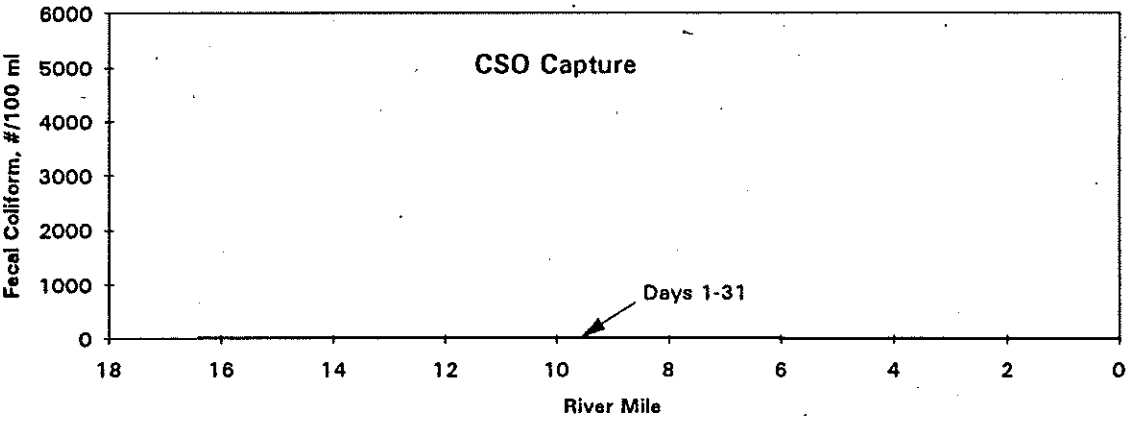



Summer SFO Time Sequence at SPSRR Bridge - D.O.
Dissolved Oxygen, mg/l
9
8
7
6
5
0
5
10
15
20
25
30
35
Time, Days
Current Conditions
Complete Separation
CSO Capture

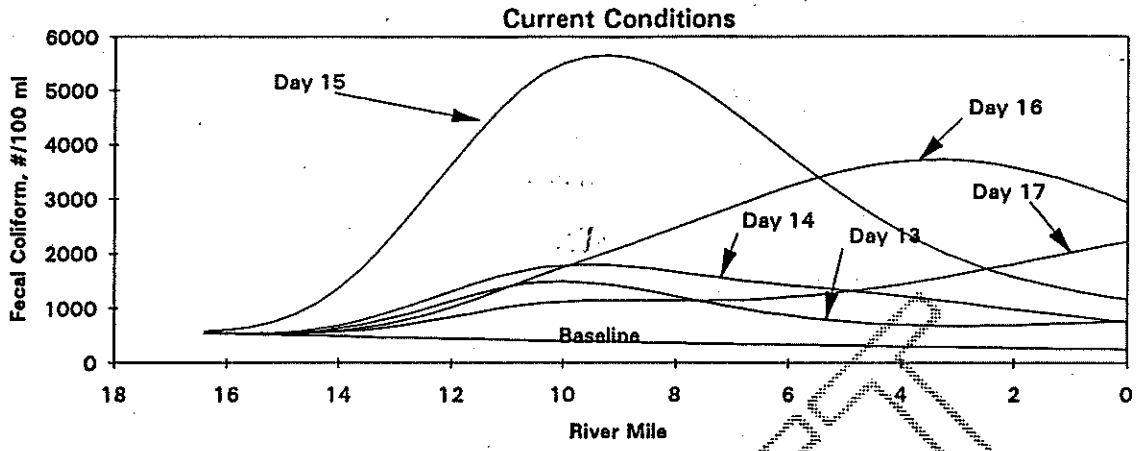
SFO Summer Storm Effects: Fecal Coliform

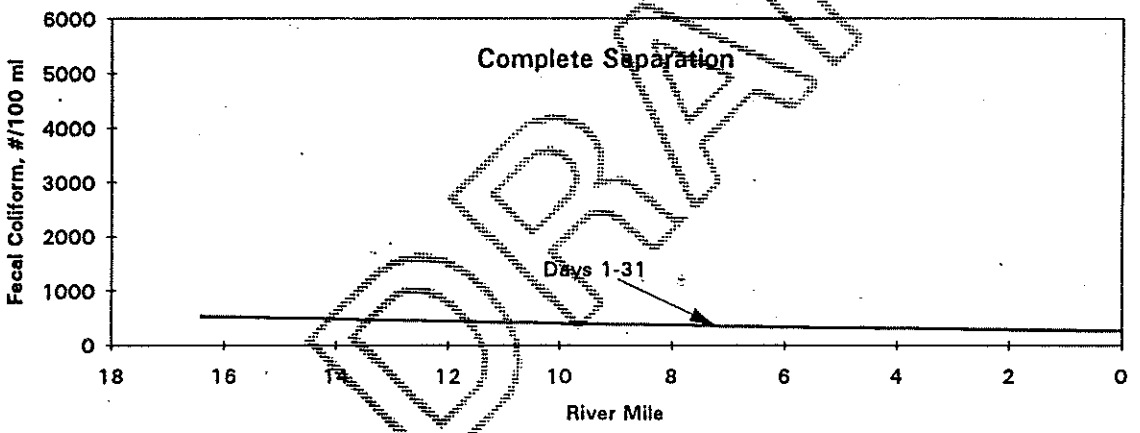


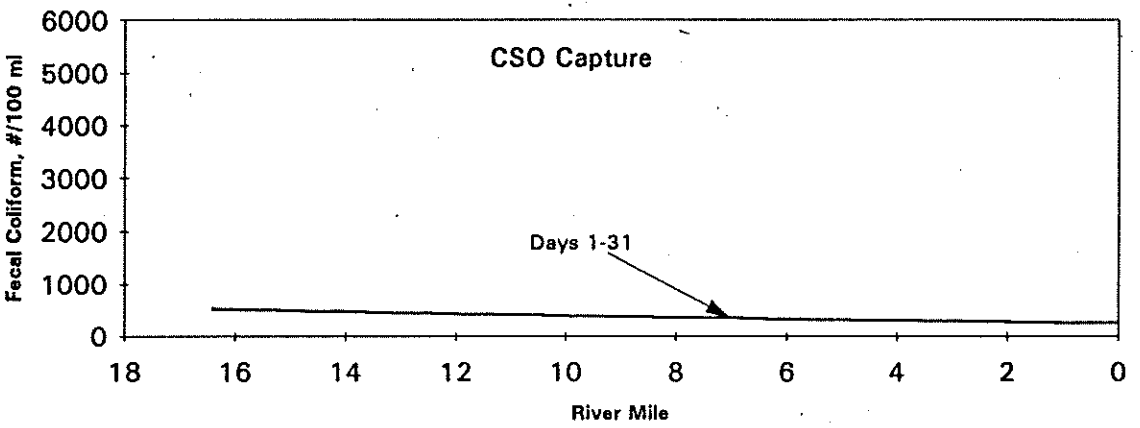




SFO Winter Storm Effects: Fecal Coliform







Summary of SFO Storm Effects

			Number of Days		
Period	**Parameter**	**Effect**	**Current**	**Separation**	**Capture**
Summer	**Dissolved Oxygen**	D.O.< 8	31.0*	31.0*	31.0*
		D.O.< 7	0.0	0.0	0.0
		D.O.< 6	0.0	0.0	0.0
	Fecal Coliform	F.C.> 200	10.6	0.0	0.0
		F.C.> 400	6.3	0.0	0.0
		F.C.> 1,000	2.25	0.0	0.0
		F.C.> 2,000	0.88	0.0	0.0
Winter	**Dissolved Oxygen**	D.O.< 8	0.0	0.0	0.0
		D.O.< 7	0.0	0.0	0.0
		D.O.< 6	0.0	0.0	0.0
	Fecal Coliform	F.C.> 200	31.0**	31.0**	31.0**
		F.C.> 400	28.0	0.0	0.0
		F.C.> 1,000	7.9	0.0	0.0
		F.C.> 2,000	1.9	0.0	0.0
		F.C.> 4,000	0.9	0.0	0.0

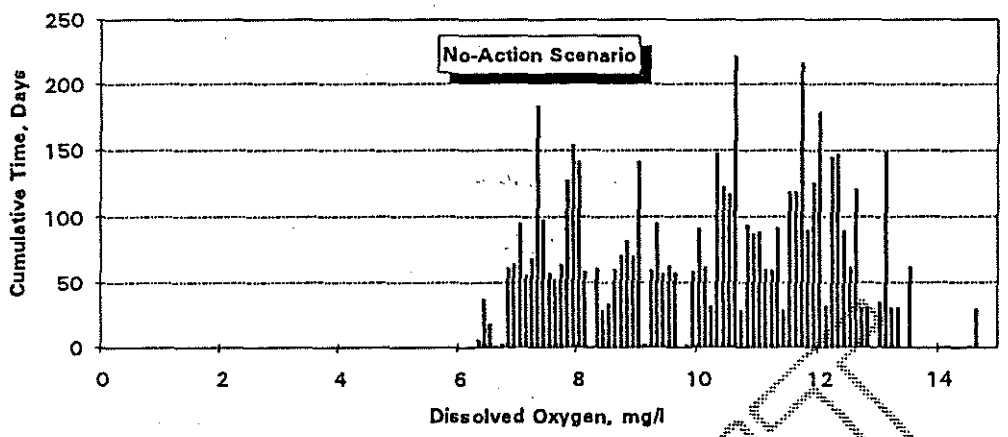
* Baseline D.O. is < 8.0 mg/l

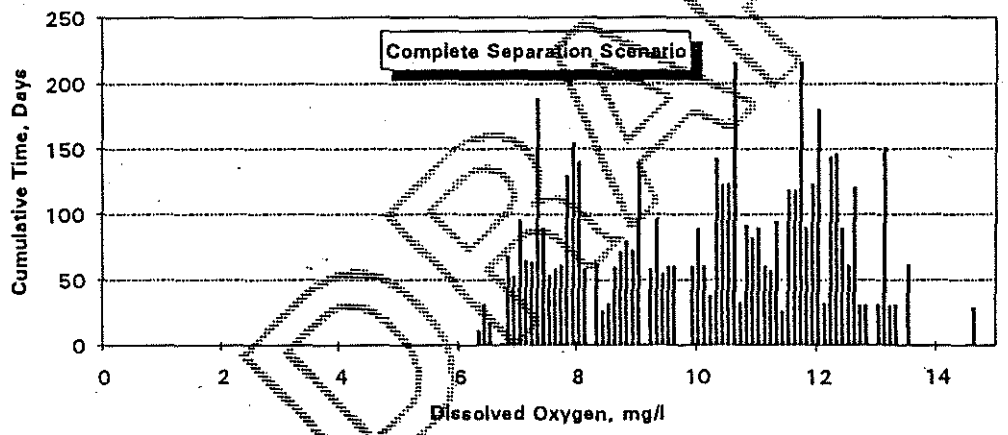
** Baseline F.C. is > 200 #/100 ml

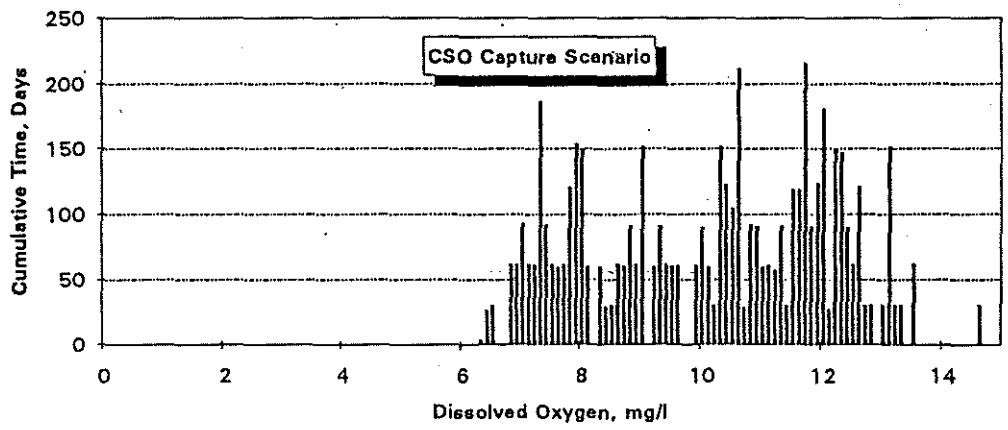
Summary of 15-Year Simulations

		Percent of Time		
Parameter	**Effect**	**Current**	**Separation**	**Capture**
Dissolved Oxygen	< 8 mg/l	23.6	23.6	23.6
	< 7 mg/l	5.2	5.1	5.1
	< 6 mg/l	0.0	0.0	0.0
Fecal Coliform	> 200	53	48	48
	> 400	32	23	24
	> 1,000	3	0	0
	> 2,000	0.2	0	0

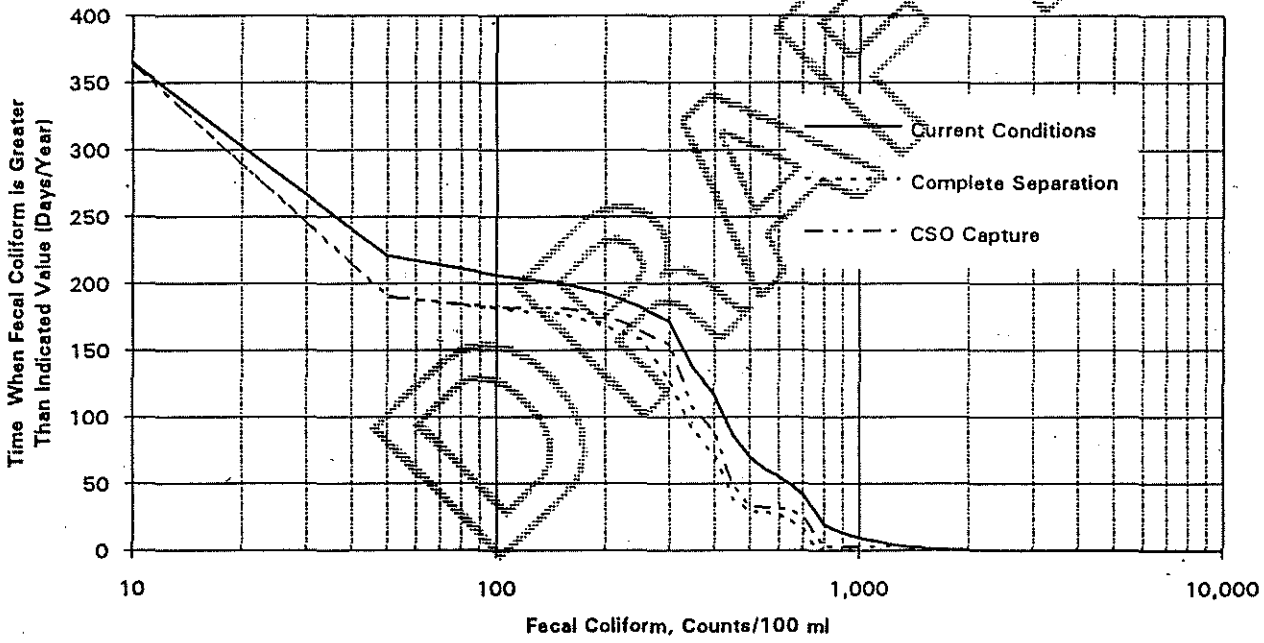
PULSEQUAL Dissolved Oxygen Forecasts in the Willamette River at SPSRR Bridge in Portland Based on 15-Year Continuous Simulations



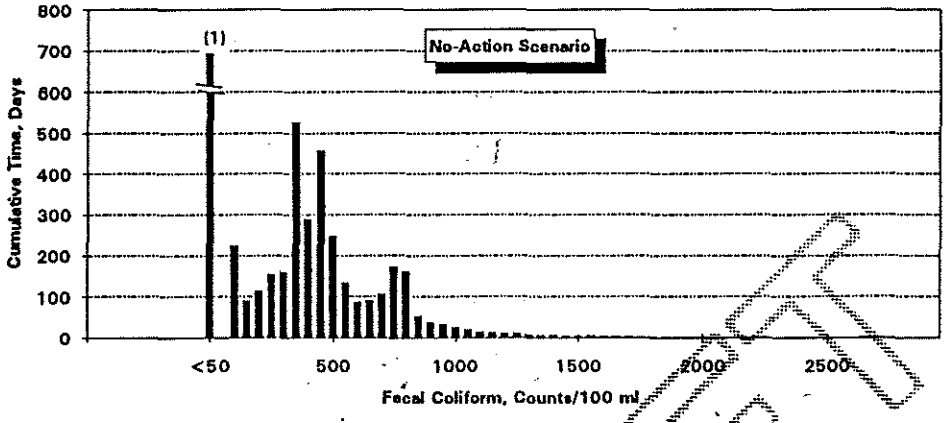




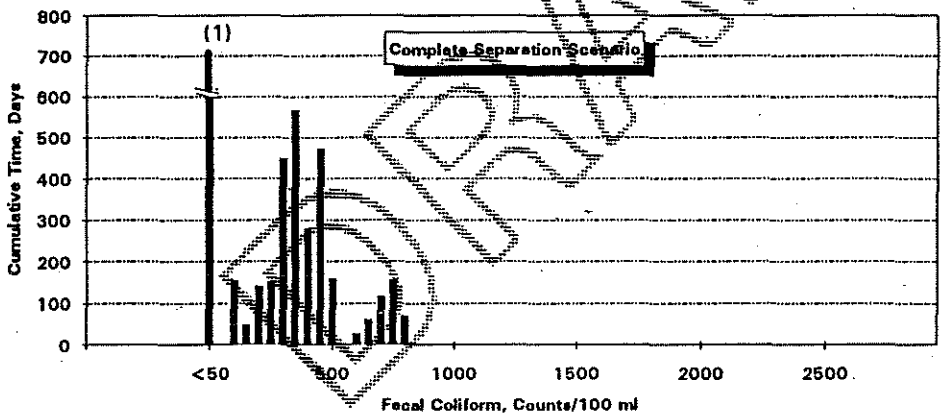
PULSEQUAL Fecal Coliform Forecasts in the Willamette River
(Continuous Simulations for the Years 1976 Through 1991)



PULSEQUAL Fecal Coliform Bacteria Forecasts in the Willamette River at SPSRR Bridge in Portland Based on 15-Year Continuous Simulations



(1) This column goes up to 2,158 days



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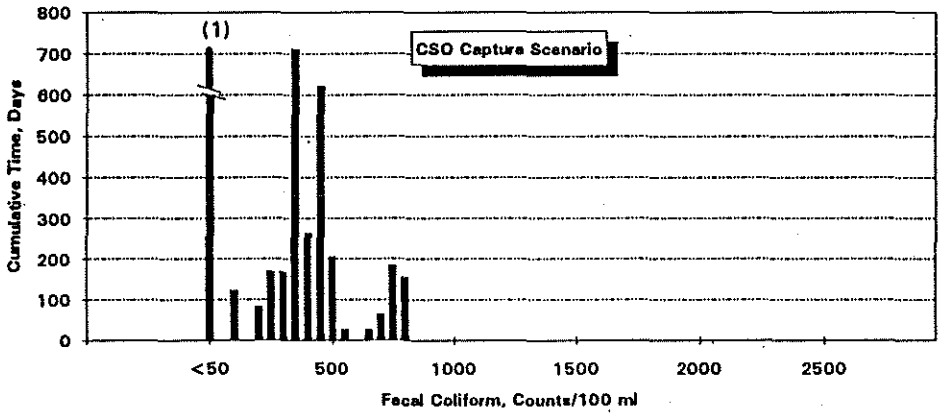

(1) This column goes up to 2,619 days

SECTION 6

SECTION 6

CSO TECHNOLOGIES: WHICH APPEAR MOST VIABLE?

TECHNOLOGIES EVALUATION

- 31 conventional CSO technologies evaluated

- Non-conventional technologies being examined

  - Creative workshops
  - Public values input

- Most promising conventional technologies:

  - Inflow reduction
    - Stormwater sumps
    - Stream diversions
  - Sewer separation
  - Storage
    - Oversized pipes
    - Tanks
  - Treatment
    - Screening
    - Sedimentation
    - Disinfection

Table 8.3-5
Combined Sewer Overflow (CSO) Control Technologies Screening Summary

CSO Control Technology	Consider in Economic Optimization	Consider in Alternatives Development	Consider for Interim Use	Eliminate from Further Consideration
Sewer System Optimization				
Static Flow Control	X		X	
Variable Control	X			
Real-Time Control	X			
Source Controls				
Street Sweeping			X	
Combined Sewer Flushing			X	
Catch Basin Cleaning			X	
Industrial Pretreatment		X	X	
Construction Site Erosion Control			X	
On-Site Domestic Wastewater Storage				X
Garbage Disposal Ban				X
Inflow Reduction Techniques				
Upland Stormwater Storage		X		
Stormwater Sumps	X			
Sewer Separation	X			
Stream Diversion		X		
Physical Chemical Treatment				
Swirl Concentrator				X
Vortex Separator	X		X	
Microscreening				X
Plain Sedimentation	X			
Flocculation/Sedimentation				X
Dissolved Air Flotation (DAF)				X
DAF with Polymer Addition				X
High Rate Filtration (HRF)				X
Flocculation/HRF				X

Table 8.3-5 Combined Sewer Overflow (CSO) Control Technologies Screening Summary				
CSO Control Technology	**Consider in Economic Optimization**	**Consider in Alternatives Development**	**Consider for Interim Use**	**Eliminate from Further Consideration**
Chlorination/Dechlorination	X			
Biological Treatment				
Columbia Boulevard WWTP	X			
Wetlands Treatment		X		
Storage				
Earthen Basins				X
Open Concrete Tanks				X
Closed Concrete Tanks	X			
Storage Conduits	X			
Storage Tunnels	X			

Table 8.3-3
Major Advantages and Limitations of CSO Control Technologies

Technology	Advantages	Limitations
Static Flow Control	Easy and quick to implement Very cost-effective	Maximum pollutant reduction = ±20%
Variable Flow Control	Short implementation period Cost-effective	Maximum pollutant reduction = ±30%
Real-Time Control	Moderate implementation period Maximizes use of existing sewer system Cost-effective	Maximum pollutant reduction = ±35%
Street Sweeping	Existing program Reasonably cost-effective for TSS control Helps control floatables	Will not reduce frequency, magnitude, or duration of CSO Will not reduce FC
Combined Sewer Flushing	Short to moderate implementation period	Will not reduce frequency, magnitude, or duration of CSO Maximum possible FC removal = ±17% Not cost-effective
Catch Basin Cleaning	Significant (27 to 29%) reductions in TSS and floatables are possible	Catch basins are not currently used in combined sewer service area Will not reduce frequency, magnitude, or duration of CSO Will not reduce FC
Industrial Pretreatment	Can be used to target specific non-conventional pollutants	Only 11% of combined sewer service area is industrial or commercial land use Will not reduce frequency, magnitude, or duration of CSO Will not reduce FC

Table 8.3-3
Major Advantages and Limitations of CSO Control Technologies

Technology	Advantages	Limitations
Construction Site Erosion Control	Can be implemented quickly Regulations applicable to the planning area are currently being prepared	Will not reduce frequency, magnitude, or duration of CSO Will not reduce FC Will not reduce floatables
Onsite Domestic Wastewater Storage	Large (±73%) reduction in FC is possible Significant reductions in TSS and floatables (21 to 31%) are also possible	Would require construction at every household within the combined sewer service area Very expensive Not cost-effective
Garbage Disposal Ban	Could be implemented in a fairly short time period Very inexpensive	Could be difficult to obtain full compliance Will not reduce frequency, magnitude, or duration of CSO Will not reduce FC Will not reduce floatables
Upland Stormwater Storage	High levels of control (90% +) can be achieved Cost-effective inflow reduction technique	Siting of required stormwater basins in developed upland areas and/or steep terrain would be difficult Large number of individual basins are required for areawide application Integrating with combined sewer system would be difficult to impractical Land costs and siting difficulties could offset apparent cost-effectiveness

Table 8.3-3
Major Advantages and Limitations of CSO Control Technologies

Technology	Advantages	Limitations
Stormwater Sumps	Prevents stormwater from entering the combined sewer system Significant portion of annual CSO volume can be eliminated Cost-effective Proven technology in Portland	Potential for groundwater contamination by infiltrated stormwater Groundwater investigations & monitoring would be required
Sewer Separation	By definition CSO would be eliminated Will meet SFO requirements Will reduce FC discharge by 95%	Will increase surface runoff and pollutant discharge Negligible TSS reduction Difficult & disruptive construction Expensive
Stream Diversion	Will reduce discharge of relatively "clean" water into the combined sewer system	Applicable only to combined sewer basins with natural stream inflow
Swirl Concentrator	Minimum land requirements No moving parts	Estimated TSS removal = ±30% Poor cost-effectiveness
Vortex Separator	Minimum land requirements No moving parts Somewhat better performance compared to swirl concentrator Commercially available	Estimated TSS removal = ±40% Medium cost-effectiveness
Microscreening	Fairly high TSS removal (±65%) Moderate land requirements Good cost-effectiveness	Limited full-scale CSO treatment experience Demonstration projects have shown some operational problems Screens need to be protected from large solids Screen life can be short

Table 8.3-3
Major Advantages and Limitations of CSO Control Technologies

Technology	Advantages	Limitations
Plain Sedimentation	Proven, well-understood technology Sedimentation basins will also provide some storage Fairly high TSS removal (64%) Good cost-effectiveness	Large land area requirements
Flocculation Sedimentation	Proven technology Improved performance (80% TSS removal) compared to plain sedimentation Good cost-effectiveness Sedimentation basins will also provide some storage	Large land area requirements
Dissolved Air Flotation	Removes small particles and grease	Large land area requirements Poor TSS removal (±32%) Difficult process to control High O&M requirements High energy use No full-scale CSO control applications Poor cost-effectiveness
Dissolved Air Flotation with Polymer Addition	Removes small particles and grease	Large land area requirements Medium TSS removal (±42%) Difficult process to control High O&M requirements High energy use No full-scale CSO control applications Poor cost-effectiveness

Table 8.3-3
Major Advantages and Limitations of CSO Control Technologies

Technology	Advantages	Limitations
High Rate Filtration	Moderate land requirements (about the same as microscreens)	High O&M requirements Medium TSS removal (±43%) Limited CSO control experience
Flocculation/High Rate Filtration	Good TSS removal (±76%) Good cost-effectiveness Moderate land requirements (about the same as microscreens)	High O&M requirements Limited CSO control experience
Treatment at Columbia Boulevard WWTP	Maximizes use of current (200 mgd) and planned future (540 mgd) treatment capacity Provides uniform and high-level treatment of all captured CSO Provides centralized processing for all wastewaters	Maximizes storage requirements if plant is not expanded because CSO treatment capacity will only be available after the storm Existing site limits ultimate treatment capacity to 700 mgd
Wetlands Treatment	Can produce a very high-quality effluent including nutrient removal Can be used to enhance wildlife habitat	Requires extensive pretreatment Requires large areas of very flat land
Earthen Basins	Inexpensive	Incompatible with many land uses Many individual basins would be required Land area requirements are large compared with concrete basins of the same size
Open Concrete Tanks	Requires less land than earthen basins of the same size	Incompatible with many land uses Many individual basins would be required
Closed Concrete Tanks	Multiple land use is possible Some urban amenity improvement potential is provided	More costly than earthen basins or open concrete tanks

Table 8.3-3
Major Advantages and Limitations of CSO Control Technologies

Technology	Advantages	Limitations
Storage Conduits	Complete outfall consolidation and centralized storage system is provided High potential for urban amenity improvement potential (at or near waterfront)	Major construction must occur at or near waterfront Costs about the same as closed concrete tanks
Storage Tunnels	Very large centralized storage volumes can be provided Minimum land requirements Marginal cost of tunnel storage is low	Very large initial "buy in" cost for near surface consolidation, drop shafts, and pump out facilities

Abbreviations: CSO = combined sewer overflow; FC = fecal coliform ; TSS = total suspended solids; WWTP = wastewater treatment plant

Table C-1
TECHNICAL EVALUATION CRITERIA
Pollutant Removal Efficiency

Technology	Classification	Maximum Attainable Pollutant Removal (%)					
		CSO Frequency	CSO Volume	CSO Duration	Bacteria	Floatables	Suspended Solids
Static Flow Control	Sewer	15	15	15	20	20	20
Variable Flow Control	System	20	25	25	30	30	30
Real Time Control	Optimization	25	30	30	35	35	35
Street Sweeping	Source	0	0	0	0	27	29
Combined Sewer Flushing	Controls	0	0	0	17	0	4
Catch Basin Cleaning		0	0	0	0	27	29
Industrial Pretreatment		0	0	0	0	5	5
Construction Site Erosion Control		0	0	0	0	0	10
Onsite Domestic WW Storage		0	5	0	73	31	21
Garbage Disposal Ban		0	0	0	0	0	16
Upland Stormwater Storage	Inflow	99	99	99	99	99	99
Stormwater Sumps	Reduction	80	80	80	80	80	80
Sewer Separation		100	100	100	96	33	6
Stream Diversion (1)		--	--	--	--	--	--
Swirl Concentrator	Physical/	99	99	99	15	80	30
Vortex Separator	Chemical	99	99	99	20	80	40
Microscreening	Treatment	99	99	99	33	95	65
Plain Sedimentation		99	99	99	32	90	64
Flocculation/Sedimentation		99	99	99	40	90	80
Dissolved Air Flotation (DAF)		99	99	99	16	95	32
DAF with Polymer Addition		99	99	99	21	95	42
High Rate Filtration (HRF)		99	99	99	22	95	43
Flocculation/HRF		99	99	99	38	95	76
Chlorination/Dechlorination		99	99	99	99.9	0	0
Columbia Boulevard WWTP	Biological	99	99	99	99.9	99	85
Wetlands Treatment (1)	Treatment	--	--	--	--	--	--

(1) These technologies are applicable only to selected basins. Maximum pollutant removal estimates will be developed in Task 9.

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TableC- 2
TECHNICAL EVALUATION CRITERIA
Typical Pollutant Removal Unit Cost

Technology	Classification	Typical Pollutant Removal Unit Cost					
		CSO Frequency $/event	CSO Volume $/1000 gal	CSO Duration $/hour	Bacteria $/billion	Floatables $/percent	Suspended Solids $/lb
Static Flow Control	Sewer	41,305	0.27	3,579	0.03	12,896	0.17
Variable Flow Control	System	175,948	0.93	12,197	0.13	48,829	0.63
Real Time Control	Optimization	275,889	1.52	19,921	0.21	82,033	1.06
Street Sweeping	Source	Source controls will not reduce			N/A	N/AV	1.25
Combined Sewer Flushing	Controls	frequency, volume, or duration			4.28	N/A	85.81
Catch Basin Cleaning		of CSO's.			N/A	145,607	1.73
Industrial Pretreatment					N/AV	N/AV	N/AV
Construction Site Erosion Control					N/AV	N/AV	N/AV
Onsite Domestic WW Storage					4.74	4,301,250	83.33
Garbage Disposal Ban					N/A	1,572,753	0.41
Upland Stormwater Storage	Inflow	39,993	0.27	3,590	0.04	17,247	0.22
Stormwater Sumps	Reduction	173,195	1.14	15,007	0.19	72,097	0.93
Sewer Separation		1,101,425	7.28	95,438	1.23	1,389,395	102.34
Stream Diversion (1)		--	--	--	--	--	--
Swirl Concentrator	Physical/	232,885	1.64	21,441	0.27	128,756	4.43
Vortex Separator	Chemical	216,488	1.52	19,931	0.25	119,690	3.09
Microscreening	Treatment (2)	289,940	2.04	26,693	0.33	134,989	2.55
Plain Sedimentation		266,428	1.87	24,529	0.31	130,934	2.38
Flocculation/Sedimentation		317,751	2.23	29,254	0.37	156,156	2.27
Dissolved Air Flotation (DAF)		401,622	2.82	36,975	0.46	186,985	7.17
DAF with Polymer Addition		424,681	2.98	39,098	0.49	197,721	5.78
High Rate Filtration (HRF)		285,801	2.01	26,312	0.33	133,062	3.80
Flocculation/HRF		361,587	2.54	33,289	0.42	168,346	2.72
Columbia Boulevard WWTP (3)	Biological	--	--	--	--	--	--
Wetlands Treatment (1)	Treatment	--	--	--	--	--	--
Earthen Basins	Storage	120,984	0.85	11,138	0.14	53,511	0.69
Open Concrete Tanks		887,415	6.23	81,700	1.01	392,501	5.07
Closed Concrete Tanks		987,915	6.94	90,952	1.12	436,951	5.64
Storage Conduits		698,588	4.91	64,315	0.80	308,983	3.99
Storage Tunnels		1,104,311	7.76	101,668	1.26	488,433	6.31

(1) These technologies are applicable only to selected basins. Typical unit cost will be developed in Task 9.
(2) Includes chlorination/dechlorination.
(3) Expansion/modification of Columbia Boulevard WWTP will be addressed in Task 9.

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Table C-3

TECHNICAL EVALUATION CRITERIA

Qualitative Factors

Technology	Classification	Resource Conservation	Near Term Control
Static Flow Control	Sewer	E	E
Variable Flow Control	System	VG	G
Real Time Control	Optimization	VG	G
Street Sweeping	Source	P	E
Combined Sewer Flushing	Controls	G	G
Catch Basin Cleaning		P	P
Industrial Pretreatment		VG	VG
Construction Site Erosion Control		E	E
Onsite Domestic WW Storage		VG	P
Garbage Disposal Ban		E	VG
Upland Stormwater Storage	Inflow	E	P
Stormwater Sumps	Reduction	E	G
Sewer Separation		VG	A
Stream Diversion		VG	P
Swirl Concentrator	Physical/	VG	G
Vortex Separator	Chemical	VG	G
Microscreening	Treatment	G	P
Plain Sedimentation		G	P
Flocculation/Sedimentation		P	P
Dissolved Air Flotation (DAF)		P	P
DAF with Polymer Addition		P	P
High Rate Filtration (HRF)		P	P
Flocculation/HRF		G	P
Chlorination/Dechlorination		G	P
Columbia Boulevard WWTP	Biological	G	P
Wetlands Treatment	Treatment	VG	P
Earthen Basins	Storage	VG	P
Open Concrete Tanks		VG	P
Closed Concrete Tanks		VG	P
Storage Conduits		VG	A
Storage Tunnels		P	A

NOTE: All technologies are potentially applicable to long term CSO control.

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Table C-4
ENVIRONMENTAL EVALUATION CRITERIA
Maximum Attainable Pollutant Load Reductions

Technology	Classification	Maximum Attainable Pollutant Load Reductions					
		CSO Frequency (events)	CSO Volume (MG)	CSO Duration (hours)	Bacteria (10^15 organisms)	Floatables (percent)	Suspended Solids (tons)
Static Flow Control	Sewer	6	945	72	7.8	20	774
Variable Flow Control	System	8	1,574	120	11.7	30	1,161
Real Time Control	Optimization	10	1,889	144	13.6	35	1,355
Street Sweeping	Source	0	0	0	0	27	1,123
Combined Sewer Flushing	Controls	0	0	0	6.6	0	155
Catch Basin Cleaning		0	0	0	0	27	1,123
Industrial Pretreatment		0	0	0	0	5	194
Construction Site Erosion Control		0	0	0	0	0	387
Onsite Domestic WW Storage		0	315	0	28.4	31	813
Garbage Disposal Ban		0	0	0	0	0	619
Upland Stormwater Storage	Inflow	41	6,234	476	38.5	99	3,833
Stormwater Sumps	Reduction	33	5,088	384	31.1	80	3,097
Sewer Separation		42	6,297	480	37.3	33	232
Stream Diversion (1)		--	--	--	--	--	--
Swirl Concentrator	Physical/	41	6,234	476	5.8	80	1,161
Vortex Separator	Chemical	41	6,234	476	7.8	80	1,549
Microscreening	Treatment	41	6,234	476	12.8	95	2,516
Plain Sedimentation		41	6,234	476	12.4	90	2,478
Flocculation/Sedimentation		41	6,234	476	15.5	90	3,097
Dissolved Air Flotation (DAF)		41	6,234	476	6.2	95	1,239
DAF with Polymer Addition		41	6,234	476	8.2	95	1,626
High Rate Filtration (HRF)		41	6,234	476	8.5	95	1,665
Flocculation/HRF		41	6,234	476	14.8	95	2,942
Chlorination/Dechlorination		41	6,234	476	38.8	0	0
Columbia Boulevard WWTP	Biological	41	6,234	476	38.8	99	3,291
Wetlands Treatment (1)	Treatment	--	--	--	--	--	--
EXISTING BASINWIDE LOAD		42	6,297	480	38.9	100	3,871

(1) These technologies are applicable only to selected basins. Maximum load reductions will be estimated in Task 9.

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Table C-5
ENVIRONMENTAL EVALUATION CRITERIA
Qualitative Factors

Technology	Classification	Siting Impacts	Construction Period Impacts	Operating Impacts	Urban Improvement Potential
Static Flow Control	Sewer	E	E	E	NONE
Variable Flow Control	System	VG	VG	E	NONE
Real Time Control	Optimization	VG	VG	E	NONE
Street Sweeping	Source	E	E	VG	NONE
Combined Sewer Flushing	Controls	VG	VG	G	NONE
Catch Basin Cleaning		VG	G	VG	NONE
Industrial Pretreatment		E	VG	VG	NONE
Construction Site Erosion Control		E	E	VG	NONE
Onsite Domestic WW Storage		P	P	VG	NONE
Garbage Disposal Ban		E	E	VG	NONE
Upland Stormwater Storage	Inflow	P	P	VG	SOME
Stormwater Sumps	Reduction	G	G	VG	NONE
Sewer Separation		A	A	E	NONE
Stream Diversion		P	P	E	NONE
Swirl Concentrator	Physical/	G	G	G	SOME
Vortex Separator	Chemical	G	G	G	SOME
Microscreening	Treatment	G	G	G	SOME
Plain Sedimentation		P	G	G	SOME
Flocculation/Sedimentation		P	G	G	SOME
Dissolved Air Flotation (DAF)		P	G	G	SOME
DAF with Polymer Addition		G	G	G	SOME
High Rate Filtration (HRF)		G	G	G	SOME
Flocculation/HRF		G	G	G	SOME
Chlorination/Dechlorination		G	G	P	SOME
Columbia Boulevard WWTP	Biological	E	G	VG	NONE
Wetlands Treatment	Treatment	G	G	E	HIGH
Earthen Basins	Storage	A	G	P	NONE
Open Concrete Tanks		A	G	P	NONE
Closed Concrete Tanks		G	G	G	SOME
Storage Conduits		G	P	G	HIGH
Storage Tunnels		VG	VG	G	SOME

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Table C-6
IMPLEMENTATION CONSIDERATIONS
Qualitative Factors

Technology	Classification	Design, Construction, & Operation Complexity	Reliability	Land Requirements	Public Acceptance	Development Time Requirements (years)	Flexibility
Static Flow Control	Sewer	E	E	E	E	2	G
Variable Flow Control	System	G	VG	E	E	5	VG
Real Time Control	Optimization	P	G	E	E	7	VG
Street Sweeping	Source	E	VG	E	E	1	G
Combined Sewer Flushing	Controls	G	VG	E	VG	4	G
Catch Basin Cleaning		VG	VG	E	VG	5	G
Industrial Pretreatment		VG	VG	E	E	4	G
Construction Site Erosion Control		E	VG	E	E	1	P
Onsite Domestic WW Storage		G	P	VG	P	10	P
Garbage Disposal Ban		VG	G	E	A	4	P
Upland Stormwater Storage	Inflow	G	VG	P	G	10	P
Stormwater Sumps	Reduction	G	G	VG	G	5	P
Sewer Separation		P	E	E	A	20	P
Stream Diversion		G	E	E	G	5	P
Swirl Concentrator	Physical/	VG	VG	G	G	10	P
Vortex Separator	Chemical	VG	VG	G	G	10	P
Microscreening	Treatment	P	P	G	G	10	P
Plain Sedimentation		VG	VG	P	G	15	P
Flocculation/Sedimentation		G	G	P	G	15	P
Dissolved Air Flotation (DAF)		A	P	G	G	15	P
DAF with Polymer Addition		A	P	G	G	15	P
High Rate Filtration (HRF)		P	P	G	G	15	P
Flocculation/HRF		P	G	G	G	15	P
Chlorination/Dechlorination		G	VG	VG	G	15	P
Columbia Boulevard WWTP	Biological	VG	E	E	VG	10	VG
Wetlands Treatment	Treatment	VG	VG	G	VG	15	P
Earthen Basins	Storage	VG	VG	P	P	15	G
Open Concrete Tanks		VG	VG	P	P	15	G
Closed Concrete Tanks		VG	G	G	G	15	G
Storage Conduits		G	G	G	G	15	G
Storage Tunnels		P	G	VG	G	15	VG

TABLE C-7
Areawide Cost Estimates for CSO Control Technologies

Technology	Classification	Cost (millions of $) Present Worth	Cost (millions of $) Annual Cost	Areawide CSO Reductions	Comments
Static Flow Control	Sewer System Optimization	2.8	0.3	15% volume; 20% pollutants	All captured volume treated at Columbia Blvd WWTP
Variable Flow Control		15.8	1.5	25% volume; 30%pollutants	
Real Time Control		31.0	2.9	30% volume; 35% pollutants	
Street Sweeping	Source Controls	11.7	1.1	N/AV	Source controls will not reduce volume, frequency, or duration of CSO. Street sweeping costs are for current program.
Combined Sewer Flushing		215.3	19.9	12% bacteria; 3% TSS	
Catch Basin Cleaning		42.1	3.9	0% bacteria; 29% TSS	
Industrial Pretreatment		N/AV	N/AV	N/AV	
Construction Site Erosion Control		N/AV	N/AV	N/AV	
Onsite Domestic WW Storage		1,456.3	134.8	73% bacteria; 21% TSS	
Garbage Disposal Ban		5.6	0.5	0% bacteria; 16% TSS	
Upland Stormwater Storage	Inflow Reduction	14.9	1.4	80% volume; 80% pollutants	
Stormwater Sumps		45.1	4.2	58% volume; 58% pollutants	
Sewer Separation		495.2	45.9	100% volume; 6% TSS; 96% bacteria	
Stream Diversion		N/AV	N/AV	N/AV	Site specific alternative
Swirl Concentrator	Physical/ Chemical Treatment	89.0	8.2	24% TSS	All physical/chemical treatment plants are sized to treat and disinfect 80% of annual CSO volume. Floatables will be effectively removed from all treated flow.
Vortex Separator		82.7	7.7	32% TSS	
Microscreening		110.8	10.3	52% TSS	
Plain Sedimentation		101.8	9.4	51% TSS	
Flocculation/Sedimentation		121.4	11.2	64% TSS	
Dissolved Air Flotation (DAF)		153.5	14.2	26% TSS	
DAF with Polymer Addition		162.3	15.0	34% TSS	
High Rate Filtration (HRF)		109.2	10.1	34% TSS	
Flocculation/HRF		138.2	12.8	61% TSS	
Chlorination/Dechlorination		N/A	N/A	N/A	
Columbia Boulevard WWTP	Biological Treatment	N/A	N/A	N/A	
Wetlands Treatment		N/AV	N/AV	N/AV	Site specific alternative
Earthen Basins	Storage	46.2	4.3	80% CSO volume capture with treatment at Columbia Blvd. WWTP	One storage basin/subbasin
Open Concrete Tanks		339.1	31.4		One storage tank/subbasin
Closed Concrete Tanks		377.5	35.0		One storage tank/two subbasins
Storage Conduits		267.0	24.7		Three storage conduits
Storage Tunnels		422.0	39.1		One tunnel system

N/A = Not Applicable
N/AV = Not Available

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SECTION 7

SECTION 7

WHAT FACILITIES ARE LIKELY NECESSARY?

FACILITY REQUIREMENTS FOR STORAGE/TREATMENT OPTIONS

- Two levels of performance:
  - SFO (>99%)
  - Marginal Cost (>94%)
- SFO and marginal cost alternatives treatment requirements are similar
- SFO and marginal cost alternatives storage requirements are substantially different
- Stormwater sumps greatly reduce storage and treatment facility requirements
- Facilities required <u>without</u> inflow reduction

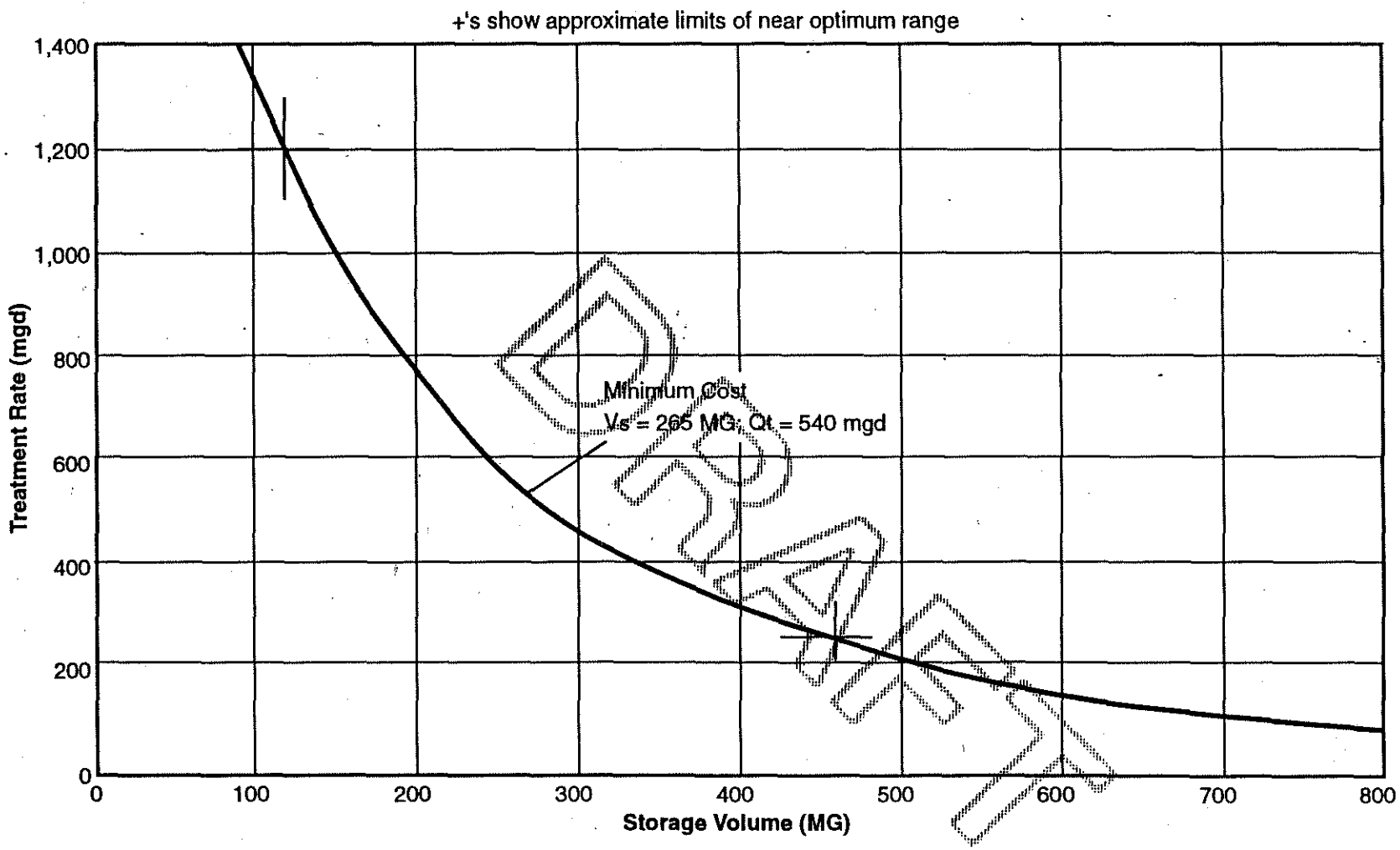
	STORAGE, MILLION GALLONS	ADDITIONAL TREATMENT, MILLION GALLONS PER DAY
SFO ALTERNATIVE	265	540
MARGINAL COST ALTERNATIVE	68	535

Table 8.4-2
Areawide Facility Requirements Summary

Inflow Reduction	Pollution Control Objective		SFO Objective	
	Storage Volume (MG)	Treatment Rate (mgd)	Storage Volume (MG)	Treatment Rate (mgd)
none	68	535	265	540
10 %	60	463	239	486
20 %	53	392	212	432
30 %	39	364	186	378
40 %	33	276	159	324
50 %	27	210	133	270

Notes:

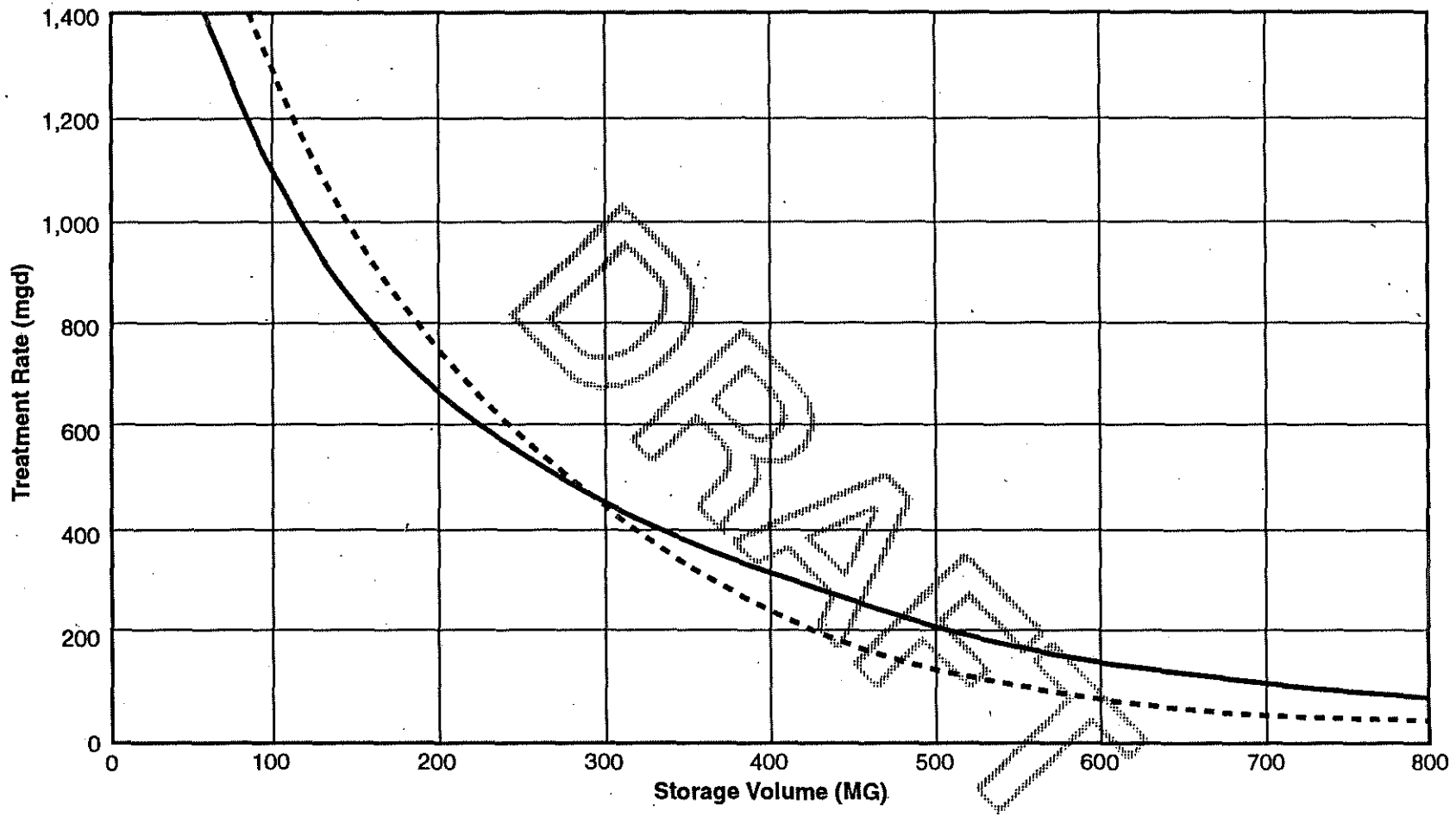
MG = Million gallons.
mgd = Million gallons per day.
SFO = Stipulation and Final Order.
CSO volume = 6,250 million gallons per year.



Areawide SFO Facility Requirements

Bureau of Environmental Services
CSO MANAGEMENT PLAN

FIGURE 8.4-13



Areawide 5- and 10-Year SFO Storm Isoquants

Bureau of Environmental Services
CSO MANAGEMENT PLAN

FIGURE 8.4-9

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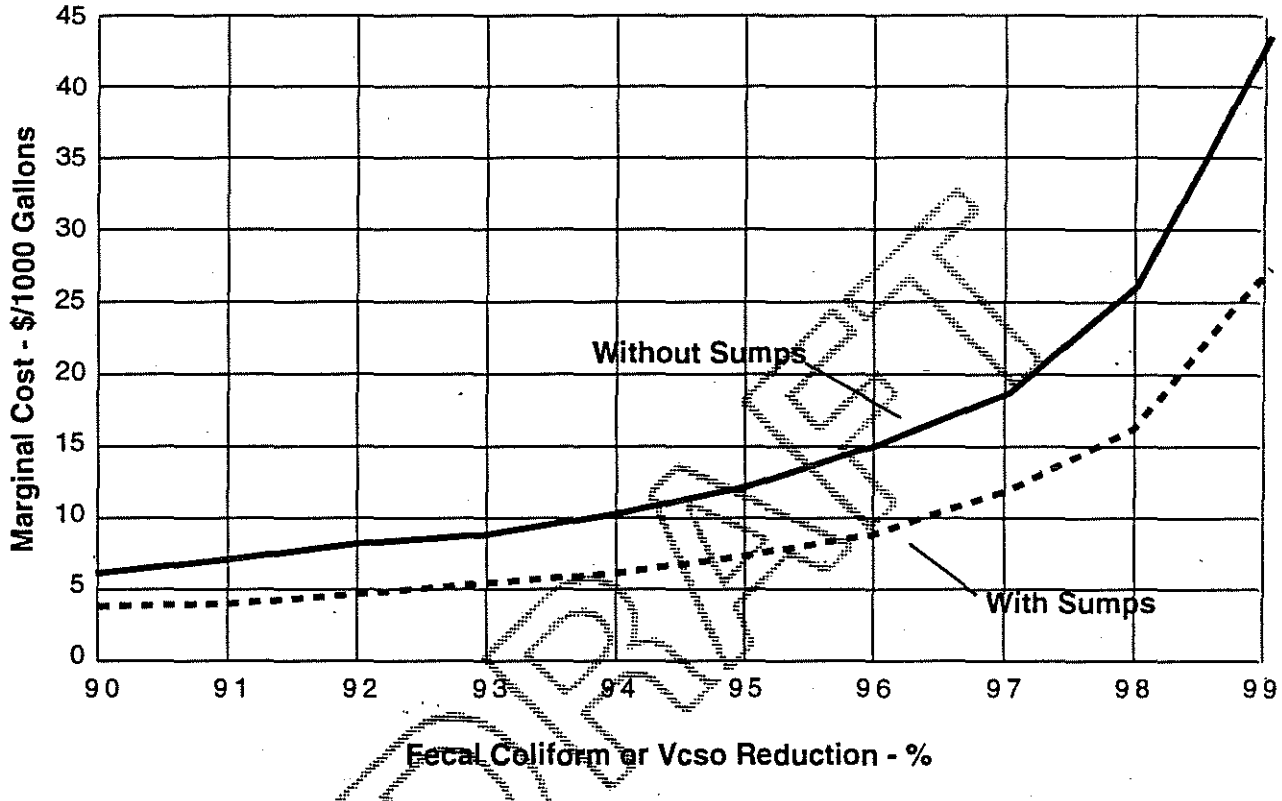
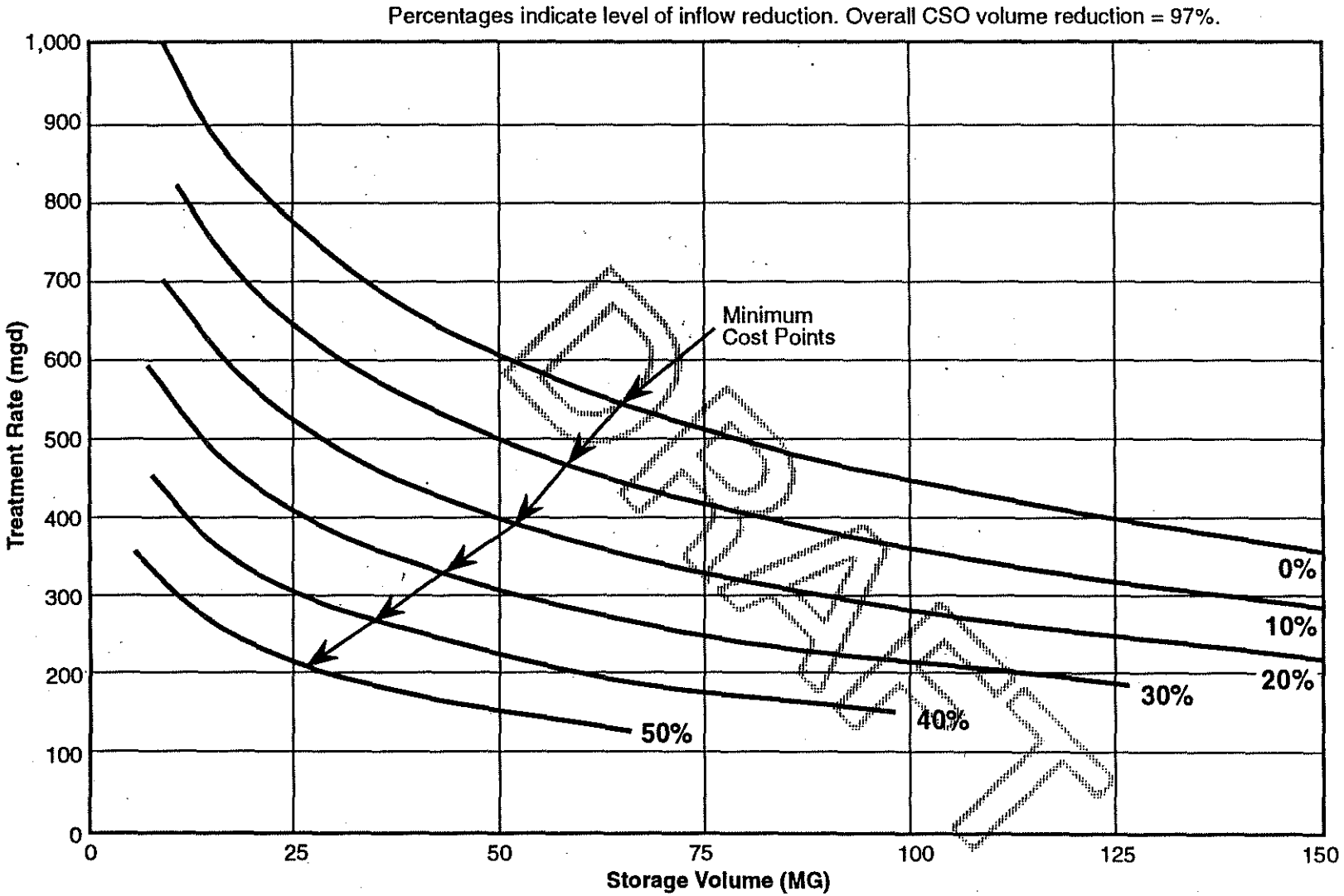


Areawide Marginal Cost of CSO Control

Bureau of Environmental Services
CSO MANAGEMENT PLAN

FIGURE **8.4-11**

Level of CSO Control	Marginal Cost Without Sumps $/1000 gallons	Marginal Cost With Sumps $/1000 gallons
90 %	$6.40	$4.00
95 %	$12.20	$7.50
96 %	$14.80	$9.20
97 %	$19.00	$11.90
98 %	$26.40	$16.40
99 %	$43.30	$27.90



Areawide Storage and Treatment Requirements for 97% Level of Control

Bureau of Environmental Services
CSO MANAGEMENT PLAN

FIGURE 8.4-12

Inflow Reduction	Storage Volume (MG)	Treatment Rate (mgd)
none	68	535
10 %	60	463
20 %	53	392
30 %	39	346
40 %	33	276
50 %	27	210

SECTION 8

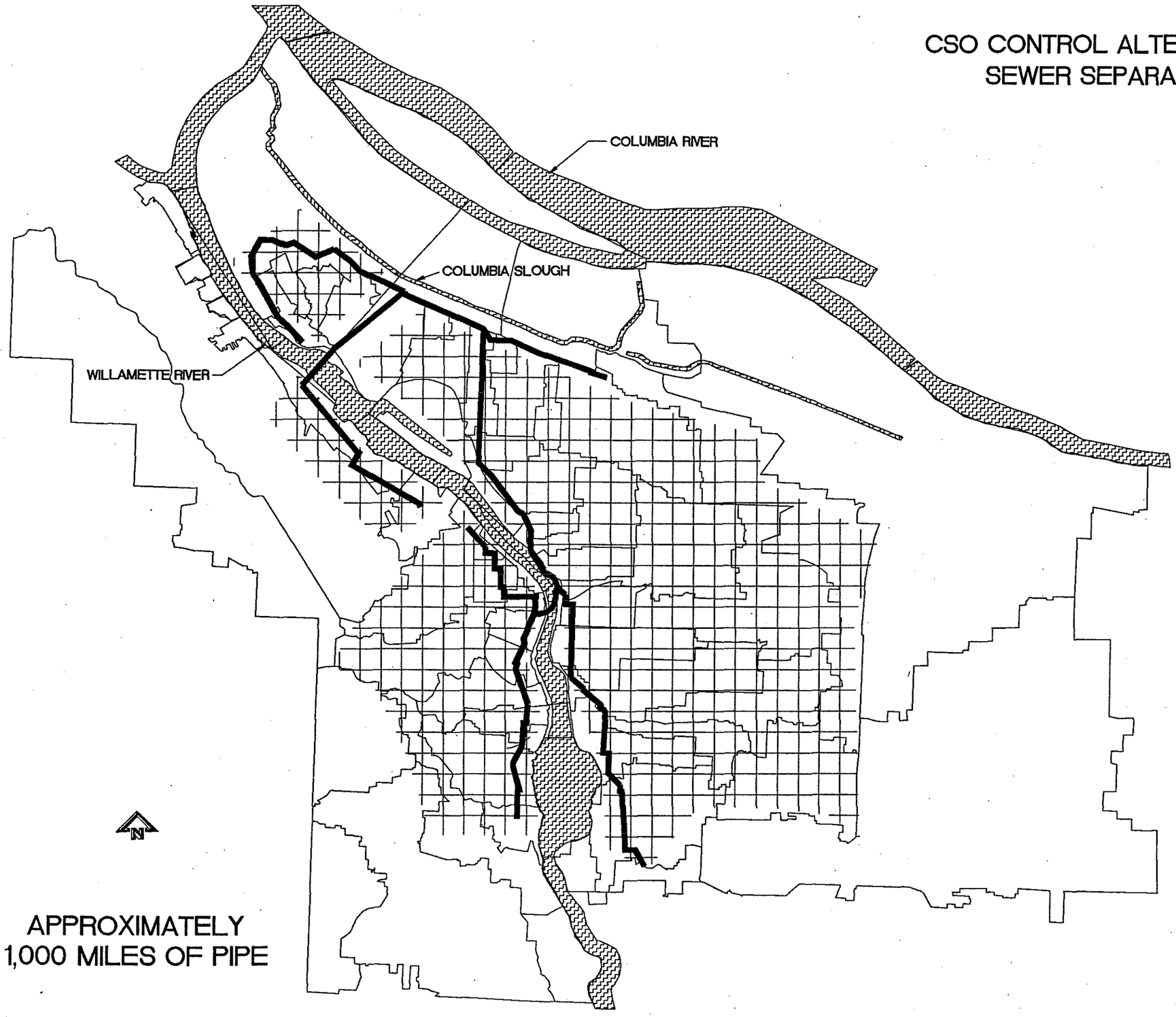
SECTION 8

CONFIGURATION ALTERNATIVES UNDER EVALUATION

CONFIGURATION ALTERNATIVES

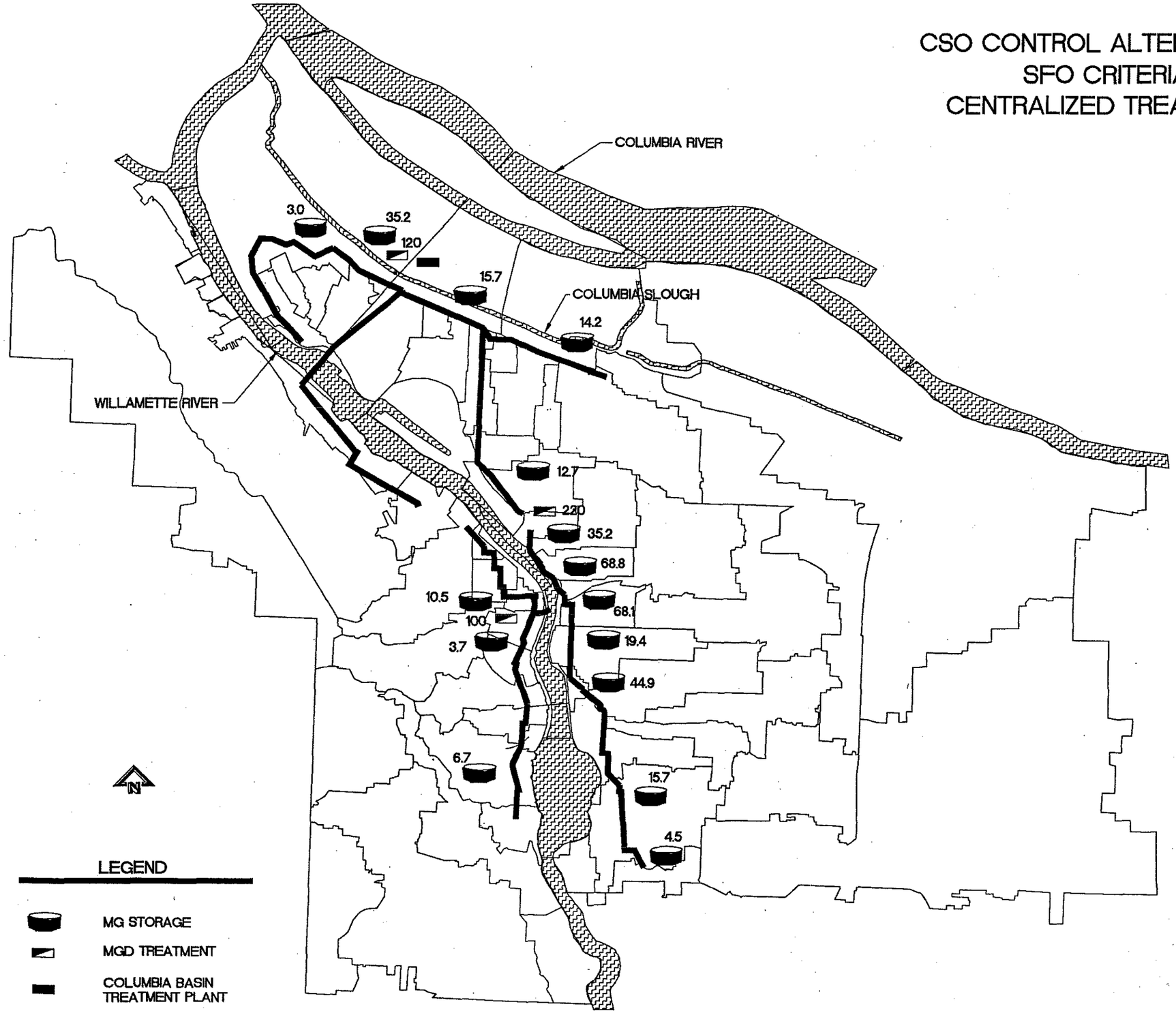
- Base assumptions
  - Future growth
  - Streams removed
- Complete sewer separation (96%)
- SFO performance criteria (>99%)
  - Storage and centralized treatment
  - Storage and decentralized treatment
- Marginal cost performance criteria (>94%)
  - Storage and centralized treatment
  - Storage and decentralized treatment

CSO CONTROL ALTERNATIVE 1
SEWER SEPARATION

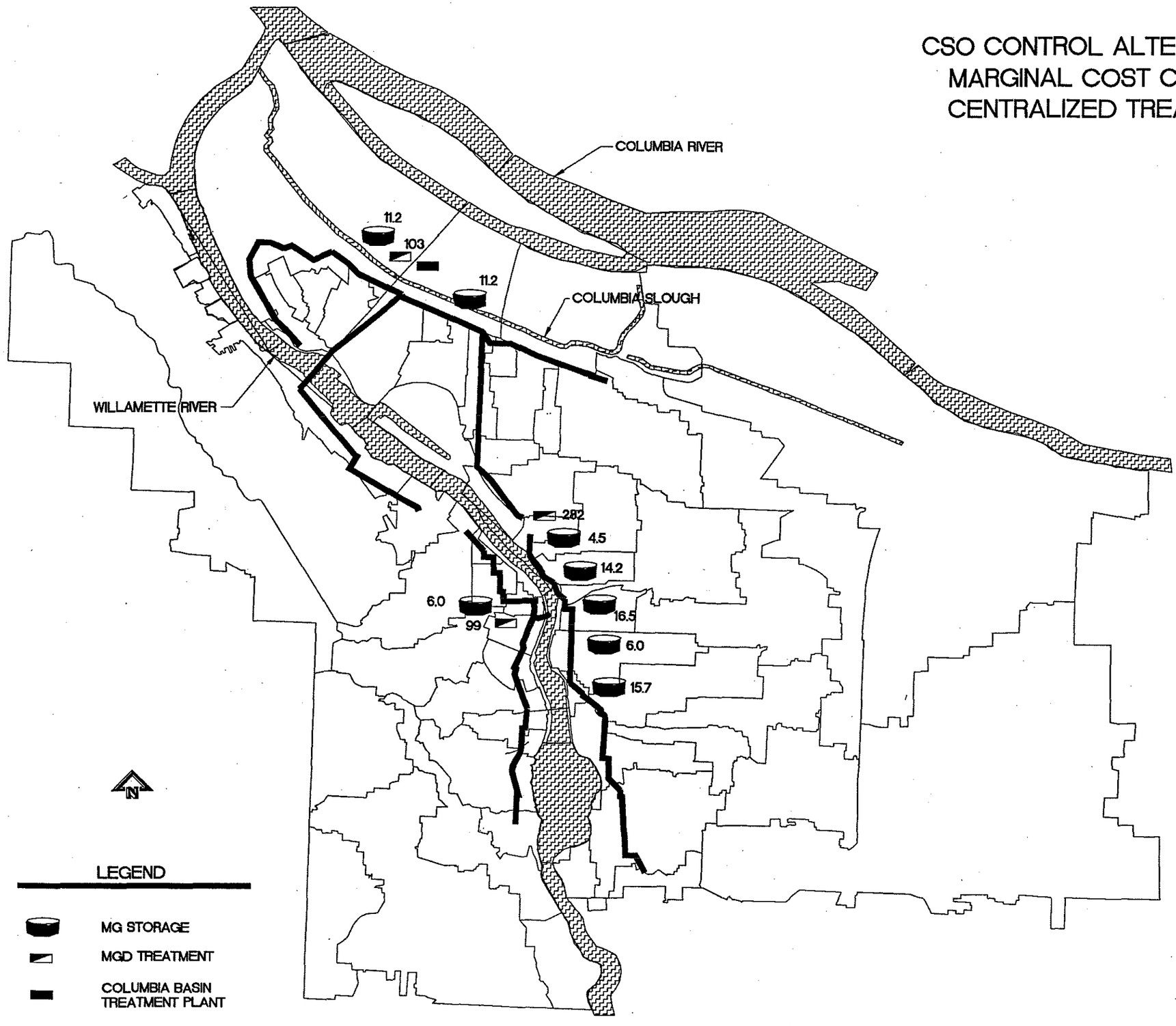


APPROXIMATELY
1,000 MILES OF PIPE

CSO CONTROL ALTERNATIVE 4
SFO CRITERIA
CENTRALIZED TREATMENT



CSO CONTROL ALTERNATIVE 5
MARGINAL COST CRITERIA
CENTRALIZED TREATMENT



Before the Oregon Environmental Quality Commission

Testimony of Keith A. Bartholomew,
Staff Attorney for 1000 Friends of Oregon

July 24, 1992

The corner stone of the State Implementation Plan for Air Quality in the Portland area is the Downtown Parking and Circulation Plan, better known as the "parking lid." At the time the lid was adopted, Portland violated federal standards for deadly carbon monoxide fumes one day out of every three. Since the lid's adoption, the number of parking spaces downtown has remained relatively constant. Yet, during the same period between 20,000 and 30,000 jobs were added to the downtown. Despite this substantial employment growth, the carbon monoxide emissions downtown have been steadily decreasing to the point where there has not been a single CO violation recorded since 1984. The parking lid can take a substantial credit for this success.

The lid, however, is in danger--and all of Portland's air quality with it. Currently, the lid applies only in the limited area of Portland's CBD. At the time of the lid's inception (1975), this may have made sense: approximately 90% of the multi-tenant office buildings in the region were located in the CBD. Today, however, the Central City's share of the region's multi-tenant office market is only 50%--the other 50% has sprawled out, away from the central core of the city and its hub of transit service. The City of Portland's Central City Transportation Management Plan indicates that the uneven application of the parking lid is largely responsible for the office flight from the CBD.

What is the result of this flight of jobs and development? Massive suburban traffic congestion and worsening regional air quality. Last year, DEQ reported that in the tri-county metropolitan area the amount of vehicle miles traveled (VMT) on state highways between 1982 and 1988 increased at a rate eight times greater than the increase in population. Where was all of this extra driving occurring? Not in the CBD, but in the far flung reaches of the region.

The air quality impact of these enormous increases in driving has been dramatic. DEQ's 1990 Annual Air Quality Report shows that over the past three years, Portland suffered double the allowed number of exceedences of federal ozone standards. The primary cause of these exceedences? Automobiles. If left unchecked, DEQ expects these dire circumstances only to get worse.

300 WILLAMETTE BUILDING 534 S.W. THIRD AVENUE PORTLAND, OREGON 97204
(503) 223-4396 · FAX (503) 223-0073

If the region and the state wish to promote decentralization of the Portland area, and thereby increase the amount of automobile driving and ozone pollution, the answer is simple. Do nothing; the uneven application of the parking lid appears to be a sufficient incentive to assure continued flight from the CBD. If, however, we wish to reverse the current trends of increased driving and decreased air quality, we must start treating the region uniformly.

The first and most obvious step is to apply parking restrictions on <u>all</u> of the central city. Lloyd District businesses have been clamoring for some time to have the district included as part of the downtown. Their cries have been heard and they have been quite successful in gaining the benefits of being part of the downtown. But, as in all things in life, with benefits come responsibilities. Now that the district is part of the central city, it needs to shoulder its share of the burden to keep the central city the living, breathing place that it is.

I urge you to adopt the temporary rule submitted to you today.

Thank you.

CITY OF
PORTLAND, OREGON
BUREAU OF PLANNING

Gretchen Kafoury, Commissioner
Robert E. Stacey, Jr., Director
1120 S.W. 5th, Room 1002
Portland, Oregon 97204-1966
Telephone: (503) 796-7700
FAX: (503) 796-3156
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FAX: (503) 823-7800

July 24, 1992

Bill Wessinger
Chairman
Environmental Quality Commission
811 S.W. Sixth Avenue
Portland, Oregon 97204

Dear Bill:

I understand that the DEQ may be asked to consider a proposed amendment to OAR 340-20-047. The amendment recommends extending the "Section 2 boundaries for downtown," redefining "downtown" to include the area bordered by the Interstate 5 ramp to N.E. Broadway and continuing east along N.E. Broadway Street to N.E. 16th Ave; thence south along N.E. 16th Avenue to the I-84 East freeway; thence west along the I-84 freeway to Interstate 5, as indicated on the accompanying map. In short, the amendment asks the DEQ to extend a ratio of 0.80 parking spaces per 1,000 feet of gross floor area to the Lloyd District.

My concern is that this proposal circumvents a process underway by the City of Portland to rewrite and revise the current Downtown Parking and Circulation Policy. This process is nearly two years old, has resulted in the expenditure of approximately $500,000, coordinates the efforts of the City, Tri-Met, Metro, the downtown business community (including Lloyd District), citizens, and DEQ. The result of this work is to be a new Central City Transportation Management Plan (CCTMP) that extends air quality and traffic management strategies beyond the Central Business District to all the districts of the Central City.

The CCTMP process is in its third and final phase (completion in March 1993). A Lloyd District Citizens Task Force has been established. Their charge is to examine a wide range of transportation management strategies to improve air quality, increase use of mass transit, reduce congestion, and encourage development in accordance with guidelines in the Central City Plan.

The proposed amendment, prematurely precedes, and quite possibly supersedes, the overall CCTMP work and the efforts of the Lloyd District Citizens Advisory Committee. The ratio strategy as proposed is a band-aid and is viewed as just one of many possible strategies that the Lloyd District Citizens Task Force will examine. It is also important to note that any plan for parking, transportation, and air quality management for the Lloyd District will be presented by the Citizens Task Force to the CCTMP Technical Advisory Committee, its Management Team, and its Policy Committee, all of which have DEQ representatives.

If this amendment is enacted it stands the chance of circumventing a process that has been both costly and important in its depth of participation by a diverse constituency in the Central City. Given that, I would urge DEQ to allow the CCTMP process to continue as planned and let the efforts of those involved in this process complete their work. Again, as a part of the CCTMP work, DEQ will be involved at all levels and will have opportunity to amend OAR 340-20-047 based on the technical work and recommendations of a comprehensive transportation management study.

The Environmental Quality Commission has been briefed by DEQ staff on the possibility of establishing maximum parking ratios for new development throughout the metropolitan area as an air quality measure. Such a regional strategy is beyond the scope of the City's CCTMP. Regional strategies are, of course, appropriate matters for DEQ's attention, and could very well complement the work the City is doing in the CCTMP. However, focusing on the Lloyd District in isolation would be counterproductive.

I appreciate your consideration of these comments. If you have any questions, feel free to call me.

Yours truly,

Robert E. Stacey, Jr.
Chairman
CCTMP Management Committee

cc: Fred Hansen, Department of Environmental Quality

DRAFT

Please replace the language in Condition 8 of the 600 Holladay Building I/S Permit with the following new language.

8. Upon a substantial increase in transit service to the proximity of the subject property, the permittee and the Department agree to re-evaluate the number of parking spaces available to the tenants of the 600 Holladay Building allowed in the permit, subject to the following:

a) For the purpose of quantifying the amount of transit service, the Department will work with the permittee and Tri-Met to establish a method and a baseline calculation within one year of substantial occupancy. The methodology may incorporate service hours, number of bus lines, line frequencies and other appropriate measures.

b) Both parties agree in principle to encourage tenant use of mass transit and other forms of commuting other than single-occupancy vehicles. Upon a substantial increase in transit service to the proximity of the subject property, the tenant agrees to develop a plan limiting the use of parking spaces by tenants of the 600 Holladay Building commensurate with the transit service improvements. The specific elements of this plan shall be determined after consideration of tenant lease agreements, changes in tenant lease agreements, changes in tenant occupancy, changes in parking and transit policies through the Central City Transportation Management Plan, changes in vehicle emission technology and other relevant factors. The permittee agrees to submit the plan for approval within 120 days after notification by the Department of a substantial increase in transit service to the proximity of the subject property.

PORTLAND CENTRAL CITY

TRANSPORTATION MANAGEMENT PLAN

PHASE III TECHNICAL ANALYSIS

DRAFT

Prepared by:

Shiels and Obletz
and
JHK & Associates

October 20, 1992

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1. INTRODUCTION

Overview of the Project

Portland's downtown and Central City area have been the subject of numerous policy studies and technical analyses. The product of these analyses has resulted in the City adopting policies that have successfully guided development in the downtown and Central City over the last two decades including Downtown Development Guidelines, the Central City Plan adopted by the City in March 1988 and the Downtown Parking and Circulation Policy updated in May 1989.

Issues of economic development, traffic congestion, transit ridership and air quality have motivated the City to consider a broad range of policies and programs to ensure an appropriate balance in each of these areas. The analyses have resulted in a coherent and comprehensive set of policies for the downtown that encompasses both development standards and transportation measures. The geographic boundaries of transportation policies have coincided with the boundaries of the downtown and have not consistently been applied to other parts of the Central City, City or region.

Recently, the market for office and commercial space has generated a growing interest in development in the portion of the Central City outside the boundaries of downtown. There has also been considerable development activity in suburban locations with the Portland metropolitan area. With these recent developments, it has become increasingly more appropriate to consider transportation and development policy in the context of the entire Central City rather than just the downtown. It also appears essential that policies affecting the Central City be considered in the context of the entire Portland metropolitan area.

The Central City Plan calls for an evaluation of the current Downtown Parking and Circulation Policy and an adoption of new transportation policies that would apply to the entire Central City area. Phase I of the study was completed in June 1991 at which time Phase II of the study was authorized. Phase II included a general assessment of transportation issues and the preparation of technical information necessary to develop a Central City Transportation Management Plan. Phase II resulted in the development of a modeling system appropriate for a complete evaluation of the possible impacts of build out of the Central City Plan. In Phase III, this model system has been implemented and the results of the analysis are subject of this report.

Central City Plan Goals

A key work task in the Phase II analysis was to develop a detailed model of the Central City to determine the transportation issues arising from the build-out of the Central City. Five goals for the CCTMP were established in the Phase I analysis:

1. Maintain air quality;
2. Increase use of mass transit;
3. Maintain traffic within the capacity of the street system to avoid gridlock and limits imposed by the use classifications of streets;
4. Preserve pedestrian and urban design elements of the Central City Plan; and
5. Encourage development in accordance with guidelines in the Central City Plan.

Development is the key variable. It impacts traffic, parking, transit, air quality, and pedestrian/urban design. While parking is not a goal, its need is recognized in supporting build-out of the Central City. Figure 1 depicts a concept of the interrelationships of the issues which was used in the development of policy questions for the Central City Transportation Management Plan.

This report provides a description of the development scenario tested in the Central City Plan build-out and describes the probable implications of the development for transit ridership, traffic, parking and air quality. Issues of urban design are not explicitly considered in this report.

Building out the Central City Plan has the potential for achieving several important environmental objectives:

a. Dense central city developments have resulted in a lower per capita travel for the population.

b. Alternatives to automobile transportation are readily available.

c. Mixed use developments support reduced travel objectives.

d. Urban design standards and pedestrian developments are contained in the Central City Plan.

Figure 1
Policy Question Framework

Source: Steve Iwata, PDOT

The economic analysis indicates that transportation is a key factor in the decisions to develop and maintain economic uses in the Central City. Accessibility, congestion, transit availability and parking cost and availability all significantly influence the decisions to build and lease properties within the dense environment of the Central City. While other factors are important, regulations on the Central City tend to deter the potential for new development.

Housing in the Central City has been identified as a key factor in the future development of the Central City. The existence of housing opportunities in the Central City provides several advantages in support of build-out:

a. Central City residents have been shown to travel fewer average miles in their vehicles.

b. Studies have demonstrated that Central City residents require fewer commuter trips.

c. Housing can improve the demand for office and retail in the Central City.

Goal 12 rules and regulations adopted by the Oregon Land Conservation and Development Commission require local jurisdictions to develop plans that will significantly reduce per capita vehicle miles traveled. A strategy to concentrate development in the Central City can be a major element in the City of Portland Plan to comply with the statewide goal.

Methodology

In Phase II of the Central City Transportation Management Plan, the Shields & Obletz developed of a model system to evaluate the impacts of the Central City Plan Buildout. The model system illustrated graphically in Figure 2 contained five major models. They are as follows:

1. Metros Regional Travel Model
2. City of Portland's Traffic Assignment Model
3. An Emissions Model
4. A Level-of-Service Analysis Package
5. MOBILE4.1 - An Emissions Rate Model Developed by EPA

All five of these models existed prior to the beginning of the study. The work of the Shields & Obletz team in this study has been to link the five models and to fine-tune them and adjust them for the Central City analysis. Some new data have been collected to provide additional detail and sensitivity within the

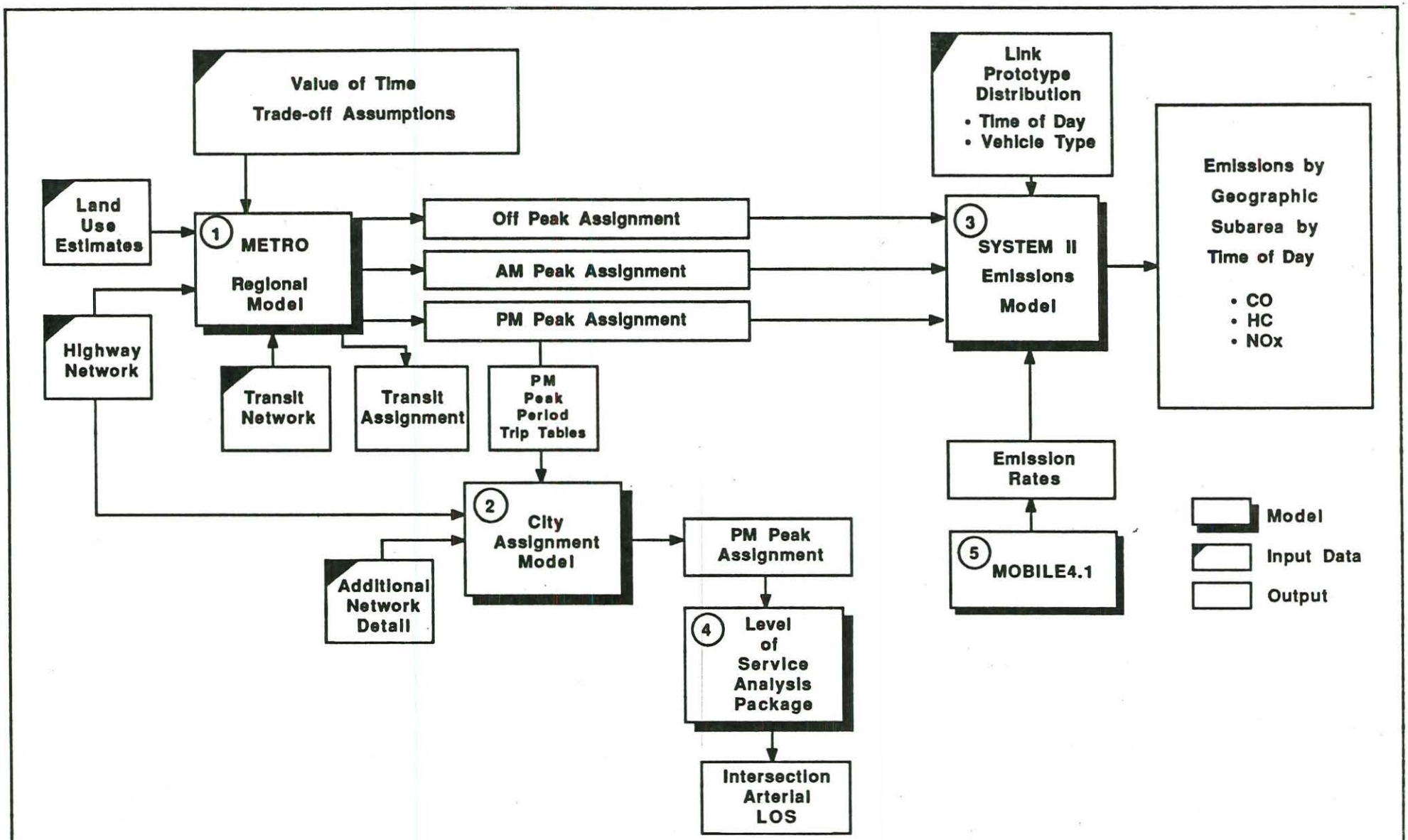


Figure 2
Central City Transportation Management Plan Study
Modeling System

jhk & associates

Central City study area. The data have also allowed for calibration of the model to current (1990) conditions.

In the development of the model system, the Shields & Obletz team has worked with a number of the participating agencies including the City of Portland's Department of Transportation, Bureau of Traffic and Parking, and Bureau of Planning, the Portland Development Commission, METRO, TRI-MET, the Oregon Department of Transportation and the Oregon Department of Environmental Quality. The team has also received support and assistance from the Association for Portland Progress. Each of these departments or agencies has supplied essential information for the application of the model system to this project.

The technical analysis presented in this report is based on extensive modeling of the Central City Buildout and numerous reports documenting the results of prior technical analysis pertaining to the Central City study area. Although no prior study has assessed the potential policies, programs and improvements necessary to accommodate the development level being tested in the Central City Transportation Management Plan (75,000 new jobs and 15,000 new housing units), these prior studies do provide useful context for consideration of the modeling results. They include the Central City Plan, the subsequent Transportation Status Report and the 1989 Portland Downtown Parking Plan and Circulation Update. In addition to these three areawide studies, numerous special area transportation studies were reviewed. These included studies for the Lloyd Center and Coliseum area, the Central Eastside, North Downtown, South Waterfront. Numerous studies dealing with special transportation programs were also reviewed including the Downtown Portland Light-Rail Alignment Study and the Inner Freeway Loop Study.

New data were also collected for the study in Phase II including traffic turning movement counts at twelve critical intersections, vehicle classification counts from roughly 150 locations in the metropolitan area (10 of these in the Central City represented new data the remainder were assembled from area agencies), city and state traffic accident and incident records and a Central City-wide land use inventory. These data have been essential in the development of the model system but have also provided useful insights for the analysis.

The remainder of this section provides a report on technical analysis in five different areas: development trends and influencing factors, transit service and use, roadway capacity and level-of-service,

parking supply and demand, and air quality issues. In each of these sections the model results and other available data are used to assess the likely magnitude of impact of Central City Plan Buildout and to identify the needs for special programs or policies for specific districts.

2. DEVELOPMENT

In the last two decades, the Central Citys share of regional office space has seen a dramatic decline. In 1970, the Central City accounted for approximately 90 percent of the competitive multi-tenant office market in the Portland metropolitan area. Today, the Central City share has been reduced to only 50 percent. In order to reverse this trend, and bring back the vitality of the Central City, a high growth development scenario (referred to as the High Growth Scenario) has been proposed to represent the Central Plan buildout. The development plan would add a projected 75,000 new jobs and 15,000 additional housing units to the Central City. Figure 3 illustrates graphically the estimated additions of jobs and housing by district for the High Growth Scenario. This core-concentrated development scenario is compared throughout this report to the population and employment projections assumed for the Regional Transportation Plan (RTP) which assumes that the growth over the next twenty years will be spread more evenly across the region.

As a region, the total projected increase in employment and housing are constant for the RTP and High Growth Scenarios, but projections in the Central City are significantly greater for the High Growth Scenario. The RTP scenario includes the addition of 39,277 new jobs and 4,081 housing units, in the Central City. Figure 4 depicts the difference in projected employment growth for the two scenarios. Employment projections in the High Growth Scenario for all districts but the Downtown and North Macadam, are at least twice the RTP scenario. Because of the difference in development levels, concern has been raised as to the impacts of the High Growth Buildout Scenario on the transportation network.

Preliminary estimates of person-trips, indicated in Table 1, indicate that the High Growth Scenario may actually produce less total trips then the RTP scenario. While the difference in person trips is slight, the High Growth Scenario would generate 100,000 fewer person trips by auto than the RTP scenario. Table 1 also shows more trips being made on alternative modes in the High Growth Scenario. The shift in mode could be attributed to the higher density levels and accessibility to transit. Similarly, Table 2 shows the related model estimated vehicle miles of travel (VMT) for PM peak hour. Corresponding to the total trips made, even with the greater development, the VMT decreases from the RTP to the High

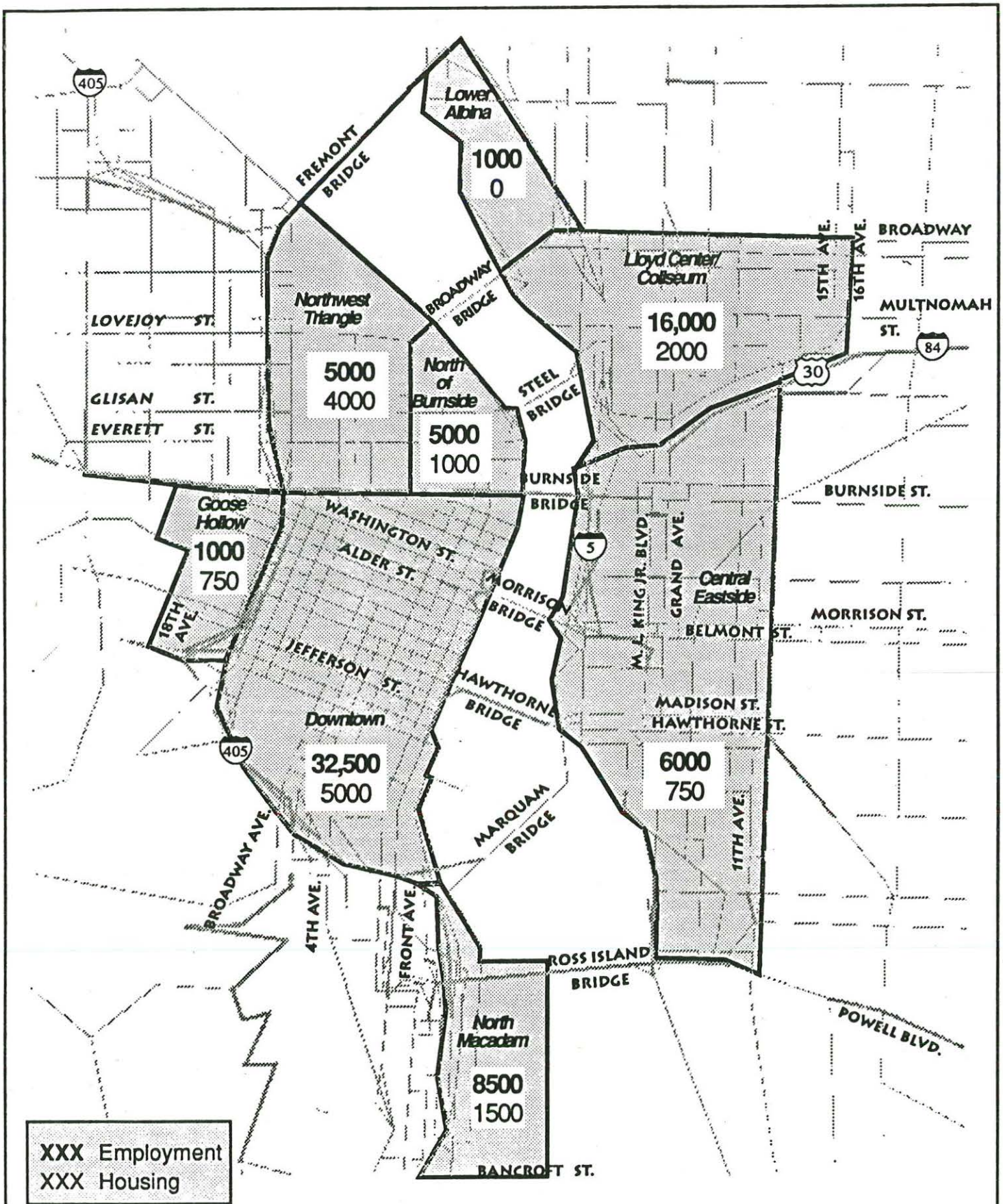


Figure 3
Estimated Employment and Housing Additions for the High Growth Scenario 1991-2010

jhk & associates

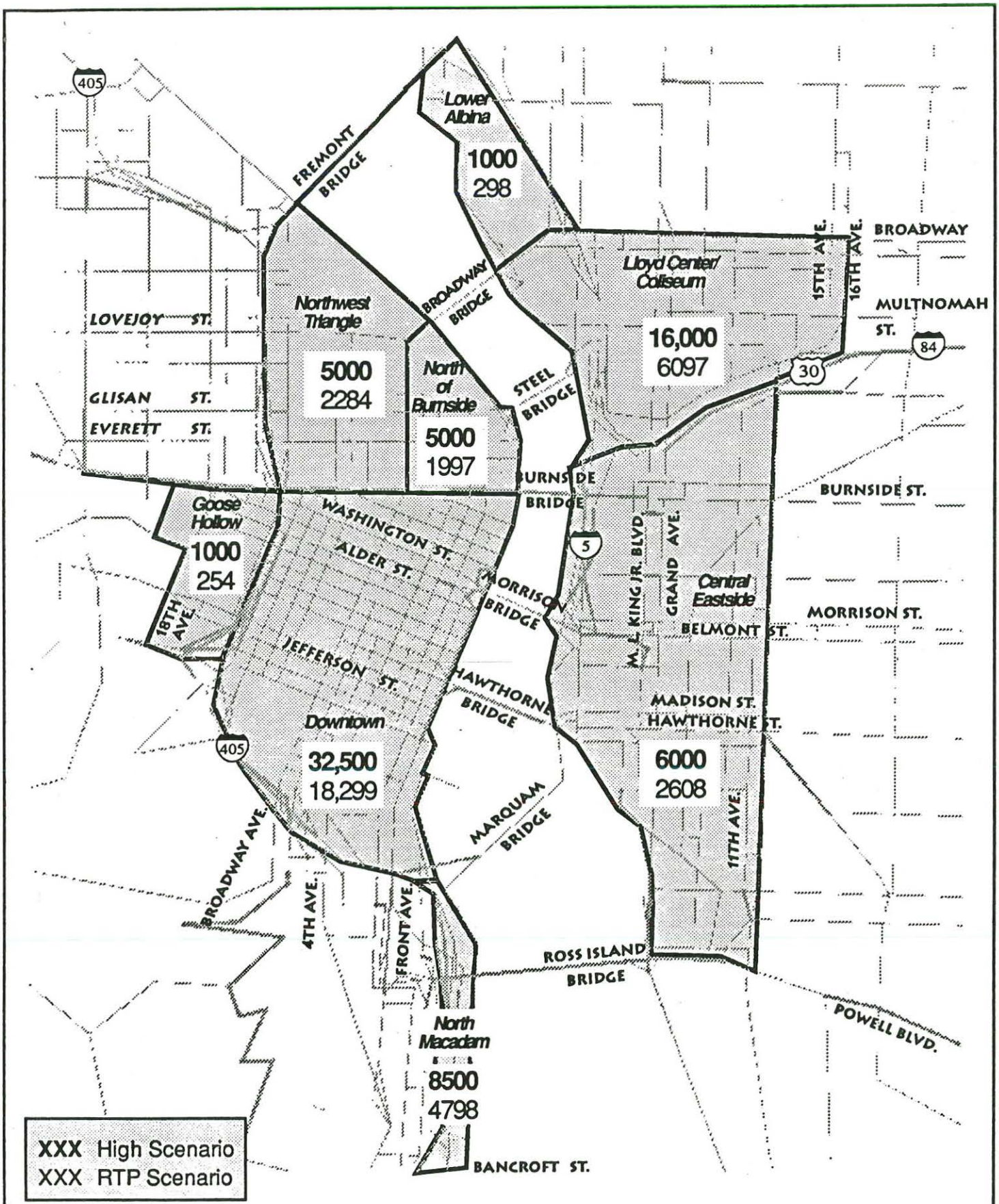


Figure 4

Estimated Employment Additions for the High Growth and RTP Scenarios 1991-2010

jhk & associates

Table 1
Projected Regional Daily Person-Trips by Mode

Mode	1990 Person-Trips	2010 RTP Person-Trips	2010 Person Trips
Auto	4,688,529	6,375,294	6,264,204
Transit	144,961	246,816	283,818
Walk/Bike	417,591	579,226	614,269
TOTAL	5,251,081	7,201,336	7,162,291

(1745TBL.1)

Source: METRO EMME/2 Prduction-Attraction Tables

Table 2
Projected PM Peak Hour Vehicle Miles of Travel

LOCATION	1990 Scenario	2010 RTP Scenario	2010 HG Scenario
N. of Burnside	2,527	3,287	3,990
Goose Hollow	6,347	7,021	7,277
NW Triangle	7,422	8,466	8,840
N. Macadam	11,296	14,251	15,061
Lower Albina	13,592	17,404	11,709
Col/Lloyd Center	22,455	22,646	28,094
Downtown	31,136	36,331	38,013
Central Eastside	33,296	41,986	43,592
CCTMP Total	128,071	155,393	162,575
City Total	931,568	1,105,546	1,114,486
Region	2,281,830	2,964,279	2,943,456

Source: City of Portland

(1745/1745DRFT.T-2)

Growth Scenario. The Downtown, while having over 30 percent of the new housing growth and 40 percent of the new employment growth, has an increase in VMT of just over 20 percent from the 1990 scenario.

The primary reason for the relatively low increase in vehicle trips and VMT with higher growth can be explained by the significant increase in the amount of Central City housing. Travel patterns are different for Central City residents than suburban residents. Alternative modes are viable due to the close proximity of retail and employment. The development of additional housing, as well as employment, in the Central City area appears to be an important element in maintaining mobility in the Central City in the High Growth Scenario. By providing this balance, the results of this comparison suggest that the higher development, and eventual build-out, of the Central City could be accommodated by the proposed transportation system for the Central City.

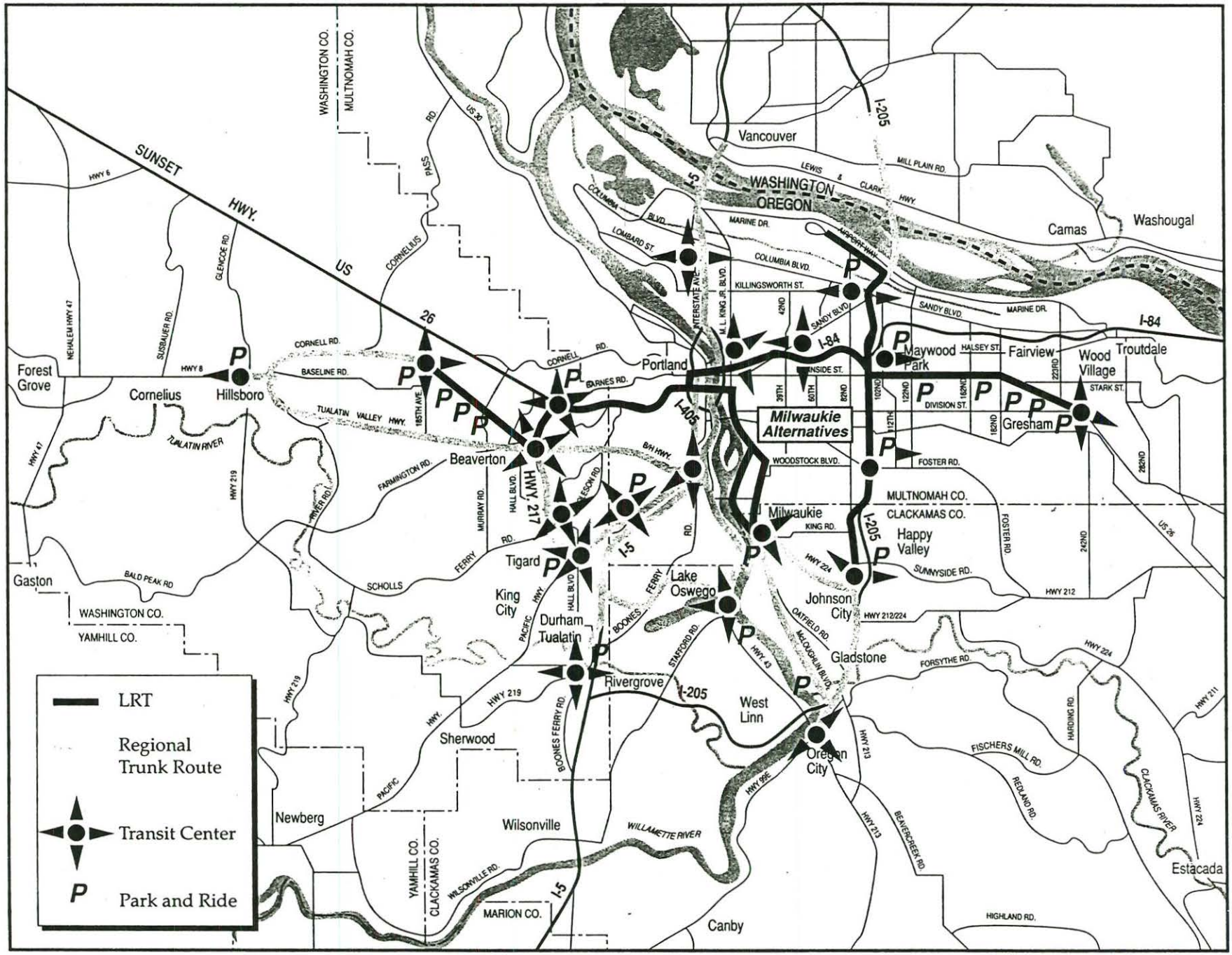
3. TRANSIT SERVICE

The Regional Transportation Plan (RTP) proposes a 60 percent increase in transit service for the year 2010. This increase in service is assumed to be the same for both the 2010 RTP and High Growth development scenarios. The capacity increase reflects the addition of four new light rail lines to the existing Banfield line as indicated in Figure 5. They are as follows:

- the West Side Corridor,
- the Vancouver Corridor,
- the Milwaukee Corridor,
- and the I-205 Corridor.

The bus network is altered to provide feeder service to the new lines and the fares are assumed to increase equal to the inflation rate.

Given the supply assumptions discussed above, Table 3 shows the expected daily mode share of transit for the districts based on the METRO regional model. As reflected in the existing mode share, the Downtown has the highest percentage of transit trips for the Central City districts. The transit mode share for all the districts increase for both development scenarios, but Downtown, North of Burnside, and Lloyd Center have the most significant increases.



METRO
1992

Figure 5
RTP Regional Transit Trunk Routes

Source: Regional Transportation Plan

Table 3
Daily Transit Mode Share by District

LOCATION	1990 Person-Trips			2010 RTP Person-Trips			2010 High Growth Person-Trips		
	Transit	Total	% Transit	Transit	Total	% Transit	Transit	Total	% Transit
Downtown	79,234	439,840	18.0	136,936	535,421	25.6	165,544	617,093	26.8
N. of Burnside	1,714	23,421	7.3	3,882	35,381	11.0	7,149	54,166	13.2
NW Triangle	1,384	39,722	3.5	2,563	49,553	5.2	6,851	80,013	8.6
N. Macadam	145	7,927	1.8	1,141	27,227	4.2	3,243	50,549	6.4
Goose Hollow	1,039	26,181	4.0	1,457	18,903	7.7	3,111	40,442	7.7
Lower Albina	197	5,849	3.4	352	7,128	4.9	537	10,372	5.2
Lloyd Center	3,110	138,730	2.2	11,583	165,043	7.0	20,485	214,915	9.5
Central Eastside	3,234	92,947	3.5	4,605	97,334	4.7	6,568	116,398	5.6
	90,057	774,617	11.6	162,519	935,990	17.4	213,488	1,183,948	18.0

[TRNTRIPS.WK3]

Using METROs EMME/2 transit model, a comparison was made of PM peak link volumes and capacities. Major corridors were summarized and investigated in the outbound direction because the PM peak hour assignment was used. Figure 6 indicates the locations of the summary lines used. Figure 7 indicates the P.M. peak hour transit volume crossing each line in the High Growth Scenario. Table 4 shows, as indicated by the shaded boxes, that the only links exceeding capacity in the 1990 model were the Morrison and Broadway Bridge links. In the 2010 RTP network four locations are predicted to have volumes greater than capacities including: Lloyd Center to East, Downtown to West, Morrison Bridge, and Steel Bridge to Lloyd Center. The Steel Bridge eastbound was the only location for which volumes exceed capacity in the 2010 High Growth Scenarios but not in the RTP scenario. The table also shows the largest deficit occurs for transit passengers traveling from the Downtown to the east. Routes east of the Steel Bridge and east out of the Lloyd Center have some of the most significant deficits, especially in the 2010 High Growth Scenario where the Steel Bridge is over capacity also. The comparison also identifies locations where the service capacity significantly exceeds the projected demand such as the Central Eastside to East and Northwest Triangle to North.

Table 5 shows the internal daily origin/destination of transit trips for the Central City Districts. The O-D tables were estimated from the attraction/production tables assuming that all attractions/productions between the origins and destinations during a 24-hour period made the return trip by the same mode. This assumption simplifies the more complicated phenomenon that trips made on transit, especially those other than HBW, may use an alternate mode for the return trip. From these O-D tables it is clear that current ridership trends persist in 2010. The Downtown consistently has the greatest number of transit passengers. The table shows that while in 1990 the greatest number of transit trips are made between the Downtown, North of Burnside and Lloyd Center these relationships change with the different development scenarios. For the RTP scenario, these district still have the greatest linkage with the Downtown, but the distribution is not as even between the three. In the High Growth Scenario, where Lloyd Center and Northwest Triangle have the second largest growth in housing and employment, respectively, the orientation of transit ridership changes. The greatest ridership demand is now between the Downtown, North of Burnside, Northwest Triangle and Lloyd Center districts.

In general, while the comparisons indicate that the transit system could accommodate increased ridership with the High Growth Scenario, the connectivity of the Downtown to the other districts becomes more of an issue. While an increase in transit service may be sufficient to accommodate the RTP

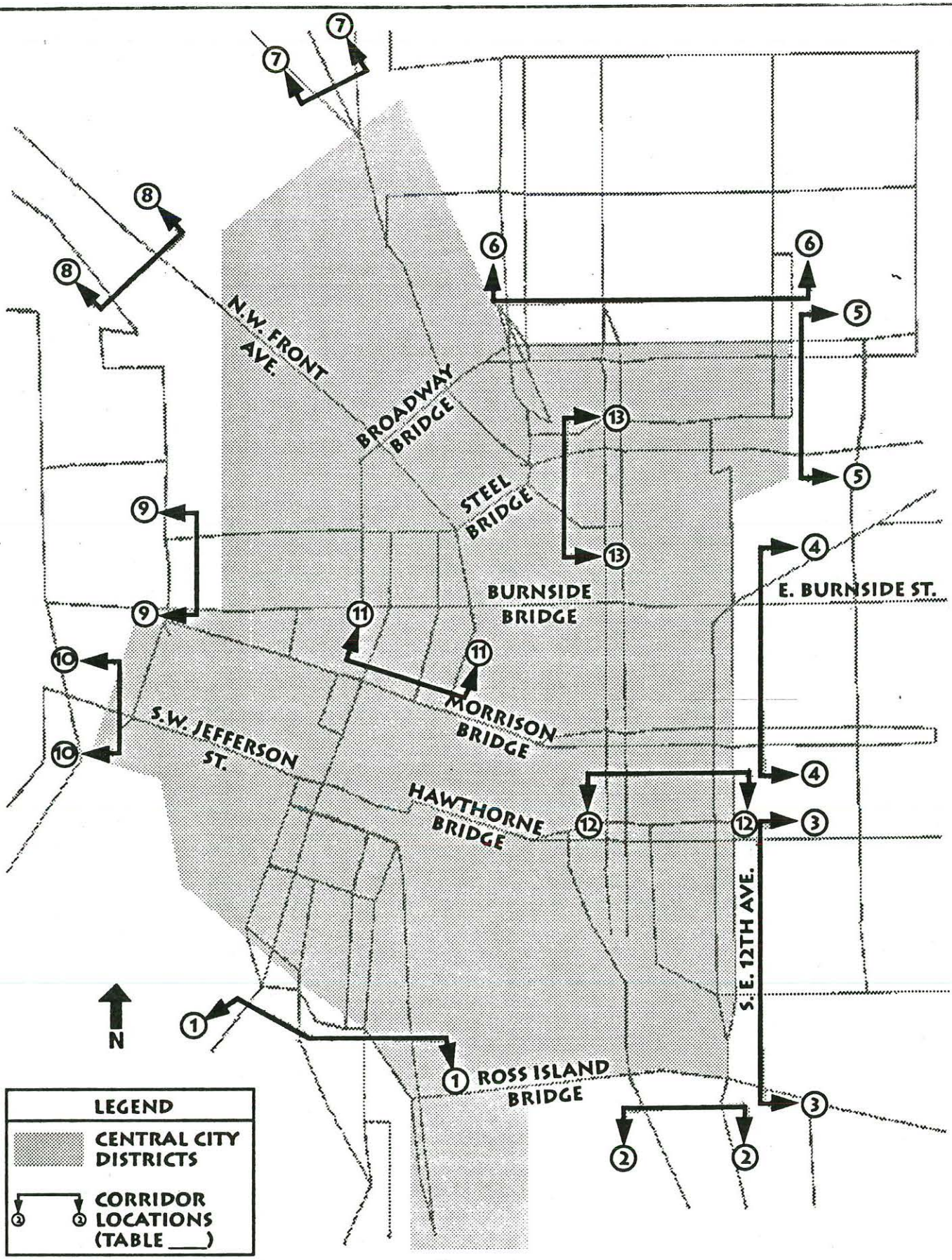


Figure 6
EMME/2 Transit Corridor Summary Locations

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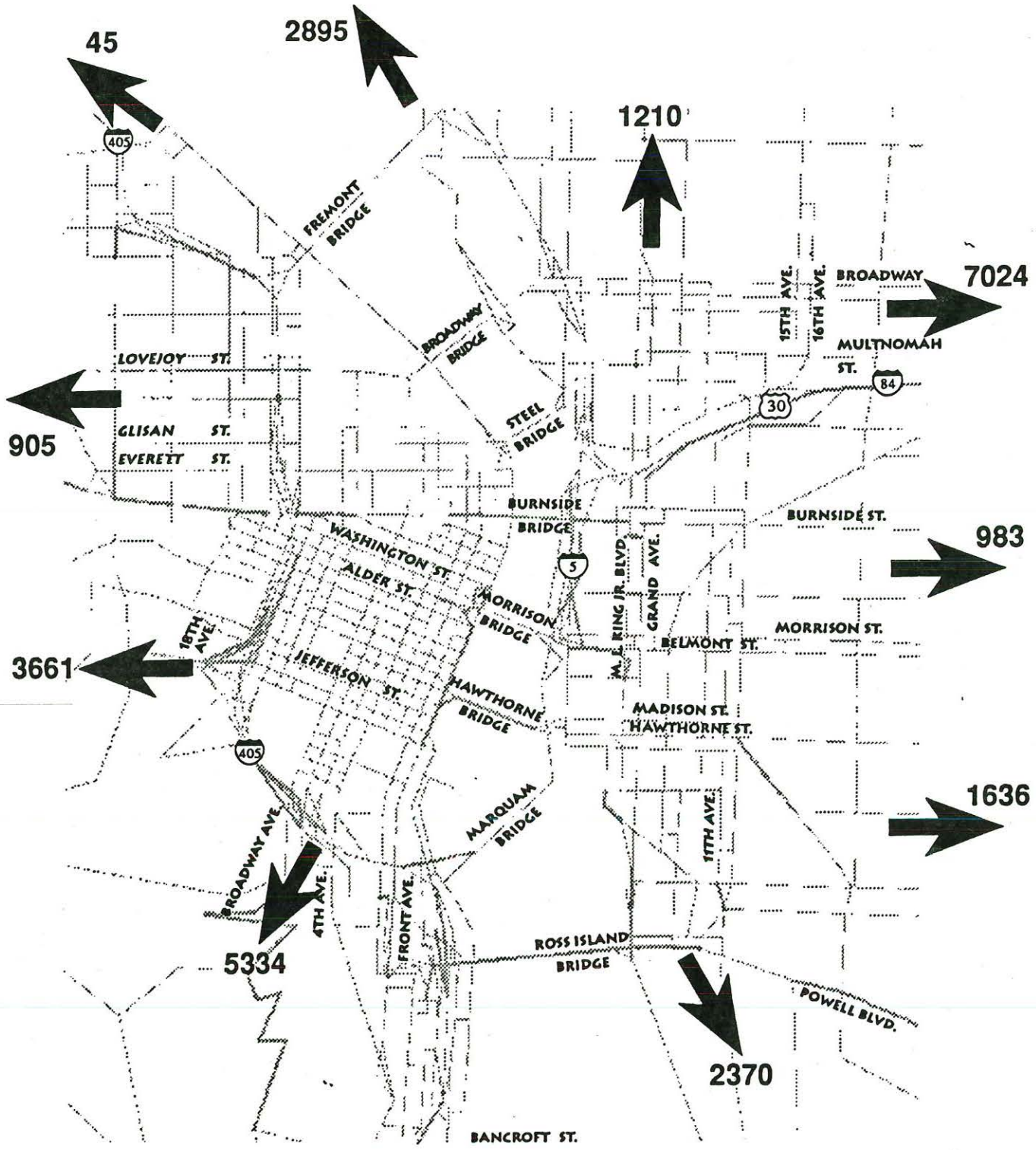

Figure 7
PM Peak Hour Transit Trips from the Central City:
High Growth Scenario

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Table 4
TRANSIT COMPARISON FOR CENTRAL CITY
(Outbound P.M. Peak Hour)

Corridor	1990 VOLUME	1990 CAPACITY	2010 RTP VOLUME	2010 HG VOLUME	2010 CAPACITY
1. Downtown to South	3,215	4,545	4,295	5,334	5,530
2. Central Eastside to South	995	1,216	1,959	2,370	2,760
3. South Central Eastside to East	2,017	2,456	1,471	1,636	3,539
4. North Central Eastside to East	1,471	1,665	924	983	1,504
5. Lloyd Center to East	2,203	3,488	5,747	7,024	4,292
6. Lloyd Center to North	1,035	1,408	1,084	1,210	2,706
7. Lower Albina to North	716	978	2,366	2,895	3,655
8. Northwest Triangle to North	4	256	40	45	858
9. Northwest Triangle to West	547	1,024	873	905	1,050
10. Downtown to West	1,062	1,496	3,015	3,661	2,656
11. Ross Island Bridge (EB)	916	960	604	636	1,370
12. Hawthorne Bridge (EB)	2,307	2,648	2,979	3,562	5,211
13. Morrison Bridge (EB)	489	384	519	620	480
14. Burnside Bridge (EB)	1,078	1,281	619	675	1,024
15. Steel Bridge (EB)	3,171	5,170	7,925	9,259	8,284
16. Broadway Bridge (EB)	602	512	343	383	1,319
17. Downtown to N. of Burnside/Lloyd Center	3,130	14,913	9,159	10,797	18,869
18. Central Eastside to South (between Morrison and Ross Island Bridge)	69	448	189	328	1,605
19. East of Steel Bridge to East	2,114	3,326	5,908	6,907	5,415

(#1745/1745DRFT.T-4)

Table 5
INTER-DISTRICT DAILY TRANSIT TRIPS

1990	Downtown	N. of Burnside	NW Triangle	N. Macada	Goose Hollow	Lower Albina	Lloyd Center	Central Eastside	TOTAL
Downtown	4,961	374	203	8	222	24	310	393	6,495
N. of Burnside	374	18	14	0	5	1	27	16	455
NW Triangle	203	14	26	0	5	0	20	13	281
North Macadam	8	0	0	0	1	0	0	0	9
Goose Hollow	222	5	5	1	25	0	10	9	277
Lower Albina	24	1	0	0	0	0	4	1	30
Lloyd Center	310	27	20	0	10	4	187	75	633
Centeral Eastside	393	16	13	0	9	1	75	77	584
TOTAL	6,495	455	281	9	277	30	633	584	8,764

2010 RTP	Downtown	N. of Burnside	NW Triangle	N. Macada	Goose Hollow	Lower Albina	Lloyd Center	Central Eastside	TOTAL
Downtown	7,855	724	493	118	342	40	558	557	10,685
N. of Burnside	724	35	28	5	11	2	44	27	875
NW Triangle	493	28	33	3	9	1	27	17	609
North Macadam	118	5	3	7	5	0	5	5	147
Goose Hollow	342	11	9	5	14	1	22	11	414
Lower Albina	40	2	1	0	1	0	7	3	54
Lloyd Center	558	44	27	5	22	7	237	109	1,008
Centeral Eastside	557	27	17	5	11	3	109	101	829
TOTAL	10,685	875	609	147	414	54	1,008	829	14,619

2010 HG	Downtown	N. of Burnside	NW Triangle	N. Macada	Goose Hollow	Lower Albina	Lloyd Center	Central Eastside	TOTAL
Downtown	10,042	1,265	1,872	606	710	68	1,312	963	16,836
N. of Burnside	1,265	83	97	29	37	6	122	74	1,710
NW Triangle	1,872	97	139	25	31	6	147	61	2,376
North Macadam	606	29	25	55	23	1	44	20	801
Goose Hollow	710	37	31	23	64	3	69	28	964
Lower Albina	68	6	6	1	3	0	15	6	103
Lloyd Center	1,312	122	147	44	69	15	528	207	2,444
Centeral Eastside	963	74	61	20	28	6	207	162	1,519
TOTAL	16,836	1,710	2,376	801	964	103	2,444	1,519	26,753

development scenario, it may not serve the needs of transit passengers in the High Growth Scenario. The connectivity of 20 key points was evaluated in the 1988 Central City Transit Study conducted for METRO and the City of Portland. The study found that the connectivity between Downtown and the Lloyd Center was good while it was more of a problem from Downtown to the North of Burnside and the Northwest Triangle. Connectivity was evaluated especially low for the center of the Northwest Triangle and Downtown south of Madison Street.

Home based work trips generally have the highest transit mode share of all trip purposes. Table 6 shows the mode share for the daily trips attracted to the Central City Districts. As expected the Downtown has the highest transit mode share of all the districts. Transit mode share increases for the districts in both the RTP and High Growth Scenarios. In addition to the Downtown, transit mode share significantly increases for North of Burnside and Goose Hollow. While the auto mode share is decreasing in the Downtown, so is the total number of auto person-trips.

The results of these comparisons show that the High Growth Scenario, with higher density development in the Central City, promotes the use of transit. Not only is transit more accessible, but the higher density development will provide destinations within a close proximity then dispersed development.

4. CIRCULATION AND ACCESS

Table 1 presented the total daily regional person-trips. In order to understand the vehicle impact of the High Growth Scenario, a similar table was developed for the Central City. Table 7 shows that while the total number of trips being made on transit on foot or by bicycle is increasing as is the shares for these modes, there is still an increase in person trips by automobile in the High Growth Scenario. The number of person trip by auto for the High Growth Scenario is approximately 32 percent greater than 1990.

Figures 8 and 9 depict 2010 RTP and High Growth roadway links, from the City of Portland's model, for which the volume to capacity ratio is estimated to exceed 0.90 in the PM peak hour. Few new locations are found to be greater than 0.90 in the High Growth Scenario that were not a problem in the RTP. New locations experiencing V/C of greater than 0.90 in the High Growth Scenario include:

- I-5 SB off-ramp to NW Glisan Street,
- SE Clay Street between ML King Avenue and Grand Avenue,

Table 6
MODE SHARE FOR DAILY HBW ATTRACTIONS

1990	Auto		Transit		Walk/Bike		Total
District	Per Trips	%	Per Trips	%	Per Trips	%	Per Trips
Downtown	67,925	57.9	47,499	40.5	1,700	1.5	117,124
N. of Burnside	3,409	85.3	512	12.8	74	1.9	3,995
NW Triangle	9,849	93.3	479	4.5	217	2.1	10,545
N. Macadam	2,961	95.9	86	2.88	40	1.3	3,087
Goose Hollow	3,143	94.7	94	2.8	80	2.4	3,317
Lower Albina	1,898	94.4	71	3.53	40	2	2,009
Lloyd Center	21,119	89.8	1,828	7.8	549	2.3	23,497
Central Eastside	23,824	93.5	1,065	4.2	588	2.3	25,477
TOTAL	134,128	70.9	51,634	27.3	3,288	1.73	189,051

2010 RTP	Auto		Transit		Walk/Bike		Total
District	Per-Trips	%	Per Trips	%	Per Trips	%	Per Trips
Downtown	64,267	45	76,184	53.4	2,053	1.4	142,504
N. of Burnside	5,976	77.4	1,595	20.6	148	1.9	7,719
NW Triangle	11,279	91.2	840	6.8	242	2	12,361
N. Macadam	8,920	92.3	604	6.3	131	1.4	9,655
Goose Hollow	2,357	91.2	165	6.4	60	2.3	2,582
Lower Albina	2,226	91.4	158	6.5	51	2.1	2,435
Lloyd Center	24,830	77.9	6,276	19.6	762	2.4	31,868
Central Eastside	25,536	91.8	1,661	6	619	2.2	27,816
TOTAL	145,391	61.3	87,483	36.9	4,066	1.7	236,940

2010 HIGH GROWTH	Auto		Transit		Walk/Bike		Total
District	Per-Trips	%	Per Trips	%	Per Trips	%	Per Trips
Downtown	66,969	41.8	90,366	56.4	2,795	1.7	160,130
N. of Burnside	8,917	74.1	2,822	23.4	279	2.32	12,018
NW Triangle	14,530	89.8	1,322	8.2	321	2	16,173
N. Macadam	13,332	91.1	1,071	7.3	217	1.5	14,620
Goose Hollow	4,270	90	345	7.3	126	2.6	4,741
Lower Albina	3,054	90.4	246	7.3	78	2.3	3,378
Lloyd Center	32,141	70.8	12,076	26.6	1,139	2.5	45,356
Central Eastside	29,316	90.7	2,204	6.8	801	2.5	32,321
TOTAL	172,529	59.7	110,452	38.2	5,756	1.99	288,737

[TBL6HBW.WK3]

Table 7
DAILY TRIPS TO, FROM, OR WITHIN THE CENTRAL CITY

Mode	1990		2010 RTP		2010 High Growth	
	Trips		Trips		Trips	
Trips Attracted to Central City						
Auto	423,968	81%	457,445	73%	541,136	71%
Transit	80,332	15%	143,307	23%	179,338	23%
Walk/Bike	18,148	3%	28,203	4%	45,11	6%
TOTAL	522,448	100%	628,955	100%	765,585	100%

Mode	1990		2010 RTP		2010 High Growth	
	Trips		Trips		Trips	
Trips Produced in the Central City						
Auto	127,234	86%	151,148	81%	202,081	76%
Transit	6,334	4%	10,928	6%	23,079	9%
Walk/Bike	13,528	9%	24,091	13%	40,941	15%
TOTAL	147,096	100%	186,167	100%	266,101	100%

Mode	1990		2010 RTP		2010 High Growth	
	Trips		Trips		Trips	
Intra District Trips						
Auto	42,532	41%	37,228	31%	43,960	29%
Transit	5,295	5%	8,282	7%	11,073	7%
Walk/Bike	57,067	54%	75,357	62%	98,417	64%
TOTAL	104,895	100%	120,868	100%	153,449	100%

(1745TBL.7)

Figure 8
2010 RTP PM Peak Capacity Constraints

jhk & associates

— V/C > 0.90

N

Figure 9

2010 High Growth PM Peak Capacity Constraints

jhk & associates

- SE 9th north of W. Burnside Avenue,
- NW Lovejoy Street west of Broadway Bridge,
- Broadway Ave south of NW Glisan Street,
- NW 3rd Ave north of NW Glisan Street, and
- Morrison Bridge.

Numerous locations that experience V/C greater than 0.90 in the RTP network get slightly worse in the High Growth Scenario. These locations include:

- Burnside Street,
- SW Front Street,
- SW 13th Street.

These figures suggest that the major access points to/from the City of Portland will be congested in either development scenario. Table 8 summarizes volumes and capacities for some of the major access points to the City. The table conveys a number of important points. First, the demand on these facilities grows in both scenarios. Although the demand increases are significant from 1990 to the 2010 RTP, the differences in the 2010 growth scenarios are negligible in a twenty year forecast on facilities of their capacity. Table 9 identifies all of the locations where volumes are expected to exceed capacity under the High Growth Scenario. Second, SB I-5 is the only location where capacity increases from 1990 to 2010. As indicated in the 1986 The Inner Freeway Loop and Radials study, few of the radial corridors have improvement plans that would significantly increase capacity. Additionally, in many of the corridors, such as Banfield Corridor and Sunset Corridor, expansion of the roadway system is not cost-effective given the physical constraints of the region.

Given the restrictions in capacity, under any development scenario mobility on the major freeway links will continue to deteriorate. As congestion worsens it is likely that some spreading of the peak period will occur but the congestion will still result in slower speeds and increased delay. Because access to the Central City is limited, a balance in the additional employment and housing is essential to maintain the attractiveness of the development.

The High Growth Scenario could also have a significant impact on circulation within the Central City Districts. As an indication of where circulation problems may arise, Figure 10 identifies those links in the 2010 network that would have a v/c ratio of .45 or greater. A value of .45 is used as an indicator for surface streets rather than .90 because traffic signals reduce the capacity of the roadway by an amount

Table 8
PROJECTED VOLUMES AND CAPACITIES
FOR SELECTED ROADWAY LINKS

Location	1990 Volume	1990 Capacity	RTP Volume	HG Volume	2010 Capacity
SB SW Macadam Ave n/o Corbett Ave	1377	1800	1898	2071	1800
SB I-5 s/o Hood Ave Entrance	5871	6000	6823	6987	6800
SB McLoughlin Blvd s/o Powell St.	3947	4800	4869	4991	4800
EB Powell St e/o SE 12 Ave	2424	2700	2731	2782	2700
EB E. Burnside St e/o SE 12 Ave	1187	1800	1468	1529	1800
EB Sandy Blvd e/o SE 12 Ave	1267	1800	1705	1768	1800
NB I-5 connector to EB I-84 w/o I-84	2934	3500	3255	3243	3500
SB I-84 connector to SB I-5 w/o I-84	2675	3500	3233	3170	3500
EB I-84 e/o Grand Ave on-ramp	5696	6300	6140	6161	6300
NB I-5 n/o Fremond Bridge	2107	3500	2480	2510	3500
NB I-405 s/o Fremont Bridge	3892	5250	4547	4590	5250
WB W. Burnside w/o 16th St	1253	1400	1259	1289	1400
EB US 26 to NB I-405	1966	1750	2119	2103	1750
SB I-405 to WB US 26	1715	1750	1968	1957	1750
WB US 26 w/o I-405	4803	5700	5628	5682	5700
SB I-405 s/o SW 5th St on-ramp	3779	7000	4354	4358	7000
SB I-5 connector s/o Marquam Bridge	2598	3500	3345	3383	3500

[1745TBL8]

Table 9: PROJECTED 2010 HIGH GROWTH ROADWAY CAPACITY CONSTRAINTS

LOCATION	FACILITY TYPE	DIRECTION	V/C
FREEWAY RAMPS			
I-5 Off-Ramp to SW Hood Avenue	Off-Ramp	SB	
I-5 Off-Ramp to SE Yamhill Street	Off-Ramp	NB	1.12
I-5 On-Ramp from SE Taylor Street	On-Ramp	SB	1.14
I-84 On-Ramp to I-5	On-Ramp	WB/SB	1.36
I-5 On-Ramp to I-84	On-Ramp	NB/WB	1.36
I-84 On-Ramp from Grand Avenue	On-Ramp	EB	1.08
I-5 On-Ramp from Broadway Avenue	On-Ramp	NB	1.14
I-5 Off-Ramp to Broadway Avenue	Off-Ramp	SB	1.08
I-405 connector to Fremont Bridge		NB/EB	1.24
I-405 Off-Ramp to Glisan Street	Off-Ramp	SB	0.98
I-405 On-Ramp from NW 14th Avenue	On-Ramp	NB	0.96
SW Clay Street to US 26		WB	1
I-405 On-Ramp from SW 6th Avenue	On-Ramp	WB	1.44
I-405 Off-Ramp to SW 6th Avenue	Off-Ramp	EB	1.26
I-5 connector to I-84		SB/EB	1
I-84 connector to I-5		WB/NB	1
I-5 Off-Ramp from NE Holladay Street	Off-Ramp	NB	1.06
I-5 On-Ramp from Vancouver Avenue	On-Ramp	SB	1.42
FREEWAY MAINLINE			
I-5 s/o Marquam Bridge	Mainline	SB	1.08
I-5 connector from Marquam Bridge	Mainline	SB	0.96
I-5 connector to Marquam Bridge	Mainline	NB	0.94
I-5 n/o Water Street On-Ramp	Mainline	SB	1.06
I-84 e/o I-5 connector Ramps	Mainline	EB	1.26
I-84 e/o Grand Avenue On-Ramp	Mainline	EB	0.97
I-84 s/o US 26 On-Ramp	Mainline	SB	0.93
I-405 connector to US 26	Mainline	SB/WB	1.11
US 26 connector to I-405	Mainline	EB/NB	1.2
I-405 connector to US 26	Mainline	NB/WB	1.09
I-5 connector to I-405 (Marquam Bridge)	Mainline	WB	1
I-5 over Marquam Bridge	Mainline	EB	1.2
ARTERIAL			
SW Gibbs Street w/o SW Macadam	Arterial	WB	1.01
Ross Island Bridge	Arterial	EB/WB	1.37
Powell Street from Grand Ave. to SE 10th Ave.	Arterial	EB	1.17
SE 11th Street s/o SE Division Street	Arterial	SB	1.11
SE 12th Street n/o Powell Street	Arterial	SB	1.1
ML King Blvd. n/o Powell Street	Arterial	SB	1.04
SE 3rd Avenue n/o McLoughlin Blvd.	Arterial	SB	1.06
SE Clay St. between ML King Blvd. and Grand Ave.	Arterial	EB	1
SE Hawthorne Blvd. w/o SE 12th Avenue	Arterial	EB	0.93
SE Belmont Street between I-5 and Grand Ave.	Arterial	EB	1.13
SE Stark St. between MLK Blvd. and Sandy Blvd.	Arterial	EB	1.31
SE Water Street n/o Taylor Street	Arterial	SB	
SE Water Street n/o Morrison Street	Arterial	NB	0.95
Burnside Bridge to ML King Blvd.	Arterial	EB	1.13
E. Burnside Street from NE 7th Ave. to Sandy Blvd.	Arterial	EB	0.97
NE 9th Avenue n/o E. Burnside Street	Arterial	SB	0.99
NE Irving Street e/o NE 12th Avenue	Arterial	EB	1.2
NE 12th Avenue n/o NE Irving Street	Arterial	SB	1.12
NE Glisan Street w/o Grand Avenue	Arterial	EB/WB	1.13

Table 9: PROJECTED 2010 HIGH GROWTH ROADWAY CAPACITY CONSTRAINTS

LOCATION	FACILITY TYPE	DIRECTION	V/C
NE Weilder Street w/o I-5	Arterial	EB	1.04
NW Glisan Street w/o NW 14th Avenue	Arterial	WB	1.06
NW 14th Street n/o Burnside Street	Arterial	NB	1.76
W. Burnside Street from NW 14th St. to NW 9th Avenue	Arterial	EB/WB	0.96
NW Lovejoy Street w/o Broadway Bridge	Arterial		
Broadway Bridge	Arterial	EB	1.17
NW 3rd Avenue n/o NW Glisan Street	Arterial	SB	0.96
NW Broadway St. between NW Glisan St. and NW Everett	Arterial	NB	0.91
W. Burnside Street from NW 4th Avenue to Burnside Bridg	Arterial	EB	1.37
SW Alder Street from SW 3rd Avenue to Morrison Bridge	Arterial	EB	1.43
SW Front Street from SW Pine Street to SW Market Street	Arterial	SB/NB	1.31
SW Front Street to Morrison Bridge (Ramp)	Arterial	SB/EB	1.35
Morrison Bridge	Arterial	EB	0.91
Hawthorne Bridge	Arterial	EB	1.25
SW Front Street to Hawthorne Bridge (Ramp)	Arterial	NB/EB	1.34
SW 13th Avenue from Alder Street to SW Jefferson Street		SB	1.25
SW Jefferson Street e/o SW 13th Avenue		WB	0.97
SW 13th Avenue n/o SW Clay Street	Arterial	SB	1
SW Macadam Avenue	Arterial	SB	1.15
NE Broadway Avenue e/o NE 16th Avenue	Arterial	EB	1.26

[1745TBL.9]

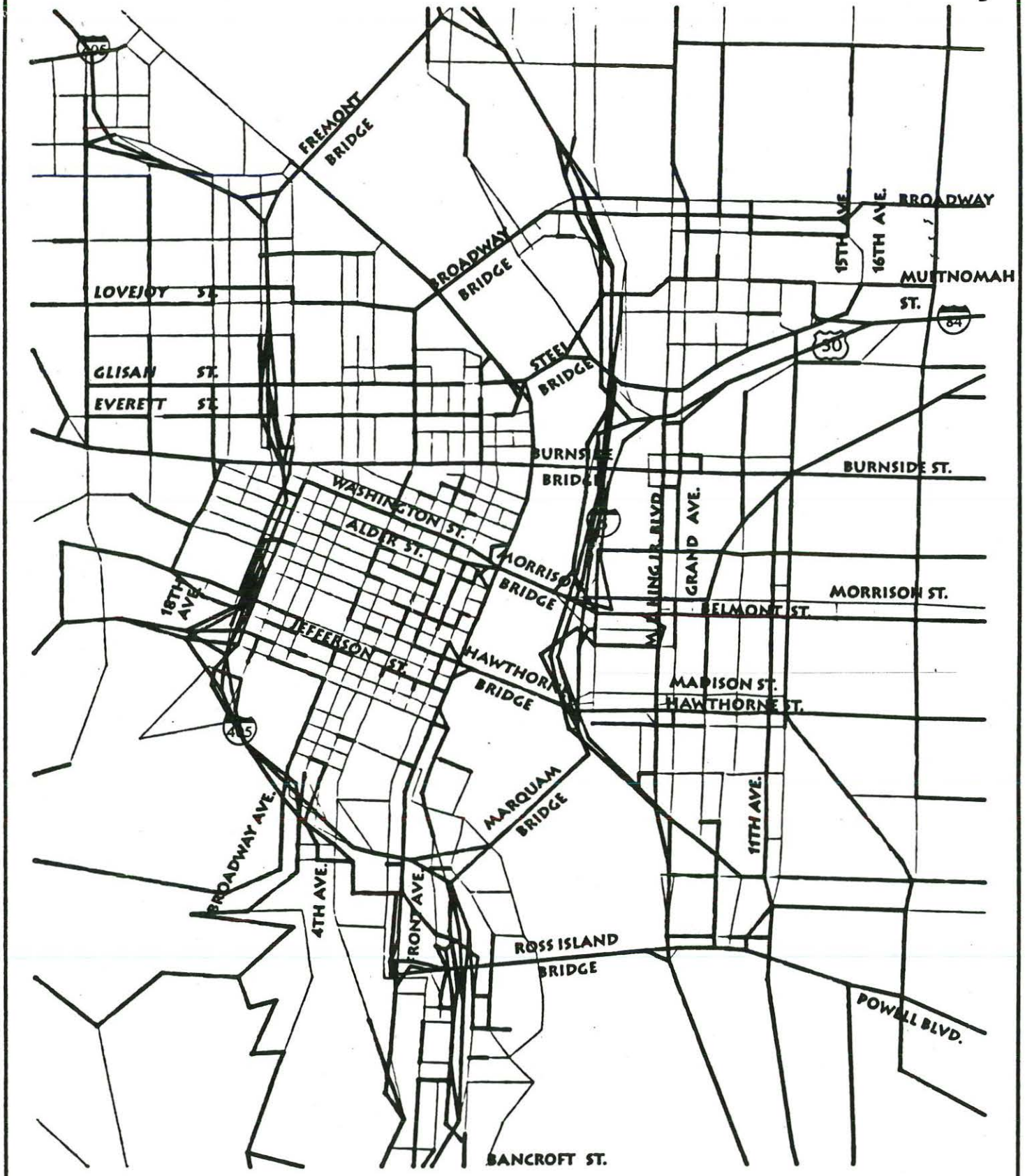


Figure 10
2010 High Growth PM Peak Arterial Capacity Constraints

jhk & associates

that depends on the percentage of green time provided for the roadway. The actual capacity may be anywhere between .30 and .70 of the full capacity depending on the signal timing.

A far more detailed analysis of the circulation and access issues raised by the High Growth Scenario is presently underway. In that effort, the actual roadway geometrics and existing traffic volumes are being taken into consideration along with the 1990 and 2010 model results. In this more detailed circulation and access study the 2010 level of service for each location that has been identified as a concern will be estimated. Where the High Growth Scenario is likely to result in an unacceptable level of service, improvement options will be explored.

5. PARKING

There are numerous indications that parking is at a premium throughout much of the Central City. While this is most obvious within the Downtown and North of Burnside districts, concerns about parking availability have been raised in the Lloyd Center/Coliseum, the Central Eastside, and Goose Hollow.

The Central City contains almost 87,000 parking spaces as indicated in Table 10. Of these, slightly more than 41 percent are in the Downtown district and roughly 48 percent are within the area covered by the Downtown Parking and Circulation Policy. (This includes all of the North of Burnside district and a portion of the Northwest Triangle.) Roughly half of all parking spaces in the Central City require the payment of a fee although most of these spaces are in the Downtown and North of Burnside districts. There are roughly 2,580 fee spaces in off-street facilities in the Lloyd Center/Coliseum district, 832 in the Central Eastside district and 117 in the Goose Hollow district. The Goose Hollow also have 501 on-street metered spaces and the Northwest Triangle has 51 metered spaces. Goose Hollow district is the only district with residential permit parking with 474 spaces included in this designation.

The primary focus of parking policy in the past fifteen years has been on the area included in the Downtown Parking and Circulation Policy. In the initial policy adopted in 1975, a parking lid was established as one of a package of measures to address air quality violations for carbon monoxide within the downtown area. In 1975, the number of carbon monoxide violations was over 50. This number had been reduced 19 in 1979 and to 3 in 1983. There have been no violations of the standard at a downtown location since 1984.

Table 10

Inventory of Parking Spaces by District in the Central City

	On-Street	Off-Street	Total	Percent of Central City
Northwest Triangle	1,758	3,453	5,211	6.0%
North of Burnside	1,001	3,280	4,281	4.9%
Downtown	3,752	31,992	35,744	41.2%
Goose Hollow	1,136	2,361	3,497	4.0%
North Macadam	563	1,076	1,639	1.9%
Central Eastside	7,157	8,060	15,217	17.6%
Lloyd Center/Coliseum	2,301	16,238	18,539	21.4%
Lower Albina	974	1,621	2,595	3.0%
Total	18,642	68,081	86,723	100.0%

1745TBL.10

Since the creation of the parking lid in 1975, the number of spaces within the area covered by the policy increased from about 38,000 to roughly 42,000. Since 1975, roughly 20,000, new jobs have been added in the same area and there has been considerable retail and other commercial development as well. The growth in trips to and from the downtown while the number of parking spaces has remained relatively constant has resulted in a high level of demand for the spaces available. According to the Downtown Parking Plan and Circulation Update conducted in 1989, the peak utilization for all off-street facilities was 79.5 percent. The peak utilization for garage spaces was 80 percent and lots 72 percent. The normal design capacity for garages is considered to be 85 percent of total spaces. This level was exceeded in five of the ten sectors that have garages as indicated in Table 11. Total off-street peak utilization exceeded 90 percent in three of the eleven parking sectors. The high demand for parking is also reflected in Table 12, which provides peak utilization estimates for on-street facilities. Six of the ten sectors with on-street spaces exceeded the 85 percent peak utilization.

The high market for parking in the downtown is also reflected by the absence of free spaces. Other than a small amount of employer supplied parking for employees, there are only a few free spaces available to the public in the downtown town. (Although 70 percent of the firms in a survey conducted as part of the study indicated that they provide some amount of free or subsidized parking, only 29 percent of the work trip parkers reported subsidy by their employer.) The 1989 Downtown Parking Plan and Circulation Update indicated an average cost paid for parking of $2.19. Average cost for commuters who parked was $2.81. The same study found that parkers who came to the downtown for non-work purposes searched an average of 8.3 blocks to find parking and parked and average of 2 blocks from the desired destination. The average walking distance for work trips was 2.7 blocks.

A final indication of the high level of demand for downtown spaces is the existence of a park-and-ride service from a lot on the Central Eastside with shuttle buses operating to the downtown. The service has a lot with roughly 800 spaces charges a fee of $35/month and is full on most weekdays.

The use of parking spaces on the Central Eastside by downtown workers has been raised as a concern by merchants and business operators within the district. The park-and-ride practice appears to also operate on a more informal basis with individuals parking on the street and using TRI-MET buses to get to and from downtown. Parking by downtown employees and shoppers in the Goose Hollow district has historically been a problem and was the modification for the residential parking program in

Table 11

Peak Utilization for Off-Street Facilities in Downtown Parking Sectors

Sector	Garage	Lot	Total
A	68%	75%	71%
B	71%	86%	84%
C	62%	88%	79%
D	79%	62%	67%
E	82%	69%	79%
F	86%	77%	81%
G	92%	92%	92%
H	96%	55%	91%
J	93%	76%	91%
K	88%	45%	63%
L	--	40%	40%
Average	87%	72%	79.5%

1745TBL.11

NOTE: Locations underlined are at or near capacity

Source: Portland Downtown Parking Plan & Circulation Update (1989)

Table 12

Peak Utilization for On-Street Facilities in Downtown Parking Sectors

Sector	On-Street
A	81%
B	68%
C	59%
D	78%
E	90%
F	96%
G	88%
H	88%
J	95%
K*	--
L	88%
Average	82%

1745TBL.12

*There is no on-street parking in Sector K

NOTE: Locations underlined are at or near capacity

Source: Portland Downtown Parking Plan & Circulation Update (1989)

that district. Despite operation of the program, infringement in the district continues to be a concern among the district's residents.

The evidence available from the 1988 Downtown Parking Policy and Circulation Update as well as the anecdotal evidence from the Central Eastside and the Goose Hollow districts suggests that the surplus parking capacity that existed when the parking lid was first established in 1975 is now all but gone. With the exception of only a few parking sectors, the downtown supply is at or over capacity. Virtually any new development in the downtown or north of Burnside districts would require additional parking if the new trips made are at or near current mode shares (36 percent for work trips and 15.4 percent for non-work trips as estimated by METRO in a 1990 study).

Table 13 indicates that the High Growth Scenario would result in the addition of 8629 parking spaces in the Downtown district using existing parking ratios. This would allow for roughly 18,849 additional vehicles to be parked in the Downtown if current turnover rates continue to prevail. With the mode shares predicted for the High Growth Scenario, the increase in vehicle trips to the Downtown district would be only 4,275, resulting in an overall surplus of parking in the Downtown district. The surplus would increase from the estimated 1990 level of 1013 spaces (2.8%) to roughly 6,712 (15.0%). As indicated previously, the practical operational capacity for a parking garage is generally considered to be roughly 85 percent of its absolute capacity. As an Downtown-wide average, a 15 percent surplus in 2010 might actually operation at or near practical capacity. At the same time, as indicated in Table 14 the small parking surplus that existed in 1990 in the North of Burnside district of 747 spaces (18.5%) would be eliminated and a small deficit of 47 spaces would result. Overall, the existing parking ratios of the Downtown Parking and Circulation Policy would generate sufficient parking supply for the Downtown and North of Burnside districts combined if the predicted mode shares for trips to these districts is achieved for 2010. Anything short of the predicted mode share, however, would result in a predicted parking deficiency. For the parking supply increase provided by the ratios to be sufficient under the High Growth Scenario the work mode share for transit would have to increase from 40.5 percent to 56.4 percent and the mode share for all trips to the Downtown would have to increase from 18.0 percent to 26.8 percent.

Table 13
DOWNTOWN PARKING DEMAND/SUPPLY COMPARISON

	1990	2010 RTP	2010 HG
PROJECTED DEMAND			
Parking Attractions			
Long-Term (HBW+College+Externals)	39,978	40,143	41,371
Short-Term (Non-HBW+Non-College)	53,984	56,261	56,866
TOTAL	93,962	96,404	98,237
PROJECTED CAPACITY			
Parking Supply			
On-street	3,367	3,340	3,340
Off-street	32,888	37,345	41,544
TOTAL	36,255	40,685	44,884
Turnover Rate			
On-street	7.22	7.22	7.22
Off-street	2.2	2.2	2.2
Weighted Mean	2.67	2.61	2.57
Vehicles Parked			
On-street	24,310	24,115	24,115
Off-street	72,354	82,159	91,397
TOTAL	96,663	106,274	115,512
DEMAND AND CAPACITY COMPARED			
Parking Surplus			
Vehicle Capacity	2,701	9,870	17,275
Parking Spaces	1,013	3,778	6,712

[BWCOMP.wk1]

Table 14
NORTH OF BURNSIDE PARKING DEMAND/SUPPLY COMPARISON

	1990	2010 RTP	2010 HG
PROJECTED DEMAND			
Parking Attractions			
Long-Term (HBW+College+Externals)	3,448	4,115	5,956
Short-Term (Non-HBW+Non-College)	6,317	6,958	9,715
TOTAL	9,765	11,073	15,671
PROJECTED CAPACITY			
Parking Supply			
On-street	806	656	656
Off-street	3,243	4,424	5,572
TOTAL	4,049	5,080	6,228
Turnover Rate			
On-street	6.89	6.89	6.89
Off-street	1.98	1.98	1.98
Weighted Mean	2.96	2.61	2.50
Vehicles Parked			
On-street	5,553	4,520	4,520
Off-street	6,421	8,760	11,033
TOTAL	11,974	13,279	15,552
DEMAND AND CAPACITY COMPARED			
Parking Surplus			
Vehicle Capacity	2,209	2,206	(119)
Parking Spaces	747	844	(47)

[BWCOMP.wk1]

6. AIR QUALITY

Air quality concerns have been a driving force in the development of transportation policy for the downtown since the adoption of air quality standards by the Environmental Protection Agency in 1972. Since the adoption of the standards, Portland Metropolitan area has been in violation of the ambient carbon monoxide standard and specifically because of violations in the downtown area. In 1981, 1984, 1985, 1986, and 1988, the Portland metropolitan area also exceeded the ambient standard for ozone, but ozone is a regional air quality issue and the trips to and from Portland's downtown could not be identified as the single source of the problem as was the case for carbon monoxide.

Violation of the carbon monoxide standard was the single most important factor leading to the development of the parking lid for the downtown area. While also supporting the City's policy of encouraging transit and a liveable, walkable environment in the downtown, the parking lid was a critical component of the State Implementation Plan (SIP) submitted to the Environmental Protection Agency. Largely as a result of federally-mandated improvements in tailpipe emission standards, the number of carbon monoxide exceedences has decreased steadily over the past 15 years. A location is in violation of the standard when the average over eight non-overlapping hours on the second highest day of the year exceeds 9.5 parts per million. According to this standard, there have been no recorded violations in the downtown since 1984. Three locations have been used to monitor carbon monoxide on a continuous basis in the downtown. They are as follows:

- 718 West Burnside (until 1987 when the monitoring station was moved)
- 510 S.W. Third (the monitoring station was moved to this location from West Burnside in 1988)
- Fourth and Alder

The eight hour averages for the second highest day of the year and their locations are as follows:

- 1985 - 8.8 ppm Fourth and Alder
- 1986 - 8.6 ppm Fourth and Alder
- 1987 - 9.3 ppm Fourth and Alder
- 1988 - 9.1 ppm 510 Southwest Third
- 1989 - 8.4 ppm 510 Southwest Third
- 1990 - 7.1 ppm 510 Southwest Third

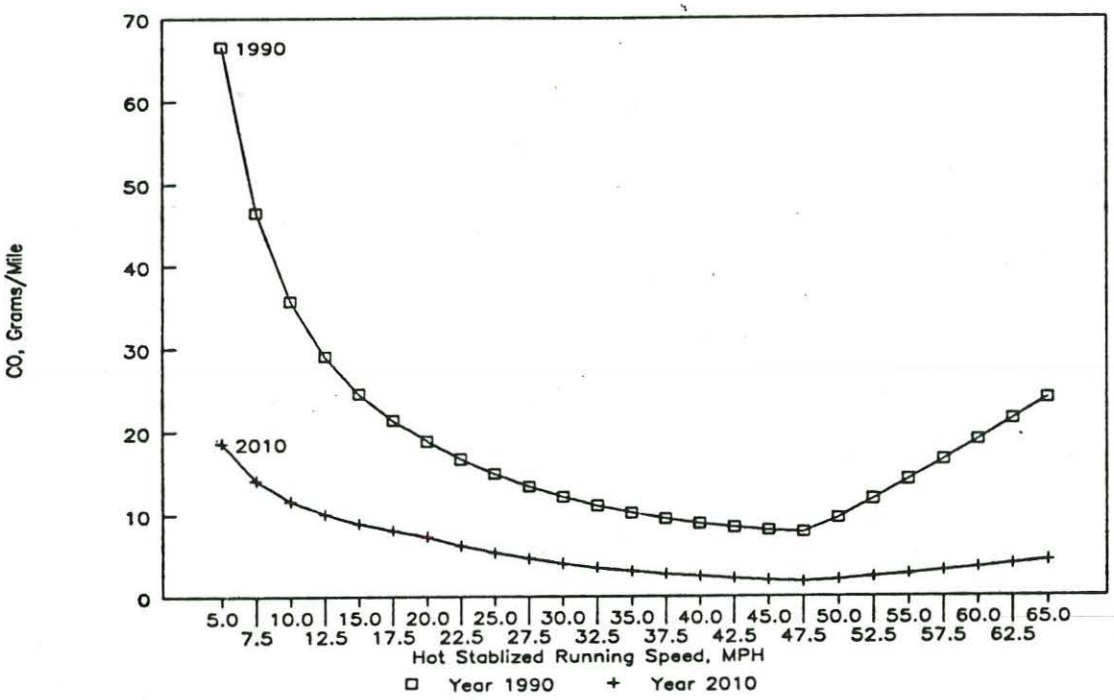
Emission Rates from MOBILE4.1

Although a complete emissions analysis has not been completed for the Central City Plan Buildout, there is strong evidence that carbon monoxide emissions will continue to decrease in the downtown and elsewhere throughout the Central City despite the buildout of the Central City Plan. The evidence comes from an examination of emission rates from EPAs emission rate model MOBILE4.1. The 4.1 version of the model, released in May of 1991, incorporates tailpipe emission standards enacted as part of the Clean Air Act Amendments of 1990. For only carbon monoxide emissions, MOBILE4.1 includes all of the changes in the standards included in the new act amendments. For hydrocarbons and nitrogen oxides, the model includes only those changes in the standards to be enacted by 1995. Reduction in average emission rates for hydrocarbon and nitrogen oxides after 1995 are a result of only fleet replacement and an increase in vehicle subject to the 1995 standards. For carbon monoxide all of the enacted changes in emission standards through the year 2010 are incorporated.

Three factors will determine the level of carbon monoxide emissions at any one location under the Central City Plan Buildout --

- Total traffic volume during the highest eight hour period
- The average operating speed of the traffic including stops while traveling through the segment under analysis
- Changes in the emission rates at specific speeds over the twenty years of the buildout

The importance of speed in the assessment of potential impacts is illustrated by Figure 11. The figure provides a plot of the emission rate on a grams per mile basis of an average vehicle operated under a hot stabilized condition. The graph indicates that in 1990, there is a significant non-linear relationship between speed and emissions. This is particularly true under 20 mph. The emission rate at 5 mph is almost four times the emission rate at 20 mph. It should be noted, however, that a high percentage of emissions occur during acceleration periods and that the higher rate at lower speeds reflects a higher number of stops and acceleration episodes that result in the lower average operating speed. The difference between emission rates for cruising with no stops at the different speed levels is far less. The curve, particularly for 1990, does reflect the importance of maintaining smooth flow through areas susceptible to carbon monoxide hot spots through good signal coordination and priority to the peak direction of flow. It is clear that in 1990 and in the past, the operating speed could be a far more significant factor in a downtown area than the total volume of traffic.



Note: Emission rates are based on EPA's MOBILE 4.1 model for composite vehicle.

Figure 11
Expected Change in Carbon Monoxide Emission Rates: 1990-2010
(Hot Stabilized)

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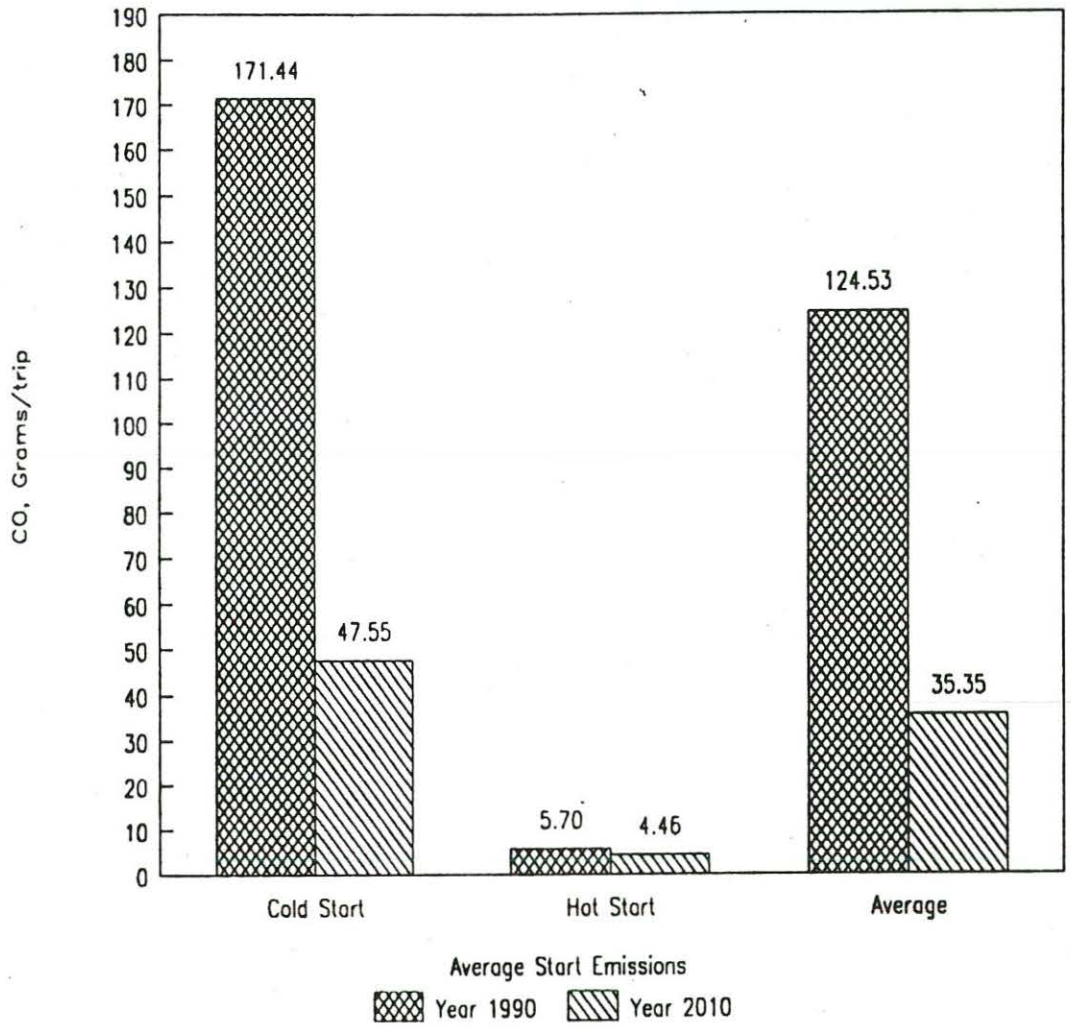
The curve for 2010 in Figure 11 provides good news of two types, first it provides an indication of the expected reduction in emission rates as a result of the new clean air act tailpipe emission standards. At almost every speed level the emission rate is roughly one-third of the 1990 level. But the curve also indicates that with the new emission standards, the emission rate is less sensitive to reduction in operating speeds. In 2010, the emission rate at 5 mph is only three times that at 20 mph rather than four times as is the case in 1990.

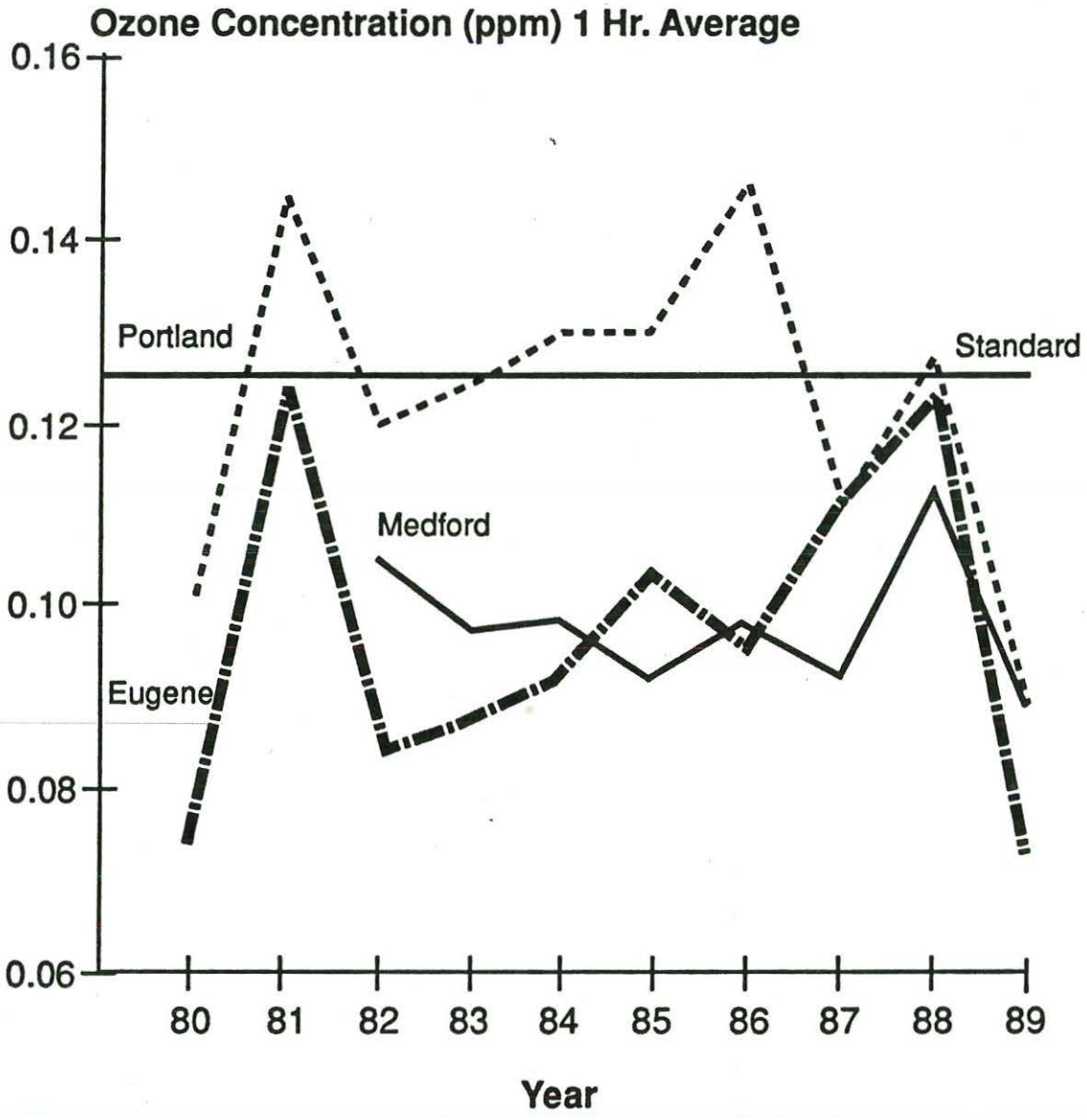
The reduction in emission rate for an average vehicle is illustrated more clearly in Figure 12. The figure illustrates the change over time in the emission rate at 25.6 mph, the average speed used by the Environmental Protection Agency, under both cold start and hot start conditions. Almost all cars operate as a cold start after being turned off for one hour or more. However, there is considerable disagreement among professionals about how long the cold start emission rate persists. It is generally accepted that the emission rate applies for the first 505 seconds of the operation of the vehicle but this is based on an arbitrary time set by the Environmental Protection Agency. Many researchers argue that all of the cold start emissions occur within a few seconds of the start of an automobile rather than uniformly over the 505 seconds. While this does not affect total emissions that result, it does have significant implications for the location of the emissions. Figure 12 indicates that the cold start emission rate is expected to decrease by almost 75 percent between 1990 and 2010 while the hot start emission rate will decrease about 20 percent. The actual decrease that will be applicable at hot spot locations in Portland will depend upon where the cold start emissions occur and the extent to which engines are hot stabilized when they pass through the hot spot locations.

Air quality concerns in development of the Downtown Circulation and Parking Policy have focused almost exclusively on carbon monoxide in the past. This was because carbon monoxide violations could be identified as specifically occurring in the downtown. The evidence of the MOBILE4.1 emission rate model suggest that carbon monoxide will no longer be a problem for the downtown or any Central City locations. Demonstrating this more definitively in Phase III of the Central City Transportation Management Plan may allow shifting of focus to ozone. As indicated in Figure 13 the ozone standard for the Portland Metropolitan area has been exceeded as recently as 1988. As a result, EPA has issued a call for a SIP revision to demonstrate ozone compliance by 1997.



Note: Average start emission rate is based on 71.3% for cold start and 28.7% for hot start and is based on composite vehicle.

Figure 12
Expected Change in Start Emissions for Carbon Monoxide: 1990 and 2010



Source: Oregon Air Quality 1989 Annual Report. Oregon Department of Environmental Quality (1990) page 9.

Figure 13
Ambient Ozone Trends in Selected Oregon Cities
(Second Highest Day)

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Like carbon monoxide, however, the emission rates for the ozone precursors, hydrocarbons and nitrogen oxides, are also decreasing over time. The rates from the MOBILE4.1 model cannot be used for years after 1995 but there is evidence that emission rates will decrease by at least 50 percent using emission rates weighted by fleet vehicle type mix. Unlike carbon monoxide, however, the impact of the Central City Plan Buildout will depend upon the total travel characteristics in the region rather than changes in traffic speeds and volumes in the immediate vicinity of the hot spots. For this reason, buildout of the Central City Plan is likely to lead to some reduction in ozone levels regardless of the change in emission standards.

Travel Characteristics and Air Quality

Development that occurs in the Central City Plan Buildout will occur within the Central City rather than at other locations in the Portland Metropolitan area, and travel to the Central City particularly the downtown has the highest overall transit mode share of any destination in the region. Person trips for work to other parts of the region result in 50 percent more vehicle trips than work trips to downtown. For all trip purposes, person trips to other parts of the region produce 33 percent more vehicle trips than trips to downtown. While there is some evidence that trips to downtown have slightly longer trip lengths than trips to other parts of the region, trip length is only a partial determinant of the level of emissions of hydrocarbons, one of the key ozone precursors. In 1990 only about sixty percent of hydrocarbon emissions are related to VMT for a typical 20 mile round trip commute at an average speed of 40 mph. Thirty-five percent of the emissions result from starting the vehicle cold and from evaporation after the vehicle has been parked. The remaining five percent of emissions occur from evaporation and occur regardless of whether the vehicle is operated.

The Portland's ability to achieve and maintain the air quality standard for ozone will depend largely upon the amount of growth in total trips and VMT in the region. METRO has forecast an increase of roughly 30 percent in trips and VMT over the next 15 years. With a 50 percent reduction in emission rates, the region should achieve and maintain compliance with the federal standard. It is fairly clear, however, that the Central City Plan Buildout will have a positive rather than negative impact on regional ozone levels.

In the Phase III technical analysis, a detailed evaluation of emissions was conducted based on the model forecasts prepared by METRO and the City of Portland. The METRO model provided forecasts

for three time periods: A.M. Peak (7-9 A.M.), P.M. Peak (4-6 P.M.) and Off Peak (all other hours). The City of Portland forecasts were for only a single P.M. Peak hour but the assignment was based on a much more detailed roadway network in the Central City. The METRO forecasts were used to develop regional estimates of the emissions of ozone precursors (hydrocarbons and nitrogen oxides) while the more detailed City of Portland assignments were used for the estimates of carbon monoxide emissions at selected sensitive locations within the Central City.

Emission Estimation Methodology

Research conducted by the U.S. EPA and various state environmental organizations on the determinants of variation in emission rates has clearly demonstrated that vehicle emissions should be identified in at least four specific categories: trip start emissions, (cold start or hot start depending upon the period for which the vehicle has been turned off), hot soak running emissions, hot soak evaporative trip end emissions and diurnal emissions (hydrocarbon emissions from evaporation that are essentially unrelated to the amount the vehicle is driven). Research has also clearly demonstrated the need for sensitivity to travel speed for running emissions vehicle type and the time that emissions occur.

These concerns about the sensitivity of pollutant emissions to trip starts, total vehicles (diurnal emissions), operating speeds, vehicle type and time of emissions all suggested that the previously common practice of basing emission forecast on only daily VMT and average operating speeds could produce highly inaccurate results. Fortunately, new data and computing capabilities have made significantly more accurate forecasting of motor vehicle emissions possible. Certainly, the disaggregation of emission rates into more explanatory component parts (cold start, hot start, running hot stabilized, hot soak evaporative, and diurnal) has significantly increased the ability to predict the quantity, timing and location of pollutant emissions using regional travel models. But new development in computing software linking travel forecasting models with database management systems has provided the capability to produce the detailed travel inventory necessary to apply the more specific emission rates without jeopardizing the feasibility of operating the travel models.

For this study the SYSTEM II program was used to generate emissions estimates for each model run. The SYSTEM II EMISSION program applies emission rates by vehicle type and travel speed to the time of day volumes for each link in the roadway network. The trip start and end emissions are calculated by applying the appropriate emission rates to trip productions and attractions.

In addition to the basic travel information from a network model, the EMISSION program requires three types of special input data. These are the time of day distributions, vehicle type distributions and emission rates. The EMISSION programs relies upon the link-prototype system to generate the time of day distribution and vehicle type distribution for each link in the system based on a sample of traffic and vehicle classification counts.

By collecting a large enough sample of hourly traffic counts (for a 24-hour period) and vehicle classification counts coverage all types of facilities (freeways, expressways, arterials and collectors) and area types (central business district, commercial, suburban residential, and rural) prototype time-of-day and vehicle type distributions can be generated for every area-type/facility type combination.

JHK & Associates has developed a methodology using its own software package, SYSTEM II, to take advantage of the improvements in emission rates and the improvements in computing software capabilities. JHK has developed a modeling system called the Link Prototype System, that operates on the normal travel model functions used by most regional transportation planning agencies. JHK's system combines these forecasting capabilities with data on travel by time of day and vehicle type distribution in a post processor to produce the type of travel inventory input data necessary for accurate emissions estimates.

The SYSTEM II EMISSIONS program uses the data and forecasts from the regional modeling process to provide a baseline of information for the emissions estimation process as illustrated in Figure 14. The data from the regional modeling system is supplemented significantly to add the detail on trips and VMT by hour of the day and by vehicle classification. Using the methodology, the volume by vehicle classification by hour of the day is estimated for each link in the regional model system. Likewise, trip starts and trip ends by zone are estimated by vehicle type for each hour of the day.

With the hourly estimates of volume on each link, a speed for each specific hour could be estimated using established speed/volume relationships. This allows for estimation of running emissions based on the volume by vehicle type by speed category for each hour of the day. With data on vehicle ownership by zone and trip starts and stops by zone, the start emissions, evaporative emissions, and diurnal emissions can be estimated at each zone centroid location. With the hourly estimates of emissions for each zone and link, summaries can be produced by aggregating emissions geographically to zone,

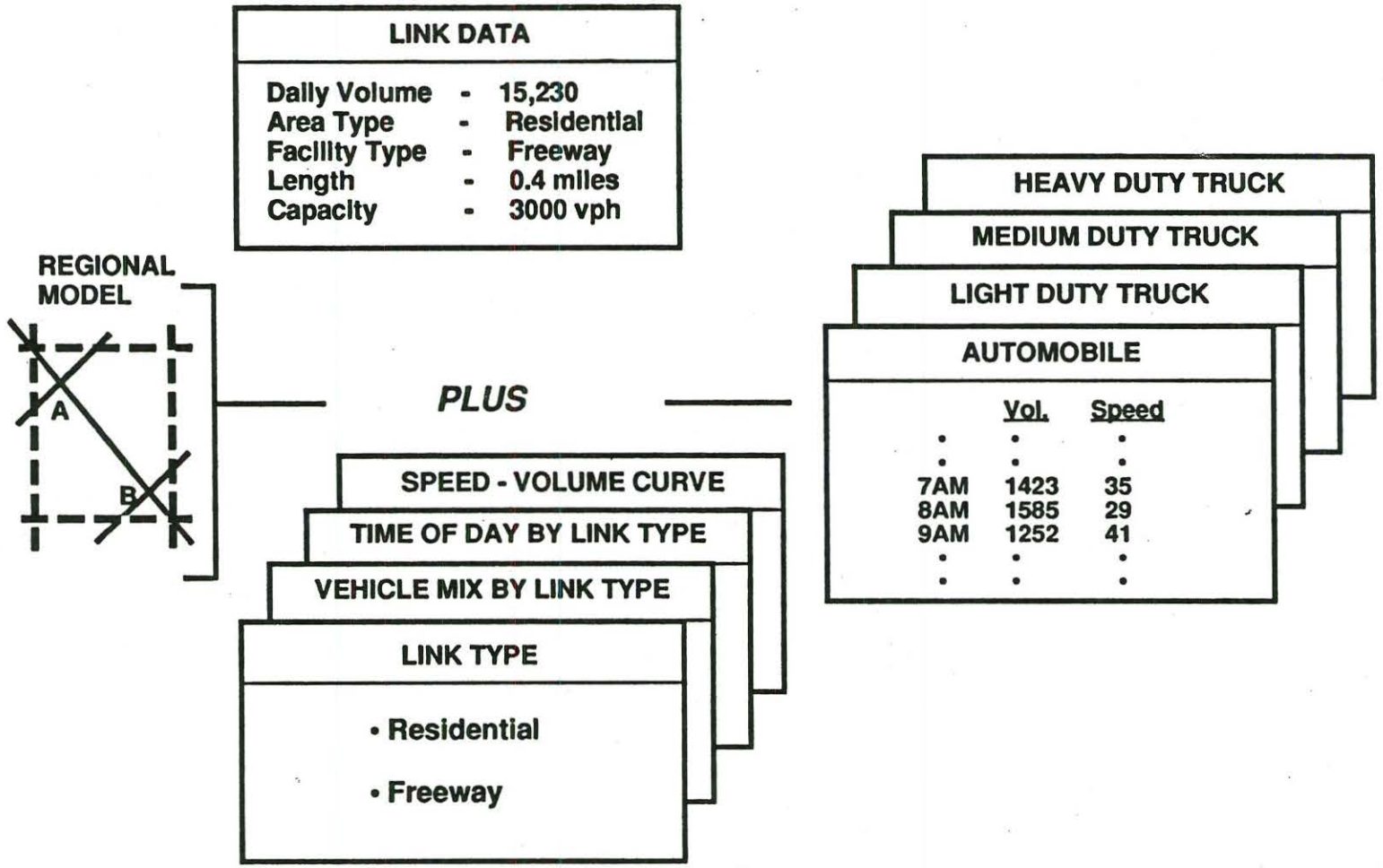

Figure 14
Link Prototype System
for Regional Emissions Estimation Process

district, county, or regional grouping and can be aggregated temporally to periods of the day or to a daily total. Geographic aggregations can also be used to develop grid cell estimates of emissions or to define hot-spot areas.

Although there is the capability to produce regional forecasts for each hour of the day using most regional model systems, this would result in a time-consuming and extremely cumbersome operation. As an alternative to this, the SYSTEM II EMISSIONS program allows the use of various combinations of assignments produced for Daily, A.M. peak period/hour, P.M. peak period/hour, and the off-peak period. Hourly breakdowns of traffic volume by link are then estimated within the time periods defined by using the system of link prototype distributions.

As illustrated in Figure 15, the link prototype system draws upon data collected in the region to provide estimates for the average distribution of travel by hour of the day for trips of a particular area type (central business district, commercial, suburban residential, rural) and facility type (freeway, arterial, collector, minor) combination.

The link prototype system is also used to develop, from observed data, distribution of VMT by vehicle type by time of day for each of the area type/facility type combinations. Once the vehicle type and time of day distributions are developed for each link prototype, they are applied to the assigned link volume for each time period available from the regional modeling assignments. The result from this is the estimate of travel by vehicle type by hour of the day. From this, hourly speeds can also be estimated for each link for each hour of the day to produce the final link data illustrated in Figure 15.

Estimation of speeds on an hourly basis, using procedures already included in regional models for speed estimation, provides for greater accuracy than aggregation over three time periods (P.M. peak period, A.M. peak period, and off-peak period) as is the general practice.

This significant increase in speed estimation accuracy comes with almost no increase in processing time or setup cost because it occurs as post-processing operating on the output already generated by the regional model. Once the volumes by vehicle type are distribution to each hour of the day, the total of all vehicle type volumes for a given hour is used to calculate the volume-to-capacity ratio for that hour. The volume-to-capacity ratio for the hour is applied in the volume-delay equation. The delays calculated

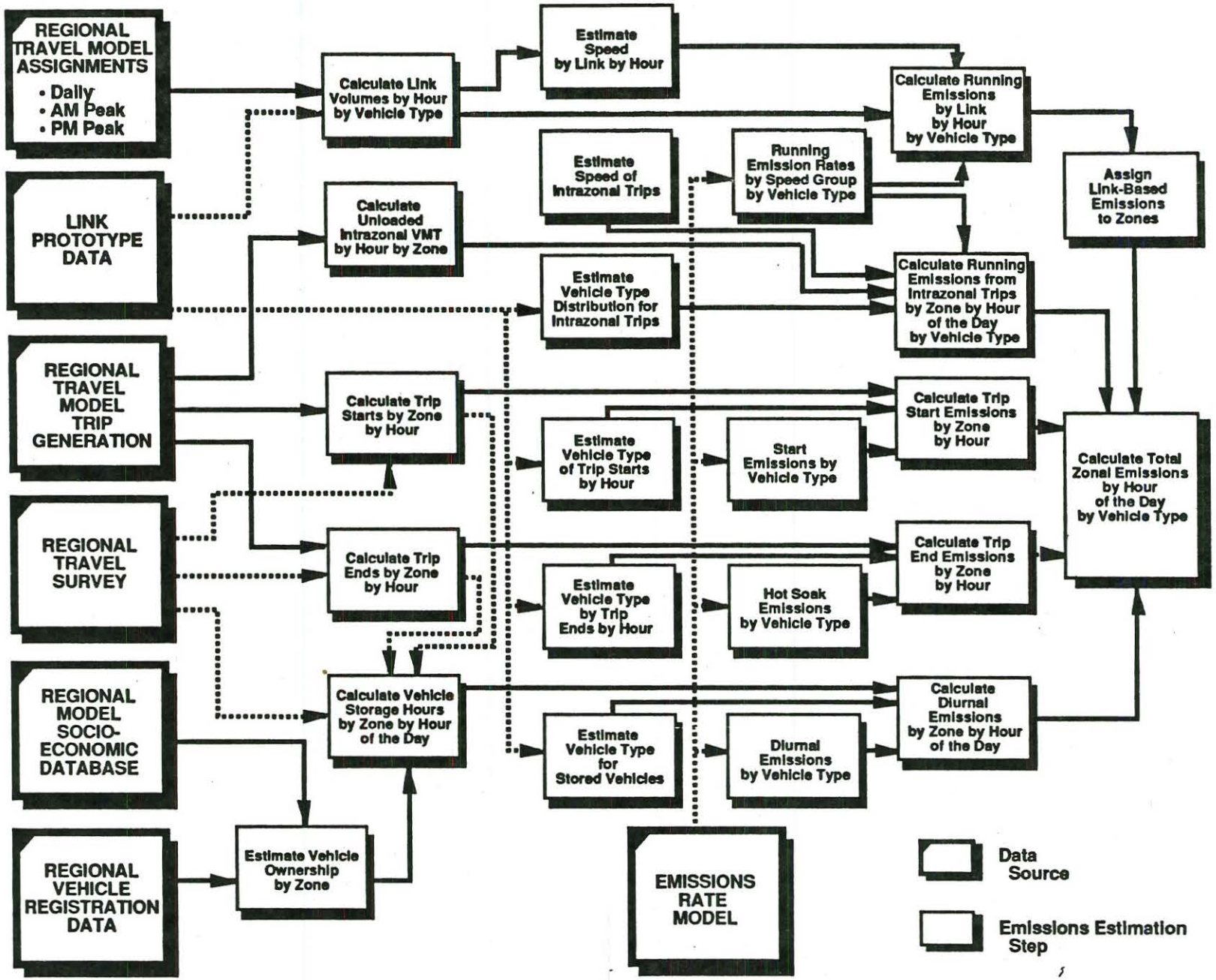

Figure 15
Regional Emissions Estimation Process

for each vehicle type are weighted by the number of vehicles of each type to determine the total delay for the hour. This delay is added to the free flow travel time in calculating the average speed for each hour of the day. The volume-delay equation available to each functional class, area type, peak orientation, and vehicle type include the same function and parameter options as the highway assignment program.

For a comprehensive emission estimate, additional information about intra-zonal travel needs to be added to the inter-zonal link volumes to complete the analysis. Special intra-zonal links are added to the network. These links have the a-node and b-node equal to the zone number and the link characteristics appropriate to a trip within the zone. These links have special functional class, area type, free flow speed, capacity, and length values calculated from zone-based information. The intra-zonal trips as provided from the trip distribution step of the modeling process are used as the volumes for these links. This approach adds the number of trip ends as well as the vehicle miles of travel from intra-zonal trips to the model network.

The EMISSION program requires emission rates differentiated by the four types of emissions - start, running, evaporative, and diurnal, by pollutant (HC, CO, NOx), by vehicle type (light duty passenger, light duty truck, medium duty truck, heavy duty truck) and by speed. The rates were taken from MOBILE4.1 and are based on assumed distributions of trips by hot and cold start and by age of the vehicle, and are for the prevailing temperature for the region. The travel speeds are divided into 2.5 mph increments from 2.5-65 mph. Because MOBILE4.1 does not provide rates directly for trip starts and trip ends, special manipulation of the rates were required to derive these rates.

Results of Emission Estimation

Seven locations in the Central City were identified as "sensitive" locations by the Oregon Department of Environmental Quality. The locations were selected on the basis of a combination of factors including high traffic volumes, peak hour congestion, canyon effect from tall buildings, and a history of past CO standard violations. The seven locations, illustrated graphically in Figure 16, are as follows:

- SW 3rd Ave. between Alder St. and Washington St.
- SW 4th Ave. between Morrison St. and Alder St.
- W. Burnside St. between 10th Ave. and 12th Ave.

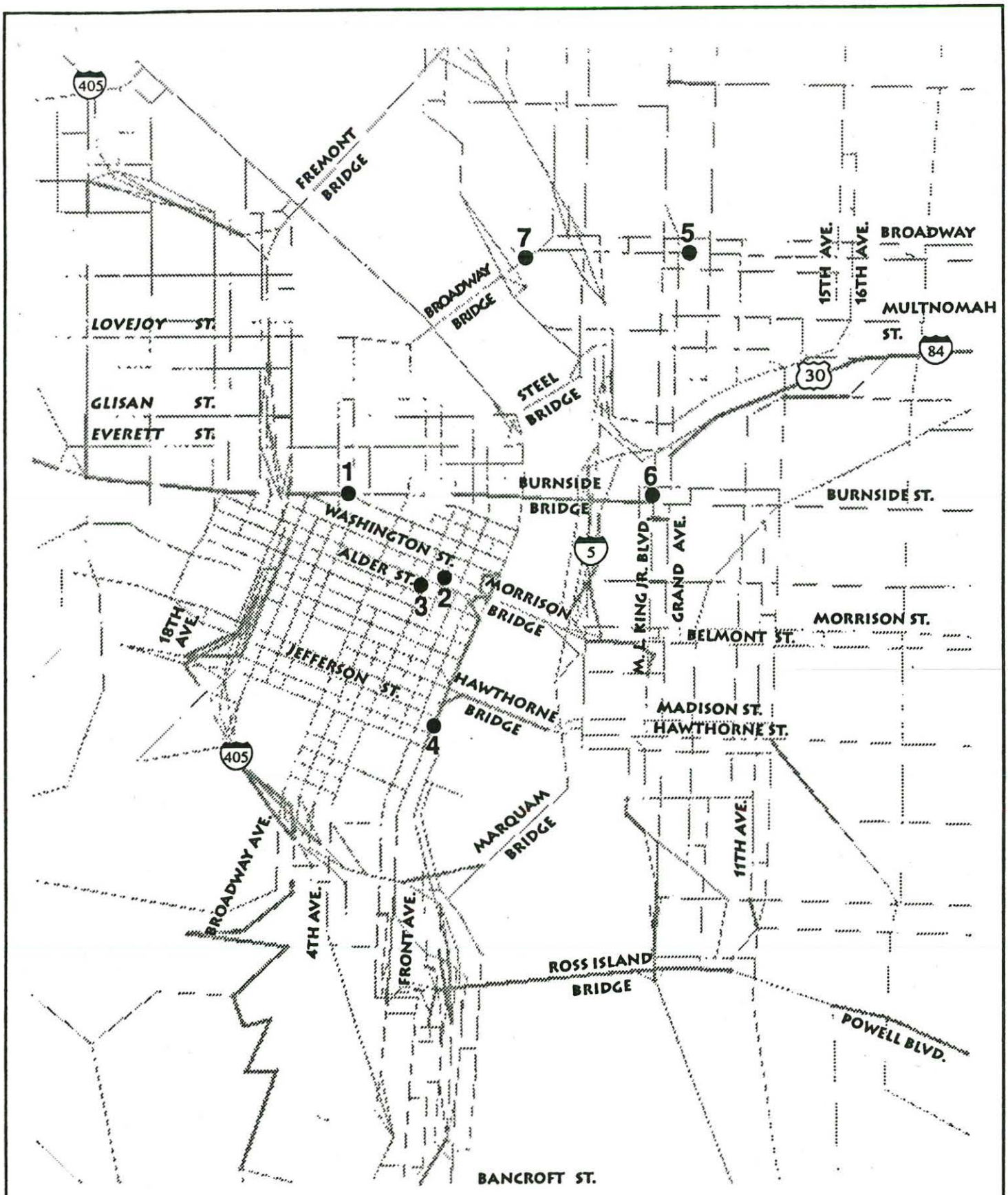

Figure 16
Sensitive Carbon Monoxide Analysis Locations

jhk & associates

- SW Front Ave. north of Clay St.
- NE Weidler St. between NE 6th Ave. and Grand Ave.
- M. L. King Ave. north of E Burnside Ave.
- NE Broadway northeast of N Larrabee Ave.

For each location, the highest daily eight-hour CO emissions were estimated for 1990 and for each of the 2010 development scenarios to provide a rough indication of how the eight-hour CO concentrations might change. Concentration levels are certainly a function of emission levels but also are effected by meteorological conditions and the specific topographic characteristics of buildings in the vicinity of the site. A more detailed assessment of possible concentration levels might be warranted where emissions were expected to increase. However, for all of the seven sites examined, the eight-hour emission levels are predicted to decrease under both the RTP and the High Growth Scenario as indicated in Table 15.

Table 16 provides a closer examination of the emission estimates for the High Growth Scenario. As the table indicates, the emissions are expected to decrease by at least 40 percent at each of the seven sensitive locations. Table 16 demonstrates the importance of the reduction in emission rates in achieving this result because in each location traffic volume is expected to increase and speed is expected to decrease. In estimating the highest eight-hour average for each location, the assignment from the City of Portland model was used to find the highest P.M. peak hour but the METRO model was used in combination with hour-by-hour traffic counts taken specifically for this study to determine the distribution of traffic flow over the other seven hours in the highest eight-hour average. The METRO model did not include exactly the same links as the City of Portland model because of the greater level of detail in the City's model. When this was the case, the closest METRO link was used to provide the temporal distribution for the location of interest. Using this methodology, it was possible to capture potential changes in the relative distribution of traffic at a location within the eight highest hours that can result from route diversions or peak spreading that occur as a facility becomes congested. Changes in the distribution of traffic can also occur as the relative mix of trips by trip purpose changes. This type of change would also be captured by the methodology used.

Table 17 presents the results of the ozone analysis for 1990 and the two 2010 growth scenarios. Based on the emission rates for hydrocarbons currently in MOBILE 4.1, the total hydrocarbon emissions would increase slightly (6 to 7 percent) by the year 2010 under both the RTP and the High Growth

Table 15

COMPARISON OF ESTIMATED EIGHT-HOUR CO AVERAGE EMISSIONS
(Grams)

Location	1990	2010 RTP	2010 High Growth
1. SW 3rd between Alder and Washington	976	423	465
2. SW 4th between Morrison and Alder	926	337	344
3. W. Burnside between 10th and 12th	5839	3239	3458
4. SW Front north of Clay	5626	2307	2375
5. Weidler between 6th and Grand	5346	2601	2920
6. M.L. King Ave. north of Burnside	2416	1126	1259
7. NE Broadway north of Larrabee	5688	1116	1282

(1745TBL.15)

Table 16

EIGHT-HOUR AVERAGE VOLUME, SPEED, AND CO EMISSIONS FOR THE HIGH GROWTH SCENARIO

Location	PM Peak Hour Traffic Volume			PM Peak Hour Speed (Miles per Hour)			CO Emissions (Grams)		
	1990	2010 High Growth Scenario	Percent Change	1990	2010 High Growth Scenario	Percent Change	1990	2010 High Growth Scenario	Percent Change
1. SW 3rd between Alder and Washington	739	1053	42.5%	13.6	12.5	-8.1%	976	465	-52.4%
2. SW 4th between Morrison and Alder	710	783	10.3%	14.1	14	-0.7%	926	344	-62.9%
3. W. Burnside between 10th and 12th	2277	2611	14.7%	18.1	17.2	-5.0%	5839	3458	-40.8%
4. SW Front north of Clay	4010	4648	15.9%	20.6	15.9	-22.8%	5626	2375	-57.8%
5. Weidler between 6th and Grand	2008	2385	18.8%	26.6	25.5	-4.1%	5346	2920	-45.4%
6. M.L. King Ave. north of Burnside	1707	2163	26.7%	25.8	23.6	-8.5%	2416	1259	-47.9%
7. NE Broadway north of Larrabee	2030	2542	25.2%	22.6	22.6	0.0%	5688	1282	-77.50%

(1745TBL.16)

Table 17

COMPARISON OF REGIONAL OZONE PRECURSOR EMISSIONS

	Emissions in millions of grams per day					
	Hydrocarbons			Nitrogen Oxides		
	1990	2010 RTP	2010 High Growth Scenario	1990	2010 RTP	2010 High Growth Scenario
Central City	4.75	4.58	4.87	0.59	0.38	0.41
Regional Total	77.74	82.97	82.72	10.01	7.29	7.25

(1745TBL.17)

Scenario. This results primarily from an increase in VMT of roughly 35 percent. Because the High Growth Scenario would generate fewer vehicle trips and less VMT, the scenario would produce slightly less total hydrocarbon emissions than the RTP scenario in 2010.

Even though the emission rates for nitrogen oxides in MOBILE 4.1 also do not include all of the improvements expected from the 1990 CAAA, the forecasts for 2010 indicate an expected reduction in emissions for both the RTP and High Growth Scenario. Again the High Growth Scenario would result in somewhat high levels of emissions within the Central City where trips and VMT would increase but lower overall emissions in the regions for which trips and VMT both decrease relative to the RTP.

The results of the analysis of emissions of the ozone precursors, while not definitive in absolute terms, does indicate that the High Growth Scenario would have more positive regional impacts on air quality than the RTP development scenario. The concentration of housing and employment within the central city core where the densities facilitate transit use and ridesharing for many trip purposes would accommodate the same amount of regional growth with fewer vehicle trips and fewer vehicle miles traveled. This lower level of VMT per capita would be an important cornerstone of the regions effort to meet the targets of Goal 12.

As a sign of the concern about regional ozone levels the Governor's Task Force on Air Quality has recommended a base strategy that includes improved vehicle inspections, an emissions fee and other strategies listed in Table 18. The combination of strategies are expected to result in a 37 percent reduction in hydrocarbons and a 20.6 percent reduction in nitrogen oxides. The strategies would also result in a 20 to 25 percent reduction in CO beyond what is already projected from 1990 CAAA mandated improvements in vehicle emission standards. These reductions are additional benefits not incorporated in the emission rates for the year 2010 used in this air quality analysis.

(1745/PORTLAND.RPT)

Table 18

RECOMMENDATIONS OF THE STATE'S MOTOR VEHICLE EMISSIONS TASK FORCE*

Strategy to Maintain Compliance with federal Air Quality Standards in the Portland area through 2007

Objective: Maintain healthful air quality and remove Clean Air Act impediments to industrial growth while accommodating up to a 31% increase in population and associated 47% in vehicle miles traveled over the next 15 years.

Base Strategy	Date Implemented	Emission Reduction (% VOC / % NOx)
1. California 1994 Emission Standards for sale of new gasoline powered lawn and garden equipment.	1994	6.1 / 0
2. High Option (Enhanced Vehicle Emission Inspection.	TBD**	17.5 / 9.0
3. Expansion of Vehicle Inspection Boundaries from Metro to Tri-County area.	TBD**	1.0 / 0.5
4. Require 1974 and later vehicle models to be permanently subject to Vehicle Inspection.	TBD**	2.4 / 0.8
5. Phased in Vehicle Emission Fee*** based on actual emissions and mileage driven. - Starting 1994 at $50 average ($5 to $125 range) - Reaching a $200 average ($20 to $500 range) by 2000	1994-2000	5.0 / 5.5
6. Pedestrian, Bike, Transit friendly Land Use for new construction.	1995-1996	5.2 / 4.4
7. Mandatory Employer Trip Reduction Program (50 or more employees).	TBD**	1.2 / 1.1
8. Congestion Pricing Demonstration Project	TBD**	0 / 0
Total Emission Reduction**** (Need 35.6% VOC / 20.2% NOx by 2007)		37.1 / 20.6
Net Cost/Benefits: $119 million/year savings, 8% traffic reduction, 11% energy savings.		

(1745TBL.18)

* Established by the 1991 Oregon Legislature and appointed by the Governor.

** TBD - To Be Determined, but expected sometime in 1995-2000 period.

*** Revenue dedicated to provide better private/public transit service, selective free transit, mitigation of fee impact on low income households, and other incentive measures to provide lower polluting and less costly transportation.

**** Total adjusted for strategy overlaps.

CITY OF
PORTLAND, OREGON
OFFICE OF TRANSPORTATION

Earl Blumenauer, Commissioner
Traffic Management
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Room 730
Portland, Oregon 97204-1969
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January 17, 1991

FUTURE FOCUS BRIEFING PAPER

Relationship of Transportation Management and the Downtown Parking and Circulation Policy to Growth Management

by Elsa Coleman
Parking Manager
Portland Office of Transportation

The overall purpose of the Downtown Parking and Circulation Policy (DPCP) is to alter the supply, operations and/or demand of parking to support economic vitality, maintain smooth traffic flow, encourage transit use, and provide a healthy environment. Major events occuring in the early '70's led to its development and set the stage for a revitalized downtown.

> Public officials, business leaders, and citizens shaped a new vision for the downtown through the adoption of the Downtown Plan, which encourages the use of public transit over the private automobile. A few years later, the DPCP became the transportation component.
>
> The Clean Air Act was passed by Congress--and the DPCP became a key element of the federally-required carbon monoxide reduction plan by managing auto travel in downtown.
>
> The need for an improved transit system was recognized and, through State legislation, declining private bus lines were folded into a public transit system in Portland, known as Tri-Met.
>
> Funds from a proposed major freeway project were transferred to improvements of the existing transportation system, including transit.

Two of the elements of the DPCP receive the considerable attention, in part because they were innovative and effective--the lid on the total number of parking spaces in downtown and the maximum number of spaces allowed to a development based on square footage of use, referred to as the "maximum ratios." At the time the policy was adopted, the approach nationwide was to require minimum parking ratios. Since then, many other cities have followed Portland's lead.

Now, in the early '90's, major events and changes are occuring.

> The Central City Plan has been adopted, and the City is in the process of developing a Central City Transportation Management Plan, which will address the unique transportation needs of each district and their interrelationship to each other.
>
> The Clean Air Act has been amended. It appears that Downtown has met the carbon monoxide standards, but the region has not met the ozone standards. Plans

will be required for both pollutants. For CO, it will be a plan for maintaining the standard; for ozone, it must be a plan for attaining the standard. Unlike CO, ozone cannot be dealt with in a location-specific manner because it is formed in the atmosphere. 75% of the region's ozone problem comes from vehicle emissions.

Development patterns are changing. In just the last five years, Class A office buildings have been constructed for the first time outside the downtown, frequently in areas where the only access is by driving one's car.

The freeway-tranfer funds are no longer available to provide for increased levels and diversity of transit service.

The problem with the downtown lid is not that it is ineffective, but rather that it addresses only a portion of the geographic area of the Central City and an even smaller portion of the region. It does not reduce or even maintain regionwide auto travel and it does not address regionwide reductions in ozone. There are few strategies in place to relate the change and amount of growth to how travel should be managed to achieve at a regionwide level commonsense goals that will keep make this populous region unique in the nation--that is, maintaining minimum congestion, a clean environment, a healthy transit system, and continued growth.

In downtown, a maximum of approximately 1 parking space per 1000 square feet of office and retail are allowed. New development is required to provide carpool spaces and spaces for clients and customers of the tenants. In the rest of the Central City and the region, there is no maximum requirement. The emerging pattern is the construction of 3 to 6 parking spaces per 1000 square feet and no requirements for how those spaces are used. Because of the extreme contrast between downtown and the rest of the region, building owners outside downtown market unlimited parking as a primary amenity and do not charge the user. That means that unless the extreme imbalance of regulation vs. no regulation is corrected, the system is encouraging auto travel and not a balanced transportation system. Only a reasonable regionwide approach can change that.

Travel management strategies should be developed which

- Reduce number of miles travelled.
- Reduce congestion.
- Emphasize use of transit and other forms of sharing rides, such as carpools and vanpools.
- Contribute to clean air.
- Save energy.
- Change the type of energy used.

To do this,

- Financial incentives and funding must be available.
- Regulations must be applied which are equitable for all parts of the region.

Some specific actions to achieve this include the following:

- o Support the Land Conservation and Development Commission's Transportation Rule 12, which includes requirements for maximum parking ratios, increasing auto-occupancy, increasing the transit mode split, and managing the vehicle miles travelled per capita.

- o Support the Environmental Quality Commission's Comprehensive Emissions Fee Bill in the State Legislature (which is based on the concept of charging for polluting) and support particularly a regionwide program which would provide revenue for regional programs, such as funding for transit and for private employers who want to provide more access to their employees other than by driving alone. This bill could provide the funding for diverse service needs. The City should continue to assist in developing a regional consensus with DEQ on what the regionwide program should be.

- o Support the Regional Urban Growth Goals and Objectives which will allow for orderly growth patterns throughout the region.

- o Support modifications to the federal Surface Transportation Act to give credit in the criteria for approving funding an area's efforts to manage land use and transportation.

- o Support the U.S. Senate Bill which would increase the tax deduction for transit passes from $15 to $60.

- o Support use of business tax credits for providing transit subsidies or employee travel programs.

- o Encourage all governmental agencies to develolp travel demand strategies for its employees, including increases to market rates for parking which could, in turn, be used to subsidize other travel methods. Develop other funding mechanisms for government participation in transit subsidy programs. The private sector can deduct such subsidies as business expenses; the public sector cannot.

- o Participate in the development of a 20-year ozone plan to achieve the federal standards by including travel management. If measures which will clearly reduce vehicle emissions are not included, the other option is more stringent regulations on industry. Include measures which are compatible with the LCDC Rule 12 and the Emissions Fee Bill to assure consistency and maximize their effects.

Managing travel through appropriate incentives and regulations does not stop growth; it manages the impacts of growth.

CENTRAL CITY TRANSPORTATION MANAGEMENT PLAN

Phase III Technical Analysis

Draft Conclusions

October 26, 1992

Prepared by:

Shiels & Obletz
JHK & Associates

The detailed model for the Central City Transportation Management Plan has been completed. Two growth scenarios for 2010 were compared to 1990 transportation conditions. The historical growth patterns included in the Regional Transportation Plan were projected and are referred to as 2010 RTP. A high growth scenario for 2010 was also tested and is referred to as 2010 HG.

Development

The comparison of the high growth and RTP scenarios for 2010 auto trips provide an evaluation of the impacts of developing the Central City to a higher density. The RTP has projected 36,500 new jobs and 2,700 additional housing units for the Central City over 1990 levels while the High Growth scenario projected 75,000 new jobs and 15,000 housing units. The regional growth was assumed equal for both scenarios. The growth of the region was reallocated to the Central City to develop the High Growth scenario. The analysis of total VMT for the region predicts a slight drop in total VMT with the High Growth scenario.

In the Central City, the pm peak hour vehicle miles travelled RTP increases 22% over 1990 levels while the High Growth scenario increases by 26% over 1990. The increased travel for the High Growth is far less than the increase in development and density. The model analysis indicates that the higher density development will be accompanied with greater use of alternative modes to the automobile including transit, pedestrian and bicycle.

The primary reason for the relatively low increase in vehicle miles with the high employment growth is the significant increase in the amount of assumed Central City housing. Trip lengths for central city residents are generally shorter than suburban residents. Alternative modes are more viable due to the proximity to retail and employment and the cost of parking. The increase in housing would have a significant impact on the ability of the Central City transportation system to absorb employment growth.

Development of additional housing in the Central City appears to be one of the most significant transportation investments the City of Portland could make. The High Growth scenario assumes Downtown employment growth at a rate much greater than the historic rate. In the past 20 years, the percent of regional employment in the Central City has declined. The RTP assumes a slight decline in the percentage of regional employment for the next 20 years. The High Growth assumes that the percentage of regional employment in the Central City increases.

Transit and Alternative Modes

The transit system assumed for the year 2010 RTP and High Growth includes light rail in Vancouver Corridor, Milwaukie Corridor, and the I-205 Corridor in addition to the Banfield and West Side. The bus network is altered to provide feeder service to the new lines and the fares are assumed to increase equal to the inflation rate. The service hours increase at approximately 2.4% per year.

1. **Total Person Trips**

   The total person trips attracted to the Central City by district increase from 522,448 (1990) to 628,955 (RTP) and 765,585 (High Growth) indicating the considerably increased activity related to the projected growth.

   Based upon the assumptions for 2010, the transit mode split for the Central City is projected to increase from 15% in 1990 to 23% for total trips attracted for both the RTP and High Growth scenarios. The Downtown, North of Burnside, and Lloyd District experience a considerable increase in transit use for both scenarios. The other districts have a greater increase in projected travel for the high growth scenario with less than 6% transit mode split projected.

   Walk and bicycle alternatives are projected to increase from 3% (1990) to 6% (2010) mode split for the high growth scenario with 19% for Northwest Triangle and 20% for North of Burnside. The high walk and bicycle use in the North Downtown is attributed to the close proximity of the district to the high employment center, Downtown.

2. **Home Based Work Trips**

   The Downtown transit mode split for home based work trips (HBW) is projected to increase from 40.5% (1990) to 53.4% (RTP) and 56.4% (HG). More significant is the projection in both cases of a reduction in the number of auto person trips to the Downtown from 67,925 (1990) to 64,267 (RTP) and 66,969 (HG). These projections are based upon increases in housing, parking costs, and transit improvements.

   The Lloyd District HBW transit mode split is projected to increase from 7.77% (1990) to 19.6% (RTP) and 26.6% (HG). The HBW trips attracted to the District are projected to increase from 23,497 to 45,356 (HG) or 21,859 additional trips. Of the additional trips, transit is projected to increase from 1,828 (1990) to 12,076 (HG) or 47% of all the additional trips.

   The North of Burnside will experience similar increases in HBW trips attracted on transit from 12.8% (1990) to 23.4% (HG). The total HBW trips attracted are projected to increase from 3,995 (1990) to 12,018 (HG) of which transit will attract 2,310 additional trips or 29% of the increased trips. The other districts are not projected to experience transit mode splits for HBW that exceed 10%.

   The analysis of trips for High Growth within the Central City indicates a considerable increase. The internal transit circulation would appear require greater attention as these trips are projected to account for a greater percentage of the total trips. Transit and alternative modes are also more likely to capture a greater percentage of these trips. Transit trips internal to the Central City increase from 9,000 to 27,000 (HG) representing 15% of total transit trips.

Circulation

The expansion of high density development in districts other than the Downtown has a significant impact on circulation and access within and to the Central City since a large proportion of new trips to districts are projected to be by automobiles. Traffic volume to capacity analyses indicate that some entry points from the freeways to the Central City are projected to have volume to capacity ratios exceeding 1.0.

Some parts of the system are already operating at capacity in 1990. The high growth scenario projects considerable growth in auto travel in districts outside the Downtown. These additional trips for the Central City are projected to add to the increase in use of the freeway/arterial system.

From 1990 to 2010 auto trips to the Central City increased 6.5% (RTP) and 24% (HG). The Downtown and Goose Hollow Districts experience a decline in auto trips from 1990 to 2010 RTP. Downtown total auto trips increase by 2% (HG). Vehicle trips increase most significantly in the Lloyd Center (30,475) and North Macadam (20,771) Districts.

Air Quality

Carbon monoxide emissions were evaluated based upon the projections of auto use for RTP and High Growth. The comparisons were conducted at locations selected by the Oregon Department of Environmental Quality. The analysis was conducted assuming the implementation of the Clean Air Act requirements for tailpipe emissions as specified by EPA. The emissions were calculated based upon assumed volumes and adjusted speeds based upon projected traffic levels. The projected carbon monoxide emissions are expected to drop between 40-70% depending upon location from 1990 levels and are included in the attached table.

The Governor's Task Force on Motor Vehicle Emissions charged with developing a 20 year ozone maintenance plan has recommended a base strategy that includes improved vehicle inspections, emissions fee and other strategies listed on the attached document. The estimated reduction in carbon monoxide from the base strategy is an additional 20-25% which was not included in the analysis of CO emissions included in this report.

Parking

Parking costs for the Downtown are assumed to rise 1% above inflation. Parking costs for districts are assumed as a percentage of the Downtown costs as follows: North of Burnside, 67%; Lloyd District, 50%; North Macadam, 25%; and Northwest Triangle, 25%.

Parking costs appear to have a major impact on automobile use for the districts. The home based auto work trips (HBW) to the Downtown are projected to decline for both scenarios in 2010.

The draft review of parking supply and demand for the Downtown District projects parking use at capacity for both the RTP and HG scenarios. The analysis is based upon the addition of parking allowed under existing ratios for the assumed development. Development assumptions were reviewed for additional parking along with an analysis of existing surface lots that would be converted to other uses. Parking supply is expected to increase by 10,000 net spaces (HG) and 6,700 net spaces (RTP) which includes exempt and non-exempt spaces. The assumptions that contributed to this analysis used only the ratios and did not apply the maximum parking lid to the calculations.

The projected demand for parking Downtown does not increase substantially under either RTP or HG scenarios. The technical analysis conducted for the transportation scenarios does not require equilibrium in price and demand. Consideration of the results will have to include the recognition that parking supply will influence the price of parking.

Districts

The Downtown, North of Burnside and Lloyd Districts are projected to experience significant increases in transit use. The remaining districts all have work trip mode splits of less than 10% projecting a high level of auto use in the districts.

The significant circulation issue for the Central City appears to be the entry portals to the area. Development in areas where transit is not as highly utilized will add considerably to the congestion in the Central City.

Air quality projections for selected intersections indicate that carbon monoxide emissions will decline from current levels at all areas. Geographically specific policies should not be required to assure carbon monoxide compliance for the districts.

Conclusions

The results of the comparison of the two scenarios are encouraging. A substantial increase in development as projected with the high growth scenario could be accommodated by the transportation system for the Central City. The following are general conclusions:

1. Circulation capacity is likely to be the most significant constraint in the build-out of the Central City.

2. Increased housing in the Central City represents a positive significant factor in transportation.

3. Carbon monoxide is expected to be less of a problem for the Central City.

4. Transit expansion above historic levels will be needed to support Central City development.

5. Parking demand in the Downtown should be accommodated with the ratios currently allowed for new development.

6. Emerging Central City districts are projected to create significant auto trips that will add to the congestion during the peak hour.

These projections are based upon the best available information and technical modelling capability. There are numerous factors that influence the outcome of the projections. Changes in the assumptions can have a significant impact on the results. Several issues emerge as important in the analysis. These are uncertainties as to whether the positive outcome projected can actually be achieved.

1. **Housing**: Housing in the Central City has been demonstrated to have a significant positive impact on transportation. Portland Development Commission has projected that substantially increased housing in the Central City would likely require significant public investment in order to effectively compete with other parts of the region. Aggressive programs approaching this level of investment do not exist at this time. Without such an investment, the high growth scenario results are not likely to be realized.

2. **Employment**: The concentration of employment in the Central City has been demonstrated to show positive benefits in increasing the number of work trips on alternative modes. The development patterns of the region are not consistent with the projected employment for the high growth scenario. In the past 10 years, the percent of regional employment in the Central City has declined. The RTP assumed a constant percent of employment in the Central City while the High Growth scenario assumed an actual increase in percentage of employment in the Central City.

   The case studies conducted by the consultant team indicated that transportation played a significant role in development decisions. Public policy will likely need to be revised for investment as well as transportation in order to reverse the past trends of greater employment development outside the Central City.

3. **Parking Costs**: Parking costs have been estimated to increase in the Downtown at a rate of 1% each year over the inflation rate. Parking costs for districts are projected as a percent of Downtown costs: North Burnside, 67%; Lloyd District, 50%; Northwest Triangle and North Macadam, 25%.

   Automobile users are very sensitive to parking costs. Significant increases in transit use are projected with increased parking costs. This factor is primarily responsible for the considerable increase in

transit mode split for the Downtown, Lloyd, and North of Burnside Districts. The cost of parking is influenced considerably by the supply available and management of the spaces. Parking costs below the assumed levels would likely cause an increase in the number of automobile trips.

4. **Transit**: The successful development of the Central City is dependent upon a substantial increase in transit ridership. The projections for 2010 suggest that such an increase can occur. The system tested included four light rail lines and an average increase in service hours of 2.4% per year. The historic average increase in transit service hours has been 1.5% per year. Transit will need additional financing sources to accomplish the assumed expansion.

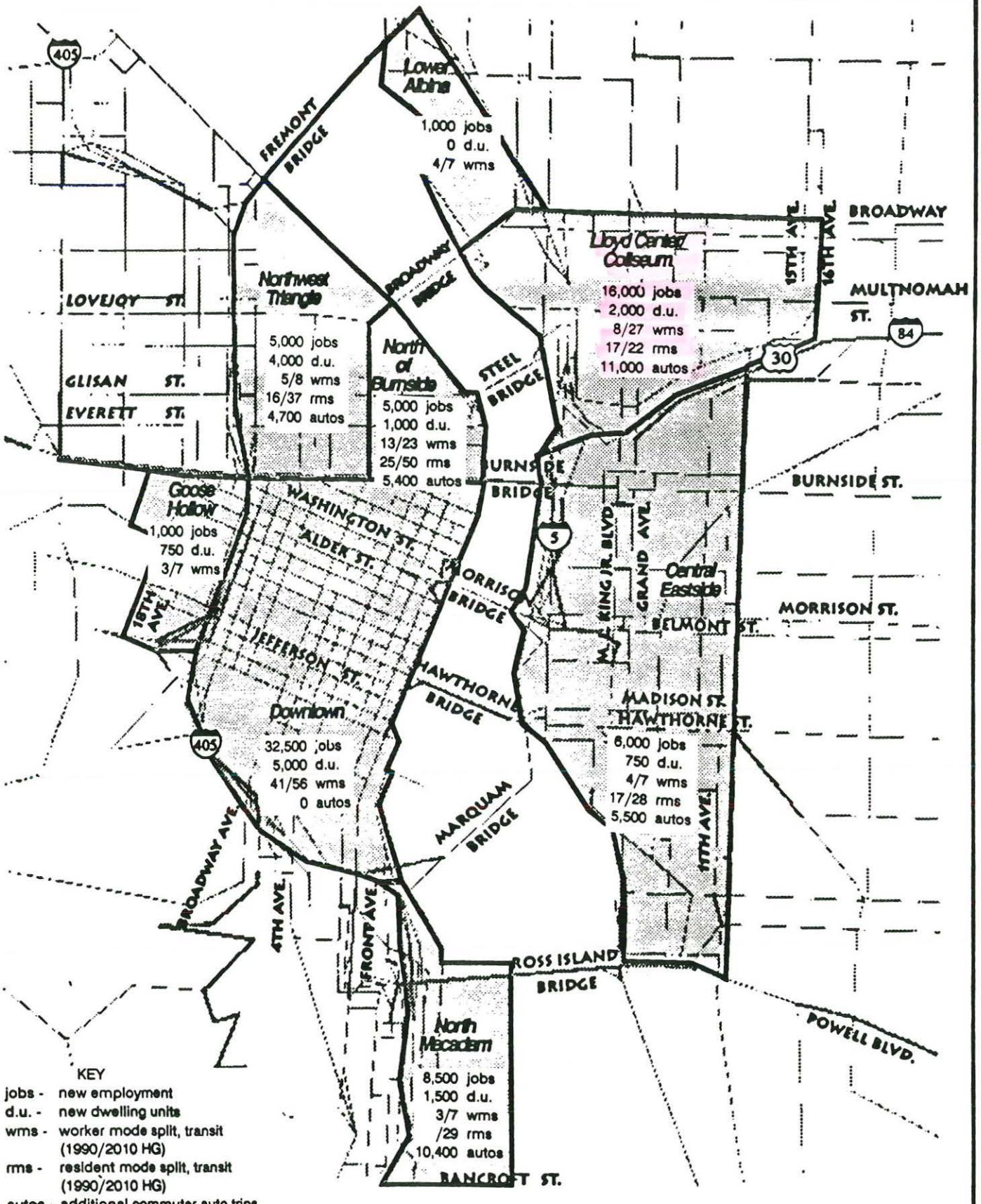
   The increase in transit ridership is substantially influenced by the assumed increase in parking costs for commuters. The increased cost will encourage more transit ridership but may also encourage more suburban development if the parking costs rise disproportionately to other parts of the region.

   Central Eastside, North Macadam and Northwest Triangle are projected to have low transit mode split for workers in the districts. Employment development in these districts are not projected to be served effectively by transit. An improved system for service identified for these districts would prove valuable in facilitating the build-out of the Central City.

ESTIMATED EIGHT-HOUR CO AVERAGE EMISSIONS
(Grams)

Location	1990	2010 RTP	2010 HG
SW 3rd between Alder and Washington	976	423	465
SW 4th between Morrison and Alder	926	337	344
W. Burnside between 10th and 12th	5839	3239	3458
SW Front north of Clay	5626	2307	2375
Weidler between 6th and Grand	5346	2601	2920
M.L. King Ave. north of Burnside	2416	1126	1259
NE Broadway north of Larabee	5688	1116	1282

(#1745/AVGEMMS.TBL)



KEY

jobs - new employment
d.u. - new dwelling units
wms - worker mode split, transit (1990/2010 HG)
rms - resident mode split, transit (1990/2010 HG)
autos - additional commuter auto trips

N

Figure 3
Estimated Employment and Housing Additions for the High Growth Scenario 1991-2010

jhk & associates

urban design
density

transit-oriented development

services up to side walk

State of Oregon
Department of Environmental Quality **Memorandum**

Date: May 12, 1992

To: Environmental Quality Commission

From: Director

Subject: Information Report on Proposed Parking for the 600 Holladay Building

The purpose of this memo is to provide the Commission with general information on parking policies in the region in light of the proposed 600 Holladay Building parking project, which was initially brought to the attention of the Commission at the January 23, 1992, meeting. Specific information on the 600 Holladay Building parking facility proposal is presented along with a brief summary of the Indirect Source Program and alternatives for dealing with the permit application.

General Background

During the early 1970's, the 8-hour carbon monoxide standard was exceeded in downtown Portland approximately one out of every three days. In 1973 Governor Tom McCall submitted the Portland Transportation Control Strategy (TCS) to the U.S. Environmental Protection Agency as a follow-up response to the Clean Air Act of 1970. The TCS included a fledgling Indirect Source review program and also outlined measures to reorganize and manage the supply of parking in downtown Portland. The TCS indicated that the Department was prepared to take over management of parking under the Indirect Source Program if the City of Portland did not produce an acceptable management plan.

In response to the Department's initiative, the city adopted the Downtown Parking and Circulation Policy in 1975. The main thrust of the parking policy was to stabilize the parking supply with an emphasis on developing and encouraging transit access, while still providing limited new parking for development projects. The keys to management of the parking supply were the adoption of an initial ceiling on spaces and maximum ratios of parking to building floor space for new developments. With parking stabilized, traffic growth in the downtown would be minimized in order to take maximum advantage of the federal tail pipe program on new cars and Oregon's vehicle inspection and maintenance program.

Under the parking policy (subsequently updated in 1980 and last updated in 1985), traffic growth in the downtown was minimal and there was rapid progress toward meeting the 8-hour carbon monoxide standard. Although singular exceedances (once in a year) have been recorded as recently as 1988 in the downtown, two

or more exceedances, constituting a standard violation, have not occurred since 1984.

Even though the downtown parking policy has been an apparent success in fostering clean air, the parking ceiling and to some extent the maximum parking ratios as applied in the downtown have been a continuing source of controversy, particularly among the business community. In the rest of the region, including areas of the city outside the Central Business District (CBD), parking is essentially unregulated. Indeed, most jurisdictions specify minimum parking ratios instead of maximums, and typically, developers generously exceed those minimums.

To augment the downtown parking supply, while still maintaining air quality, the Commission in 1990 adopted a parking offset program for the downtown. This has bolstered the number of spaces available for new development. However, new developments in the downtown must still meet the maximum parking ratio requirements, and this has become an issue of concern with respect to office developments, such as in the nearby Lloyd District and elsewhere in the region, that do not have to meet such requirements, but compete for tenants in essentially the same market.

600 Holladay Building--Background Information

Mary Kile McCurdy, representing 1000 Friends of Oregon, brought the 600 Holladay Building (parking) project to the attention of the Commission in the Public Forum segment of the January 23, 1992, meeting. She requested that the Commission direct the Department to extend the regulations of the downtown Portland parking policy to the area of the Lloyd Center by Temporary Rule. In response to the concerns raised by 1000 Friends, the Director made a commitment to review and sign future Portland area Indirect Source permits and to examine the Indirect Source Rules for possible changes.

Policy Issues

The basic issue that was drawn at the January 1992, meeting was the apparent disparity in regulatory treatment of office projects, for the downtown area versus the Lloyd District, with respect to the allowed amount of associated parking. Under the City of Portland's parking policy, which has been incorporated into the State Implementation Plan, new office developments in the CBD are allowed a maximum of 0.7 to 1.0 space per 1,000 sq. ft. of gross floor area, depending upon location within the CBD. By contrast, the 600 Holladay Building would have a parking ratio of 2.9 spaces per 1,000 sq. ft. of gross floor area, assuming

that all the spaces in the garage were made available only to the tenants of the new office structure. (The developers, however, have indicated in the Conditional Use application to the city that the effective ratio would be approximately 1.3 spaces per 1,000 sq. ft. of gross floor area, after accounting for parking space usage by non-tenants.)

Beyond the apparent regulatory disparity between the downtown and the Lloyd District, though, there is a larger issue of an office market that has dramatically changed from the 1970's. As an example of this change, in 1970 Washington County had approximately 1% of the space then occupying downtown Portland. By 1990 Washington County office space was equal to approximately 76% of downtown office space. Accordingly, from an air quality perspective there is concern that restrictive parking policies in the central city area may only serve to move air quality problems to the east side, or the suburban areas of the region. (In 1989 and 1990 the highest 8-hour levels of carbon monoxide were measured at 82nd Avenue.) Suburbanization of the office market may also have ramifications on the generation of ozone precursor emissions, not yet well understood.

The change in the office market provides added impetus to take a regional approach to parking/transportation/air quality issues. There are three significant planning studies under way that may have some bearing on the development of new, regionally based policies. However, the 600 Holladay Building, by virtue of the large size of the parking garage, may have impacts before these studies are completed.

1) The Central City Transportation Management Plan study is expected to result in a comprehensive parking policy for the entire central city area, including the Lloyd Center commercial district.

2) The Governor's Task Force on Motor Vehicle Emissions in the Portland area has begun work to develop a regional strategy, including a broad examination of parking issues, to maintain air quality standards.

3) Region 2040 by Metro in cooperation with local jurisdictions will examine local land use plans, with particular emphasis on addressing the Department of Land Conservation and Development, Transportation Rule, which includes a requirement for a 10% reduction in per capita parking in the Metro region.

The Central City study, to be completed early next year, will determine if there will be any carbon monoxide problem in the

Lloyd District. This study should result in a Parking and Traffic Circulation Plan that will insure maintenance of the carbon monoxide standards for at least twenty years. The Governor's Task Force will determine the extent of the regional ozone problem and make recommendations to address them by October 1992.

600 Holladay Building (Indirect Source) Permit Issuance Alternatives

The initial Indirect Source Program in the Portland TCS was changed to operate statewide on a permit issuing basis in 1975, somewhat similar to the industrial permitting program. Certain large parking projects (150 or more spaces within the city limits of Portland) are required to secure a construction permit from the Department. A significant provision of the Indirect Source Rules is for the development of Parking and Traffic Circulation Plans (P&TCP's). Currently, the only P&TCP in effect is for the area of the downtown governed by the city's parking policy.

The Department received a permit (Indirect Source) application for the proposed 600 Holladay Building and associated parking garage facility on March 15, 1992. The garage would have a total of 1,376 spaces, but the net increase in on-site parking would be 926 spaces, due to the demolition of the existing two-level, 450-space facility, which exclusively serves the existing 500 Lloyd building. The applicant was notified that the application would not be processed until a completed Land Use Compatibility Statement (required by Department of Land Conservation and Development, Administrative Rule) was received by the Department.

In the Conditional Use application, required by the city, the developers of the 600 Holladay Building have indicated that 450 spaces in the new parking structure replace the existing two-level parking on the site, and the 450 spaces would be reserved for the exclusive use of the existing 500 Lloyd building. Additionally, 306 spaces would be held for general commercial use. If those spaces are subtracted from the total, then the parking ratio for the new building would be approximately 1.3 spaces per 1,000 sq. ft. of gross floor area (compared to the CBD's 0.7 to 1.0 space per 1,000 sq. ft. of gross floor area). According to the developers, the existing office parking demand in the Lloyd District is approximately 2 spaces per 1,000 sq. ft. of gross floor area, which is satisfied in part by existing area surface lots.

The following alternatives for regulatory action appear to be relevant in light of the above information:

1) Issue a relatively unrestrictive permit for the proposed project, given there is no known existing carbon monoxide problem in the area.

2) Place restrictions on parking for the 600 Holladay Building project that limit parking to the ratios allowed in the Portland downtown area, or ratios appropriately scaled to the level of future Lloyd District transit service. This could be accomplished through extending the boundary of the present Parking and Traffic Circulation Plan (the CBD parking policy) to encompass the Lloyd District.

3) Restrict the parking to the uses proposed as a part of the Conditional Use application to the city.

4) Limit the parking of the 600 Holladay Building and future new facilities through changing the Indirect Source Rules to develop a regionally based schedule of maximum parking ratios. The intent would be to make the Indirect Source Rules compatible with the parking space per capita reduction required by the Department of Land Conservation and Development, Transportation Planning Rule. In order to gain the time necessary to develop the ratios and apply the appropriate one to the proposed project, the Department would need to apply OAR 340-14-020(4)(b), which allows the Director to invoke additional measures to gather facts regarding a permit application.

5) Wait until recommendations of the Governor's Task Force are complete before considering regional parking ratios, since this is one of the strategies under deliberation by the task force.

Additional Considerations/Evaluation

1) Uncertainty will remain for at least a few more months until the air quality modeling work on the Central City Transportation Management Plan study is completed as to whether there could be future, localized air quality problems in the Lloyd District.

2) Limiting parking use to the developer's proposal to the city (i.e., 756 spaces = 450 for existing Lloyd Tower + 306 "General Commercial" would not be made available to tenants of the new office tower) would come close, but still exceed the CBD maximum parking ratio.

3) Even if the Lloyd District parking ratios for new development were made equal to those in effect for the CBD,

such action would still not address the larger regional problem and equity issues posed by suburban office parking.

4) Several months of technical work would be necessary to determine a reasonable set of regional parking ratios that would be compatible with the Department of Land Conservation and Development, Transportation Planning Rule. The following major tasks would need to be accomplished in order to derive a set of regional parking ratios:

   1) Determine the existing inventory of commercial parking spaces and the corresponding per capita ratio (2 to 3 months);

   2) In coordination with Tri-Met and Metro, determine future mode shares on a subregional basis for transit and carpooling (2 to 3 months);

   3) Based on steps 1 and 2 and the 10% reduction in per capita parking, determine a set of regional parking ratios for new developments (1 to 2 months).

   Steps 1 and 2 could take place concurrently. Thus, the necessary fact finding process could probably be accomplished within a five-month period.

5) The Governor's Task Force holds its third meeting on June 2, 1992 to receive presentations on similar types of studies conducted elsewhere in the country. The remaining schedule of task force meetings is listed below.

   June 25 (First look at potential vehicle emission reduction strategies)

   July 22 (Presentation of evaluation and analysis of potential vehicle reduction strategies)

   August 27 (Consideration of selected strategy packages and draft recommendations)

   September 22 (Final recommendations)

6) In consideration of time periods in the above outlined items 4 and 5, the 600 Holladay Building and others could be held up under OAR 340-14-020(4)(b) while fact finding measures are undertaken to determine the appropriate parking ratios.

Legal Authority

ORS 468A; OAR 340-20-100 through 20-135; OAR 340-14-020(4)(b)

Recommendation

The Department recommends that we seek clarification on the use of the 306 non-tenant, "General Commercial" parking spaces. In addition, we recommend that we coordinate with Tri-Met, Metro and the City of Portland regarding any additional appropriate requirements which should be attached to any permit issued and attach such conditions to the permit, including restrictions on the 306 spaces. We recommend proceeding with these actions while not awaiting the actions in the above listed items 4 and 5.

If approved by DEQ, the Holladay Building Garage would become the largest commuter parking structure in the state of Oregon. Its developer has proposed that DEQ approve a garage which would accommodate 1,376 parking spaces. For purposes of illustration, the Morrison East Garage in downtown Portland currently provides 800 parking spaces. The lines show how large the Morrison East Garage would have to be in order to accommodate the number of spaces proposed by the developers of the Holladay Building Garage.

RUSSELL DEVELOPMENT COMPANY, INC.

STATEMENT BY JOHN W. RUSSELL

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

July 24, 1992

Good morning. My name is John Russell. I'm President of Russell Development Company and the owner of a number of properties within the Portland downtown business district. Also speaking today are Keith Bartholomew staff attorney of 1000 Friends of Oregon, and John Charles, Executive Director of Oregon Environmental Council.

We are here to formally propose adoption of this temporary rule that we believe is necessary to protect the air quality of our Central Business District. The temporary rule would extend current parking regulations to developments east of the Willamette River. It would close a loophole that currently allows virtually unlimited parking for new developments in the Lloyd District. This rule was requested in testimony by 1000 Friends of Oregon in January.

The need for a temporary rule is critical because a permit application has been submitted to DEQ to build in the Lloyd District the largest commuter parking garage in Oregon. This high-rise garage would contain 1376 parking spaces -- more than double the number allowed for the same type of development west of the Willamette River. We believe that DEQ, with EQC's guidance through adoption of a temporary rule, should revise this permit to comply with parking limits that apply west of the Willamette River. Such a revision would still allow some 800 parking spaces.

To illustrate how massive the proposed garage is, I have a picture here of the existing Morrison East City Parking Garage, with lines showing how large it would have to be to accommodate 1376 parking spaces.

The Parking and Circulation Plan adopted in 1980 currently limits parking for new office developments in the downtown business district west of the Willamette River. But the same requirements do not yet apply east of the river, even though the central business district was expanded to include the Lloyd Center District under the Central City Plan adopted by the Portland City Council several years ago.

200 MARKET BUILDING, SUITE 1515 PORTLAND, OREGON 97201 503•228•2500 FAX (503) 228•3204

The parking regulations were among several measures adopted to improve air quality in the Portland downtown area. As development and automobile traffic increase, it is essential that rules to protect public health -- and the cost of complying with those rules -- be extended throughout the Central City.

In addition to its public health implications, parking regulation is also an issue of economic fairness. The City of Portland is committed to a thriving and vital downtown and has extended that commitment to both sides of the Willamette River. For example, the density zoning for most of the Lloyd District is identical to this very site. Unequal application of parking ratios creates an economic disparity between downtown west of the Willamette River and those areas immediately east of the river. Until this loophole is closed, DEQ has the worst of all possible policies: a partial regulation. Needless to say, with partial regulations, economic activity is encouraged in the unregulated area.

In effect, the parking restrictions amount to a cost placed on business to improve air quality. Right now, that cost is being paid by some businesses and not others. That hurts some downtown businesses simply because they are located west of the Willamette River.

The temporary rule is by no means a comprehensive solution to parking and traffic issues in the Portland Metropolitan area. Bigger solutions are in the works in the form of several major studies. This rule would merely apply reasonable parking policies to the unregulated portion of the Central City until comprehensive studies are complete.

We urge your favorable consideration of the temporary rule.

Thank you. I would be happy to answer any questions.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

In the Matter of the Amendment of OAR 340-20-047 relating to implementation of air quality strategies, rules and standards.	))))	PETITION TO ADOPT TEMPORARY RULE TO AMEND OAR 340-20-047 STATE OF OREGON CLEAN AIR ACT IMPLEMENTATION PLAN)

1. Petitioners names and addresses are 1000 Friends of Oregon, 300 Willamette Building, 534 SW. Third Avenue, Portland, Oregon 97204, and John W. Russell, 200 Market Building, Suite 1515, Portland, OR 97201.

2. Petitioner 1000 Friends of Oregon has testified on two occasions at Environmental Quality Commission hearings regarding this specific issue.

3. Petitioner John Russell, individually and in his capacity as President of Russell Development Company, Inc., is the owner of numerous properties within the downtown business district and is subject to the central business district maximum parking ratio requirements as imposed both by the City of Portland and by the Department of Environmental Quality.

4. Pursuant to OAR 340-20-047, the Department of Environmental Quality has adopted Volume 2 of the State of Oregon Air Quality Control Program. A portion of that program at appendix 4.2-14 is entitled "City of Portland Parking and Circulation Plan". ("The Parking and Circulation Plan"). The Parking and Circulation Plan provides particular rules concerning parking within its

affected boundaries, divides the boundaries into various parking sectors and prescribes maximum parking space ratios by sector for parking spaces in office developments. The Parking and Circulation Plan was adopted by the Portland City Council on October 30, 1980, pursuant to City of Portland Resolution No. 32794. The affected boundaries, referred to as "Downtown" are defined as the area enclosed by the west bank of the Willamette River, the Broadway Bridge and Broadway ramp, Hoyt Street, Stadium Freeway and Marquam Bridge, and is further described in Section 2 of the Parking and Circulation Plan.

5. Since the adoption of the Parking and Circulation Plan, significant development has taken place and further development is likely for those portions of the Central City directly to the east of the Central Business District, and most notably in the Lloyd Center District. In recognition of this new and anticipated development, the City of Portland adopted its Central City Plan and thereby expanded the Central Business District to include the Lloyd Center District.

6. The properties in the Lloyd Center District share a common air shed with the balance of the Central City and are constructed to similar densities. As development and automobile traffic increase, it is essential that rules to protect public health be extended throughout the Central City including the Lloyd Center District.

7. The City of Portland is committed to a thriving and vital downtown and has extended that commitment to both sides of

WHEREFORE, petitioner requests the Environmental Quality Commission to adopt the proposed amendment to OAR 340-20-047.

DATED this 24 day of July, 1992.

1000 FRIENDS OF OREGON

By _____
Keith Bartholomew

_____
John W. Russell

russell\rulemak.two