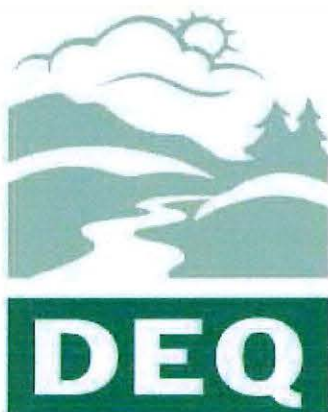


**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS 10/11/1996**



State of Oregon  
**Department of  
Environmental  
Quality**

# **A G E N D A**

## **ENVIRONMENTAL QUALITY COMMISSION MEETING**

**October 10-11, 1996  
Columbia River Maritime Museum  
1792 Marine Drive  
Astoria, Oregon 97103**

**Notes:**

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

**Public Forum:** The Commission will break the meeting at approximately **11:30 a.m.** for the Public Forum if there are people signed up to speak. The Public Forum is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of the agenda for this meeting. The public comment period has already closed for the Rule Adoption items and, in accordance with ORS 183.335(13), no comments can be presented to the Commission on those agenda items. 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.

**Thursday, October 10, 1996  
Beginning at 10:00 am**

Department of Environmental Quality/Environmental Quality Commission Strategic  
Planning Session

---

**Friday, October 11, 1996**

### **Notice of Executive Session of the Environmental Quality Commission**

The Environmental Quality Commission will hold an executive session at 8:00 a.m. at the Columbia River Maritime Museum. The session will consider the settlement of Merz, et al v. Heceta Water District, et al., District Court Case No. CV91817TC and the filing of Kinross Copper Corporation v. State of Oregon, Circuit Court Case No. 9609-06900. The executive session is to be held pursuant to ORS 192.660(1)(h). The regular meeting of the Environmental Quality Commission will commence at 8:30 a.m. Representatives of the media will not be allowed to report on any of the deliberations during the session

**Regular Meeting will Begin at 8:30 am**

- A. **Approval of Minutes**
- B. **Approval of Tax Credits**
- C. **Action Item:** Variance Application of Nona Henkel
- D. **Action Item:** Department of Environmental Quality v. Russell Henry Jr. dba Henry Dozing and Excavating and Lane Ward - Appeal of Hearing Order Regarding Violation and Assessment of Civil Penalty, Case No. AQOB-WR-94-289 **This Agenda Item moved to the November Meeting**
- E. **†Rule Adoption:** Adoption of Newly Promulgated federal National Emission Standards for Hazardous Air Pollutants (NESHAP) standards for the following source categories: Chromium electroplating and anodizing, wood furniture coating, ship building and repair, aerospace, marine vessel loading and unloading, polymers and resins production, secondary lead smelters, and coke oven batteries. This adoption is limited to major (OAR 340-32-0120) sources only.
- F. **†Rule Adoption:** Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping)
- G. **†Rule Adoption:** Proposed New Source Performance Standards (NSPS) and Emission Guidelines for Municipal Waste Combustors
- H. **†Rule Adoption:** PM<sub>10</sub> Control Strategy for the Oakridge PM<sub>10</sub> Nonattainment Area
- I. **Action Item:** Temporary Rules Regarding Clarification of Tank Vessel Per Trip Fees and Oil Spill Contingency Planning Requirements
- J. **Action Item:** Temporary Rule Adoption to Lift Clear Lake Watershed Moratorium by Amending OAR 340-41-270, OAR 340-71-400(2), and OAR 340-71-460
- K. **Informational Item:** Presentation by City of Portland Regarding the Combined Sewer Overflow (CSO) Project **This Agenda Item moved to the November Meeting**
- L. **Informational Item:** Update on Emergency Preparedness at Umatilla Chemical Depot
- M. **Informational Item:** Report from Fish and Wildlife Regarding Salmon Restoration and Spills

- N. **Informational Item:** Presentation of Recommendations from the Industrial Wastewater Permit Advisory Committee
- O. **Informational Item:** Department of Environmental Quality Solid Waste/Recycling "Budget Note" Review Process
- P. **Commissioner's Report**
- Q. **Director's Report**

Hearings have already been held on the Rule Adoption items and the public comment period has closed. In accordance with ORS 183.335(13), no comments can be presented by any party to either the Commission or the Department on these items at any time during this meeting.

The Commission has set aside November 14-15, 1996, for their next regular meeting. The location will be in Portland, Oregon. A special meeting will be held November 22, 1996 at the Little Vert Theatre in Pendleton, Oregon.

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

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

October 8, 1996



State of Oregon  
Department of Environmental Quality

Memorandum

Date: 10-2-96

**To:** Retreat Participants  
**From:** Lydia Taylor, Deputy Director  
**Subject:** EQC Retreat, October 10, 1996

Thank you for agreeing to participate in the Environmental Quality Commission Retreat October 10th in Astoria.

The meeting will be held at the Maritime Museum, 1792 Marine Drive in Astoria.

AGENDA

- 10:00 am Overview of Department Mission/Vision efforts  
Lang Marsh/Lydia Taylor
- 10:15 am Overview of Department 1997-99 Budget Request  
Helen Lottridge, MSD Administrator
- 11:00 am Comments from invited organization representatives  
- 1:00 pm (working lunch provided)
- 1:00 pm DEQ Customer Service Efforts  
Carolyn Young
- 1:30 pm Commission Dialogue on agency Mission/Vision/Goals
- 4:00 pm Local Elected Officials/ Commission informal visits

Participants:

John Ledger, Associated Oregon Industries  
Joni Low, League of Oregon Cities  
Jim Craven, American Electronics Association  
Nina Bell, Northwest Environmental Advocates  
John Charles, Oregon Environmental Council  
Ward Armstrong, Oregon Forest Industries Council  
Andy Anderson, Oregon Farm Bureau  
Terry Witt, Oregonians for Food and Shelter  
Chris Taylor, OSPIRG  
Janet Gillespie, Oregon Association of Clean Water Agencies

**DRAFT**

**WE VALUE:**

**A healthy environment  
Serving the public well  
Decisions based on facts & science  
Environmental policy made publicly with open  
participation  
Our work making a difference to Oregon's  
Environment  
Innovation & continuous improvement  
Each other**

**VISION**

**We envision all Oregonians working cooperatively  
for a healthy environment.**

**MISSION**

**The Mission of the Agency is to be an active leader in restoring, maintaining and  
enhancing the quality of Oregon's air, water and land.**

**GUIDING PRINCIPLES**

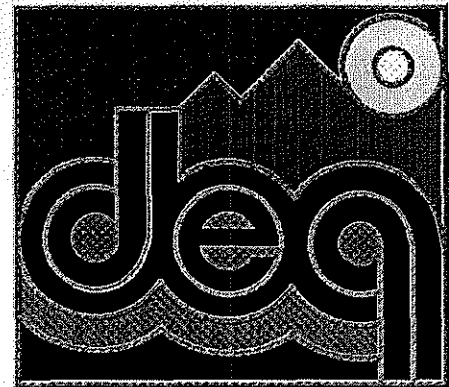
**Balance resources between compliance, technical assistance and education  
Provide integration of pollution prevention across all media  
Achieve trust, cooperation and partnering with others  
Emphasize creativity, innovation and continuous improvement  
Focus resources and problem solving on specific geographic areas  
Attain stable funding and resources**

# Overview of 97-9 Draft Biennial Budget

Presented to the  
Environmental Quality Commission

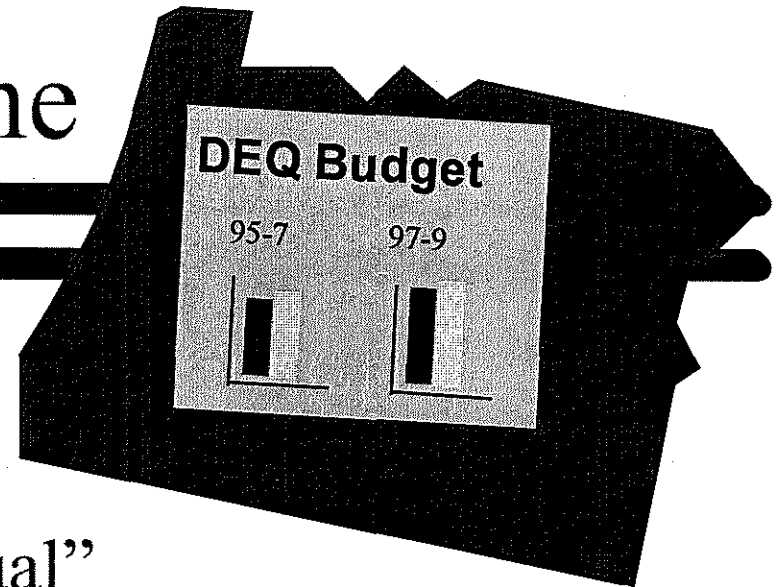
October 10, 1996

Helen Lottridge, Administrator  
Management Services Division



# Presentation Outline

DEQ Draft Budget: 97-9 Biennium

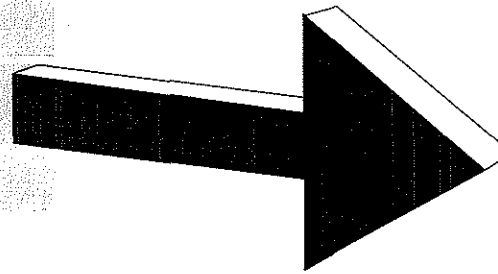


- *Not* "Business as Usual"
- Revenue Shortfalls
- 1997-99 Budget
- Budget & Mission Linkages
- Needs for New or Increased Fees
- Actions for Needed Resources
- Looking to the Future

# *Not* "Business As Usual"

DEQ Draft Budget: 97-9 Biennium

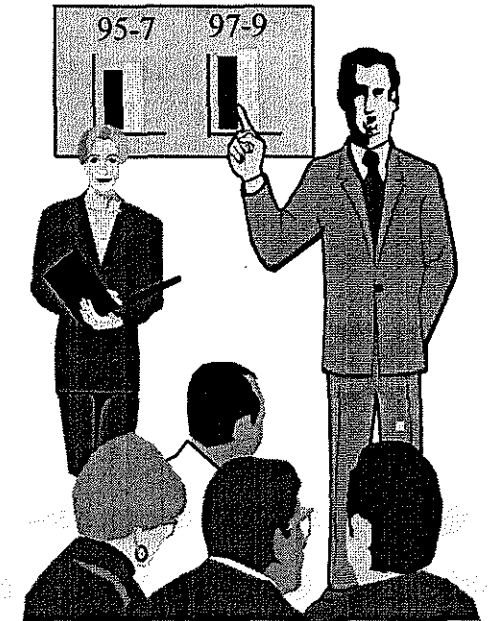
Had Revenue &  
Needed Position  
Authority



Need New  
Revenue to  
Sustain *Existing*  
Environmental  
Protection, and for  
New Demand

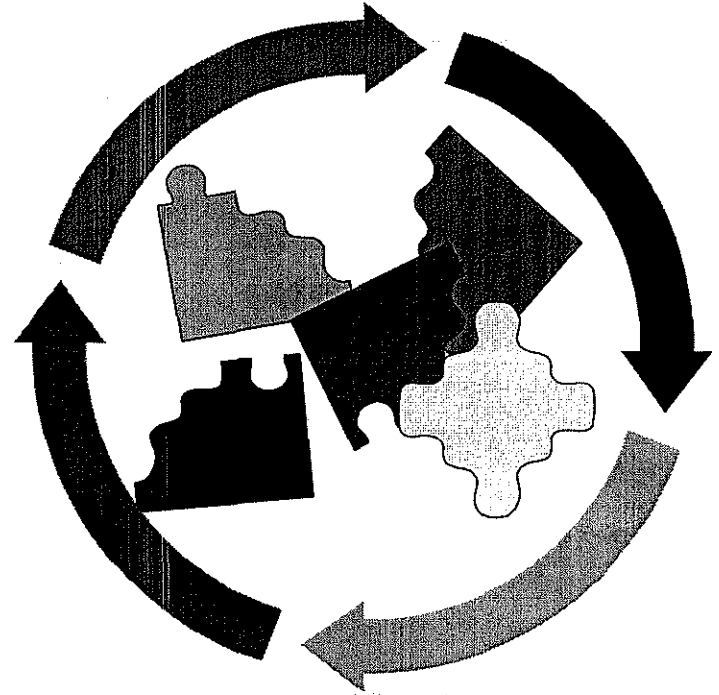
# Theme: Change

- Budget more tightly linked to state's needs:
  - Watershed Health
  - Salmon Recovery
  - Effect on Communities
  - Economic Development
- Can't adequately protect environment without new resources
- Need to lay foundation for future long-term stable funding



# DEQ's Evolving Role

- Fewer easily defined & quantifiable problems
- Greater complexity with interrelationships
- Problems & Solutions: interwoven & multilayered
- DEQ is part of a larger effort to keep Oregon's options open



# Growth Fueled by Federal & State Legislative Requirements

DEQ Draft Budget: 97-9 Biennium

**1980**

- Resource Conservation & Recovery Act (RCRA)
- Superfund Program established (CERCLA)

**81-3**

- Fed. Clean Water Act reauthorized
- Backyard Burning Program

**83-5**

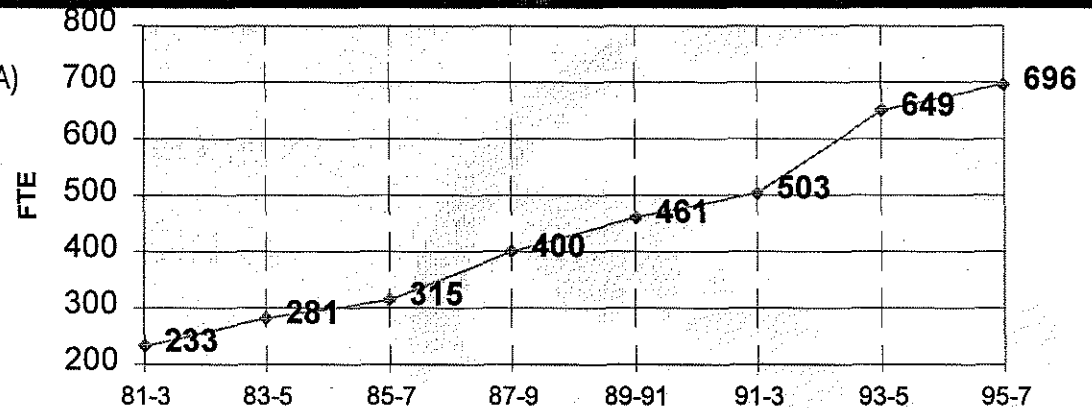
- Fed. RCRA reauthorized
- Woodstove Certification Program
- Opportunity to Recycle Act

**85-7**

- Fed. Underground Storage Tanks (UST)
- Fed. Water Quality Construction Grants
- Fed. CERCLA amended & reauthorized
- Fed. Safe Drinking Water Act amended
- Lawsuit enforces Tualatin River TMDLs
- Oil & Haz. Material Response & Remedial Action
- Hazardous Waste Facility Siting

**87-9**

- Fed. State Revolving Fund
- Fed. Clean Water Act reauthorized
- UST Permitting & Compliance
- Waste Tire Program
- Env. Cleanup Prog./State Superfund
- Illegal Drug Lab Cleanup
- Asbestos Program



- Sewage Treatment Worker Certification
- Regional Solid Waste Sites

**89-91**

- UST Financial Assistance
- State Superfund/Orphan Site Cleanup
- Fed. Clean Water Act Pretreat. & Sludge
- Groundwater Protection Act
- Oil Spill Planning

•Toxic Use Reduction Act

- Household Haz. Waste: Cleanup Proj.
- Pollution Control Tax Credits extended

**91-93**

- Underground Tanks Grants
- Hazardous Voluntary Cleanup
- Solid Waste/Recycling Laws
- Stormwater discharge permitting

- Hazardous Waste Tech. Asst.
- WQ Stormwater Permits

- Federal Clean Air Act
- Comprehensive Air Emissions

**93-95**

- Clean Air Act - full implementation
- Environmental Crimes

- Fed. Subtitle D Solid Waste

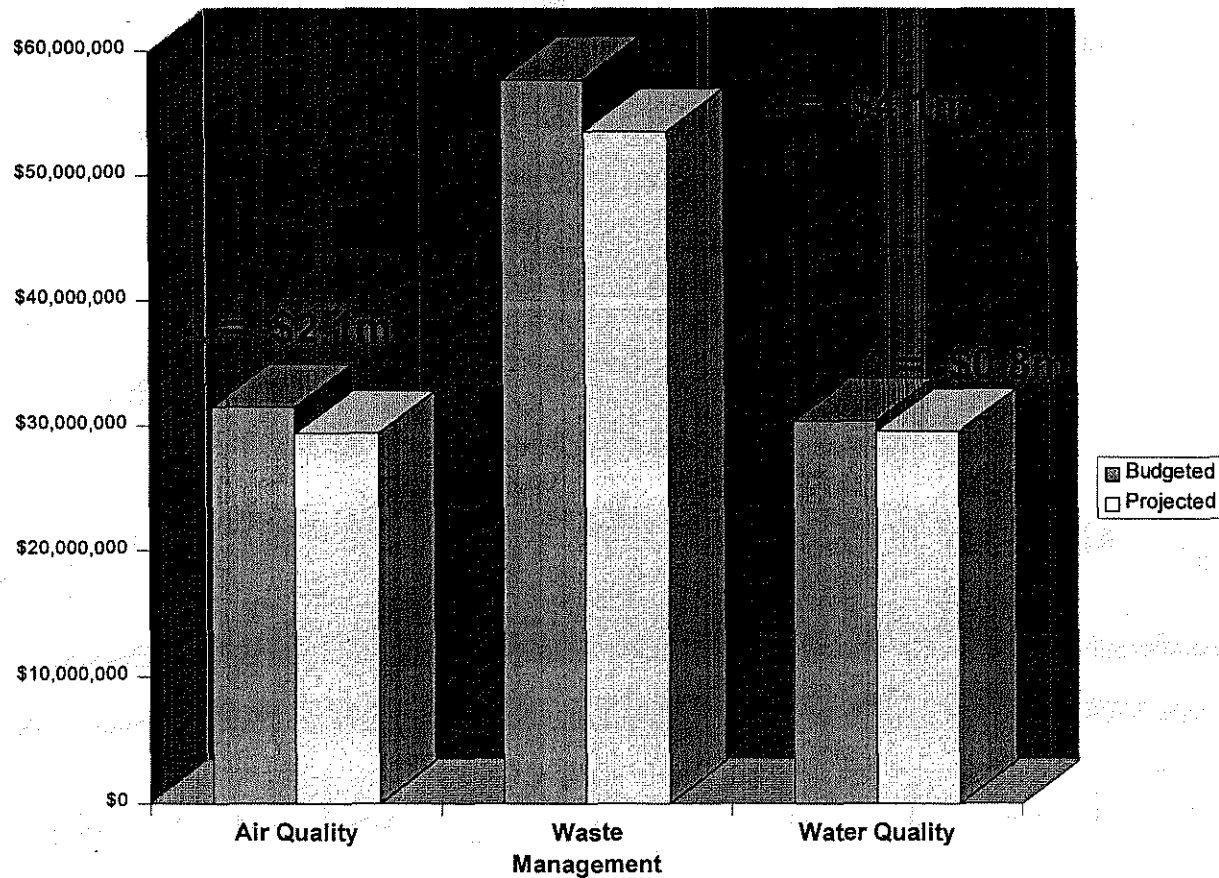
**95-7**

- Fed. Clean Water Act
- Fed. Safe Drinking Water Act
- Fed. Comprehensive Envir. Response Compensation & Liability Act
- Plastics Recycling Implementation
- Oil Spill Prevention & Risk Reduction
- Local Woodheat Program



# Revenue Shortfalls 1995-97

*Projected program revenues for 1995-97 are \$7M (5.9%) less than we expected when we developed the current budget.*



# Program Advisory Groups

## Exploring program changes and funding

### Waste Management & Cleanup

- Orphan Site
- Toxics Use Reduction
- Spill Response
- Hazardous Waste
- Tanks

### Water Quality

- On-site
- Also Need Increased NPDES, WPCF, & New 401 Certification Fees

### Air Quality

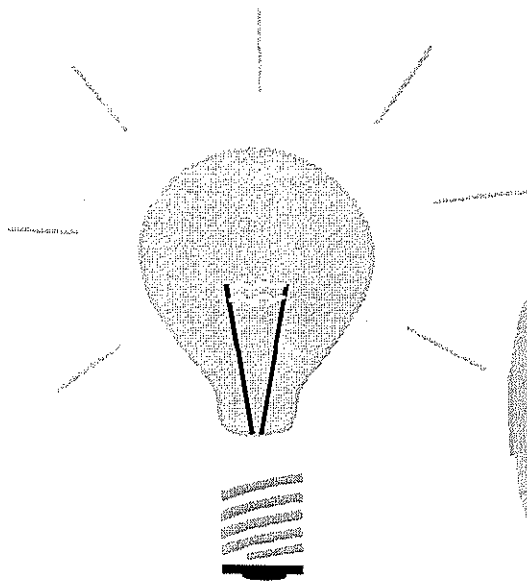
- Open Burning Fees
- Air Permitting Fees



# Efficiency Measures & Innovations

DEQ Draft Budget: 97-9 Biennium

*DEQ staff deliver services in new and more efficient ways.*

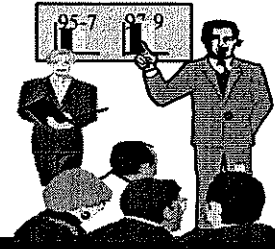


## Innovations - combined list

| Description  | Program           |
|--|-------------------|
| <b>Quality</b>   |                   |
| "Outside the Envelope" mega project will explore significant innovation and opportunities for change.  | All               |
| Development of a <b>Water Quality Index</b> to provide a better indicator of the over all quality of Oregon's waters.  | Lab               |
| <b>Performance measures</b> relate to environmental gain, response time, turnaround time   | All               |
| <b>Voluntary Cleanup Program</b> keeps in touch with what customers want through focus groups and evaluations  | Cleanup           |
| <b>Continuous Improvement Plan</b> Managers continually examine what the cleanup program does and identifies areas that can be improved; plan and implement action.  | Cleanup           |
| <b>Eastern Region Performance Measures, Commitments and Critical Items to Track</b>  | SW, Tanks         |
| <b>RCRA/Cleanup Coordination Manual</b> , developed by cross-functional ad hoc team, resolved interprogram conflicts and made it easier for regulated community  | HW<br>Cleanup     |
| <b>Pollution Prevention</b>  |                   |
| <b>Partners for Smart Commuting</b> involves public agencies and transit authorities in Washington and Oregon. Education on environmentally sound options. Has received national awards. Leverages resources to get free air time and shared production costs.             |                   |
| <b>Pollution Prevention Core Committee</b> plans, coordinates and develops strategies for integrating pollution prevention into all aspects of our activities.   | All               |
| <b>Hazardous Waste Program Technical Assistance "Blitzes"</b>  | HW                |
| <b>Hazardous Waste Program "GAG"</b>   | HW                |
| <b>Toxics Use Reduction Program</b>  | HW                |
| <b>Performance Measures</b> establish P2 goals   | All               |
| <b>Public Outreach Program</b>   | WQ, AQ            |
| <b>Model Cities</b> promotes resource efficiencies.  | SW                |
| <b>Ecosystem Management</b>  |                   |
| <b>Governor's Community Solutions Team</b> includes DEQ, OEDD, ODOT, DLCD and Housing and Community Services. Identifies ways to integrate planning for growth-related issues  | All               |
| Developed a <b>biological assessment protocol</b> for rating the biological health of waterbodies.   | Lab               |
| <b>Tualatin River dissolved oxygen</b> criteria achievement and maintenance  | WQ                |
| <b>Sweet Home Area Groundwater</b> cleanup project joined with local governments and other agencies to provide clean drinking water to economically disadvantaged residents, and are addressing other communications and community concerns; includes partnership with EPA | Cleanup           |
| <b>Granite Drainage</b> project partners with EPA and local residents to assess mining contamination   | Cleanup           |
| <b>Partnering</b>  |                   |
| <b>SEPs Suppl. Environmental Projects</b> mitigates civil penalties in exchange for environmental projects   | Enfcmnt.          |
| <b>Pilot brownfields</b> redevelopment projects with other state agencies and local governments  | Cleanup           |
| <b>Orphan Site Program</b> redesign to encourage public and private partners in cleanup and redevelopment  | Cleanup           |
| <b>Voluntary Cleanup Program</b> developed at request of industry; national model.   | Cleanup           |
| <b>Columbia Slough Toxics Project Enhancement</b> evaluates sources of impacts to the slough via a cross-functional team   | WQ, HW<br>Cleanup |
| <b>Private Sector</b> exchange pilot enables private sector employee to work at DEQ for four months  | SW                |
| <b>Compost project with private sector</b>   | SW                |
| <b>Communications and Education</b>  |                   |
| <b>Technical assistance on Brownfields grants</b> for local governments; two successes 1) City of Portland 2) Millsite   | Cleanup           |

| Description   | Program |
|---|---------|
| Community Discussion Groups create dialogue between cleanup program and citizens in communities around Oregon                     | Cleanup |
| Developing a new laboratory information system that will provide agency network access to analytical results and data at the Lab. | Lab     |
| Public Workshop and Dialogue on new cleanup law, attended by over 300   | Cleanup |
| Recycling Education included partnering with schools and use of teleconference technology.  | SW      |
| Household Hazardous Waste hotline at Metro  | SW      |
| Waste Generator Studies aid local governments in knowing who generates what kinds of waste  | SW      |
| Satellite Downlink Communications on land disposal regulations  | HW      |
| Solid Waste Review with Communities includes extensive community involvement and statewide teleconferencing                       |         |
| QMC Ideas   |         |
| Environmental Leadership Project  |         |
| Volunteer Programs  |         |
| VIP/DMV   |         |
| School Education Program  |         |
| EPOC  |         |
| CEG-HHW Collections   |         |
| Kerri Nelson programs in WR   |         |
| Industrial Wastewater Committee - group of stakeholders to get better protection for the environment                              |         |
| Job Listing consolidation - HR doesn't put out an ad for each position  |         |
| Performance Partnerships with EPA   |         |
| Portland Maintenance Ozone Plan   |         |
| Green Permit  |         |
| Governor's Coastal Salmon Initiative  |         |
| Cross functional team meetings  |         |
| Natural Resources Communication Group   |         |
| Information Mapping   |         |
| Transportation Conformity   |         |
| Portland's O3/CO SIP  |         |
| Lawn Mower Buyback  |         |
| Clean Air Action Day  |         |
| Early Warning Teams   |         |
| Surveys of regulated community  |         |
| Ecosystem (Lower Columbia, Deschutes County)  |         |
| Web Page  |         |
| Public Information system permit  |         |
| DOGAMI agreement  |         |
| Helping Klamath county with backlog   |         |
| Local citizens groups - AQ monitoring   |         |
| Public accessibility (Umatilla)   |         |
| Ed-Net training   |         |
| APTI  |         |
| Working w/ Army Corps of Engineers  |         |
| Permit Streamlining   |         |
| First Strike team w/ OEDD   |         |
| VOC amnesty   |         |
| Stormwater amnesty  |         |

# 1997-99 Budget Needs



- **\$6.6 million = increased revenue to keep current level of services & environmental protection.**

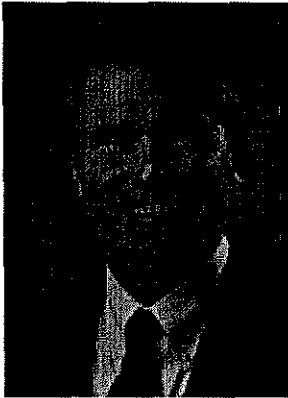
- Water Quality Permit Responsiveness Restoration
- Maintain Air Contaminant Discharge Permit Responsiveness
- Maintain Existing Hazardous Waste, Spill Response, & Underground Tank Program

- **\$36.9 million = increased revenue for new, critical environmental protections**

Examples:

- Governor's Healthy Streams/ Coastal Salmon Initiative
- Portland Area Enhanced Vehicle Inspection & Employee Commute Option
- Preventing and Cleaning Up Leaks from Underground Storage Tanks

# Governor's Environmental Initiatives



**“Today Oregon is still the best place in the world to live, because those who went before us cherished this place, guarded its gifts and protected its quality.”**

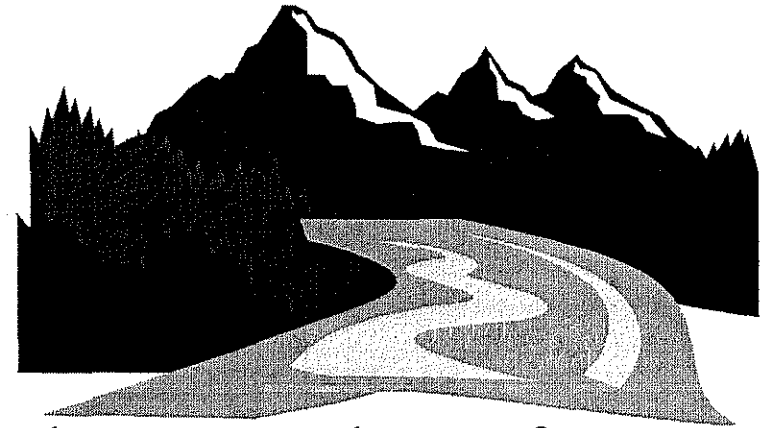
State of the State: Keeping Oregon's Promise - Jan. 19, 1996

- Clean Streams
- Salmon Restoration
- Community Solutions Team

# Water Quality

DEQ protects and restores the state's waters to drinkable, fishable and swimmable quality.

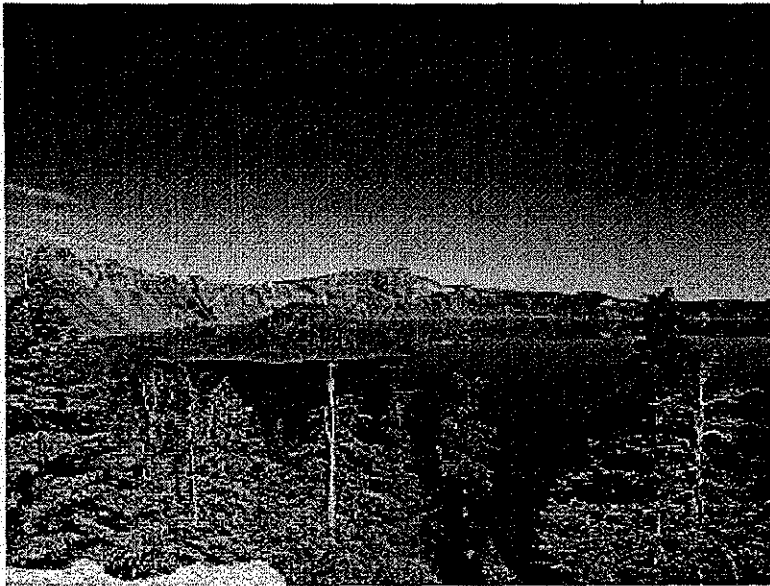
- Since 1938, correcting water quality problems
- 104,000 river miles
- Half of state's population depends on groundwater for drinking water; another 20% for backup
- 3,000 waste discharge permits
- >30% of Oregonians rely on on-site sewage treatment systems
- Helping local governments improve sewage treatment systems





# WQ Policy Package Summary

DEQ Draft Budget: 97-9 Biennium



| Title  | FTE          | \$ (thousand)    |
|--|--------------|------------------|
| Governor's Healthy Streams/<br>Coastal Salmon Initiative                                     | 32.00        | \$ 8,724         |
| Water Quality Permit Program<br>Responsiveness Restoration<br>On-Site Program<br>Enhancement | 14.00        | \$ 1,950         |
| Major Rivers   | 11.00        | \$ 1,236         |
| Compliance Assistance  | 5.00         | \$ 1,344         |
| Pollution Control Tax Credits  | 2.00         | \$ 1,305         |
|  | 0.00         | \$ 88            |
| <b>Policy Package Total</b>  | <b>64.00</b> | <b>\$ 14,646</b> |

# Air Quality

Preserves Oregon's clean air, with a resulting ability to accommodate economic growth.

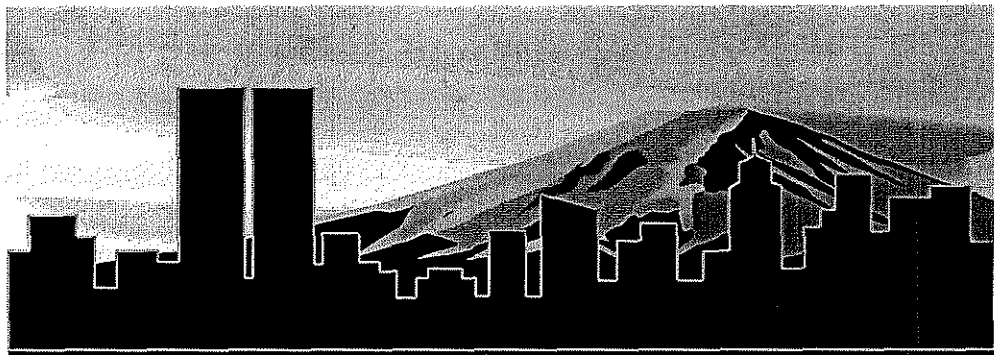
- Maintains statewide air quality monitoring system
- Protects clean air from #1 source of pollution: the automobile
- Permitting and technical assistance for 1,400 sources of industrial air pollution
  - Monitors air quality statewide
- National model for woodstove certification



# AQ Policy Package Summary

DEQ Draft Budget: 97-9 Biennium

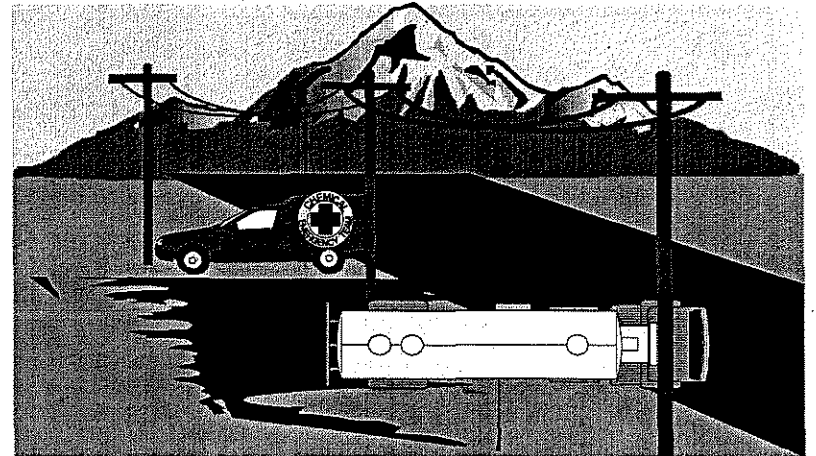
| Title   | FTE           | \$ (thousand)    |
|---|---------------|------------------|
| Portland Area Enhanced<br>Vehicle Inspection &<br>Employee Commute Option | 98.50         | \$ 10,542        |
| Maintain ACDP Permit<br>Responsiveness                                    | 8.00          | \$ 1,013         |
| Acceleration of Attainment<br>Designation                                 | 2.00          | \$ 267           |
| Continue Open Burning Permit<br>Program                                   | 1.00          | \$ 108           |
| AQ Pollution Control Tax<br>Credits                                       |               | \$ 127           |
| <b>Policy Packages</b>  | <b>109.50</b> | <b>\$ 12,056</b> |



# Waste Management & Cleanup

**Reduce the amount of waste generated and keep it from getting into the air, water and land, and from affecting public health.**

- Regulate 58 mil. lbs. of hazardous waste generated by Oregonians each year
- Give technical assistance to industry & small business to “move up the waste management hierarchy”
- Provide technical assistance/regulate the 6 lb./person/day of solid waste generated by Oregonians
- Regulate the 9,800 underground tanks used for storage of petroleum products
- Respond to (unfunded) technical assistance needs of homeowners about >200,000 home heating oil tanks
- Restore Oregon’s resources by cleaning up the >1700 places contaminated by hazardous substances
- Respond to (unfunded) increasing numbers of emergency spill situations

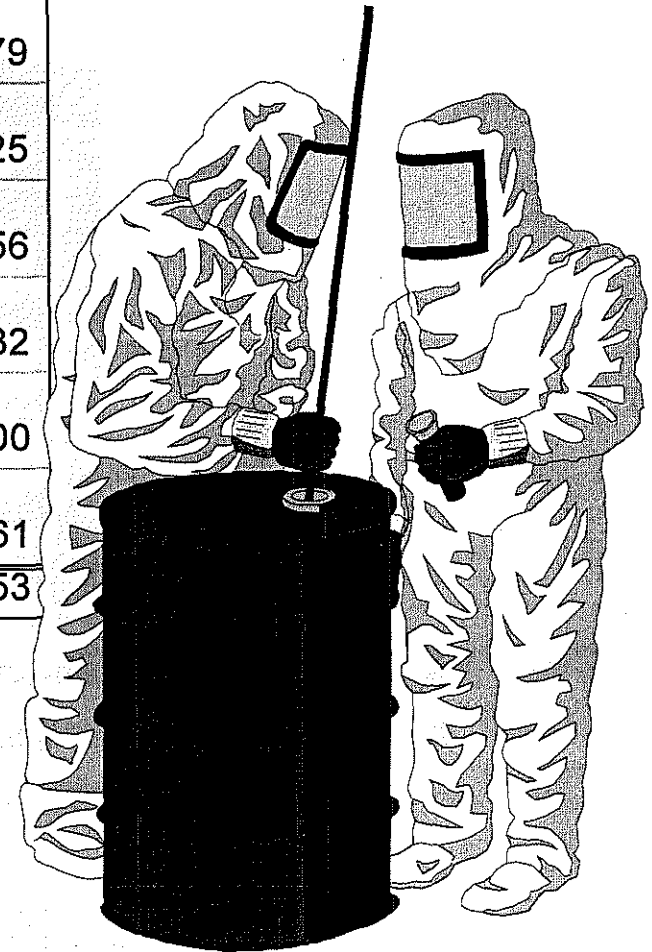


# WMC Policy Package Summary

DEQ Draft Budget: 97-9 Biennium

| Title   | FTE          | \$ (thousand)    |
|---|--------------|------------------|
| Preventing and Cleaning Up Leaks from Underground Storage Tanks | 24.00        | \$ 4,579         |
| Hazardous Waste Monitoring, Inspection & Reduction              | 12.00        | \$ 1,625         |
| Adequate Prevention of and Response to Hazardous Spills         | 10.00        | \$ 1,456         |
| Orphan Site Program Efficiencies                                | 1.00         | \$ 132           |
| McCormick & Baxter Federal Superfund Cleanup                    | 0.00         | \$ 8,300         |
| Waste Management Tax Credits                                    |              | \$ 61            |
| <b>Policy Package Total</b>                                     | <b>47.00</b> | <b>\$ 16,153</b> |

\*Also needed: funding source for \$12M/biennium to clean up Orphan Sites



# Agency Management Policy Package Summary

DEQ Draft Budget: 97-9 Biennium



| Title                               | FTE | \$ (thousand) |
|-------------------------------------|-----|---------------|
| Governor's Community Solutions Team | 1.5 | \$ 170        |
| Continuous Improvement Initiative   | 4.0 | \$ 396        |
| Policy Package Total                | 5.5 | \$ 565        |

# New/Increased Fee Requests

DEQ Draft Budget: 97-9 Biennium

| Fee Funds   | Description  | Amount     | Subprogram                      | Why Needed  |
|---|--|------------|---------------------------------|---|
| AQ Permits  | Air contaminant Discharge Fees   | 1,169,568  | All Air except VIP              | Operate permit program at a level where there is no   |
| Open Burning Permit Program                             | New open burning letter permit fees  | 150,000    | All Air except VIP              | Provides funding for existing position to inspect burns & issue permits   |
| Vehicle Inspection                                      | Vehicle inspection fee   | 9,265,230  | Vehicle Insp. Prog.             | Cover cost of more sophisticated testing and 88 positions to maintain compliance with ozone standard for Portland area  |
| Water Quality Industrial Permits                        | Wastewater discharge permit fees   | 1,500,000  | Water Quality                   | Restore ability to expeditiously process wastewater discharge permit applications   |
| Water Quality Sub/On-Site                               |  | 1,301,584  | Water Quality                   | Staff for more timely response for site evaluations &   |
| HW TSD Permits  | Increase fees assessed on Treatment, Storage & Disposal facilities                     | 596,845    | Hazardous Waste                 | Maintain current level of TSD monitoring and inspection. Add risk assessment capability.  |
| HW Generator Fees                                       | Increase existing fee on assessed facilities generating hazardous waste                | 1,281,483  | Hazardous Waste                 | Maintain level of generator technical assistance and compliance assurance; add resources to streamline regulatory requirements and increase technical assistance. Examples: universal waste, used oil rules |
| Tax Credits   |  | 275,000    | Air, Water & Waste              | Expenditures for administering the program exceed revenues  |
| New spill funding source                                | Still being formulated   | 1,324,088  | Spill Prevention and Management | Maintain current ability to respond to spills; add resources to increase spill preparedness/prevention, provide adequate geographic spill coverage  |
| Source to supplement existing Oil Spill Prevention fees | Still being formulated   | 207,749    | Spill Prevention and Management | Maintain existing level of oil spill response planning and facility preparedness on transportation routes.  |
| New heating oil tank revenue source                     | Still being formulated   | 512,152    | Tank Compliance and Cleanup     | No revenue source for residential oil tank cleanups and technical assistance.   |
| UST Tank Permit   | Increased tank permit fee  | 339,295    | Tank Compliance and Cleanup     | To maintain existing Underground Storage Tank compliance program  |
| UST Services Licensing Fee                              | Fee to license private tank inspectors (new category of existing service provider fee) | 134,837    | Tank Compliance and Cleanup     | Pays for position to audit work done by private inspectors to meet increased demand   |
| New Orphan Site Funding Source                          | Source(s) chosen by Legislature as alternative to existing orphan site sources         | 150,081    | Cleanup                         | Reduce burden on state funds to complete orphan site cleanups   |
|   |  | 18,207,912 |                                 |   |

# 97-9 Interim Draft Budget

DEQ Draft Budget: 97-9 Biennium

## 95-7 Approved Budget & 97-9 Interim Agency Request





# Looking to the Future

## Long-term, stable funding sources

- Fee payers weary of multiple fee initiatives
- Need industry & stakeholder support
  - » for 1997-99 budget
  - » for developing long-term solutions
- Lay foundation for future funding solutions
  - » analyze overall funding approach
  - » find alternative to “dialing for dollars”

# Actions for Needed Resources

- Communications
  - Legislators, Lobbyists & Interest Groups
  - Other Agencies
  - Advisory Committees
  - DEQ Employees
- Budget partnering with other Natural Resource Agencies
- Increased visibility of programs
- Meaningful linkages to environmental health

## DEQ Draft Legislative Concepts - October 1996

### Water Quality

- Rural Oregon Technical Assistance Account** 340-1  
Establish a special fund to assist small communities and individuals to comply with environmental requirements. The fund would provide technical assistance to Communities under the EPOC program, assist local governments in their wellhead and groundwater management plans, and pay for pollution control facilities or practices related to the Water Quality Limited (303d) list. The fund would receive moneys from civil penalties.
- SRF For Nonpoint Source Pollution** 340-2  
Remove the restriction that State Revolving Fund loans only be made to public entities for projects that are publicly owned.
- On-Site Program Improvements** 340-3  
Increase the Variance Application Fee  
Housekeeping changes
- Fee For Fill & Removal 401 Certifications** 340-14  
Give the Environmental Quality Commission authority to establish a graduated fee based on the size of the project. For large projects (such as Hyundai) the fee would be the same as we collect for hydro projects. No fee would be charged for a small wetland fill. Staff time could be charged against the fee with a refund provided for any remaining balance
- 401 Hydropower Certification Process** 340-17  
Place-holder for re-licensing process - State Hydropower Task Force
- Emergency Fee Waivers** 340-18  
Give the Environmental Quality Commission authority to waive fees established by the Legislature in cases of emergency such as a flood. The fee waiver would be granted on a case by case basis. Would apply to fees related to septic tanks
- Water Quality Program Funding** 340-19  
Placeholder - Governor's memo budget
- Tax Credits for Nonpoint source Practices** 340-20  
Provide tax credits for nonpoint source pollution control facilities and activities.
- WPCF Permits** 340-21  
Remove the requirement for five year renewal for Water Quality WPCF permits. The current renewal time is five years. Require review at certain periods with possible reopener when needed. Assess a fee for review to make the proposal revenue neutral.

## Waste Management and Cleanup

**Underground Tank Financial Assistance and Fee Increase** 340-4  
Modify financial assistance criteria and increase the tank fee and license fee for tank service providers to pay for existing positions.

**Toxic Use Reduction Program** 340-5  
Update Toxic Use Reduction Law to allow flexibility in planning and reporting.

**Recycling Program Modification** 340-6  
Change state law in the following areas: local recycling program elements and recovery rates, commercial recycling, recovery rate reporting, markets development, and education.

**Spill Prevention and Response Improvements and Fee Increase** 340-7  
Prepare geographic response plans for inland river basins, modify plans for Newport and Coos Bay, and clarify responsibilities in approving spill contingency plans. Increase fees to provide for adequate spill response staffing, volunteer training and spill prevention training for vessel operators.

**Orphan Site Funding and Program Modification** 340-8  
Modify program to encourage private party participation in cleanups.

**Hazardous Waste Fees** 340-16  
Establish or increase fees for certain time-consuming activities such as TSD permitting and modification, corrective actions, and recycling determinations.

## Air Quality

**Golf Cart Exemption for Vehicle Test** 340-10  
Exempt golf carts and all terrain vehicles from emissions testing. DMV will not issue registrations without a DEQ certificate and DEQ does not have facilities to test golf carts.

**Modify Vehicle Test Fee** 340-15  
Modify the fee requirement to allow collection of a fee for each vehicle test performed. Currently a fee is charged only when the Certificate of Compliance is issued, cars that fail the test are not charged. DEQ may wish to charge on a per test basis in whole or in part for the new enhanced test.

## OUTLINE OF COMMENTS TO THE EQC

John A. Charles  
Oregon Environmental Council  
October 10, 1996

### **DEQ Vision is unrealistic**

People respond to incentives, not pleas for cooperation

### **The Mission is not being carried out**

DEQ is passive; is a facilitator, not a leader; and works to slow the rate of degradation, not improve the environment.

### **DEQ is beginning to crumble under the weight of the command-and-control regime**

\* regulatory programs that once brought about large improvements now require significant bureaucratic resources with little incremental benefits; disarray of the Water Division an indicator of the problem

### **DEQ should be a leader in pursuing new approaches that rely on prices, markets and property rights**

#### Examples

- \* tax shifting - tax pollution, not income; stop treating Oregon's air/water as free goods
- \* treat pollution as a property rights problem, as Oregon courts occasionally have; strict enforcement will change the nature of the debate
- \* end foolish subsidies, such as the PCTC program
- \* do what legislators least expect: offer up regulatory programs for repeal in exchange for more effective pricing strategies, e.g., repeal of ECO/parking ratios while enacting smog fees/road pricing/deregulation of transit

### **Neither the legislature nor the governor will lay out the new vision; EQC must be much more active in pointing the way**

- legislators don't have the knowledge
- the governor has too many other priorities
- EQC members appointed, not elected, therefore best suited to challenge the status quo

## **Tax Reform for Sustainable Development**

### **I. Current Paradigm in Oregon**

Taxes on property, income and investment  
Sales tax on gasoline

"Livability commodities" - air, water, roads - are free or underpriced

Problem: subsidies distort individual decision-making, rewarding those who create pollution or waste resources, while penalizing hard work and investment

### **II. Alternative Paradigm**

Impose user fees to account external costs of traffic congestion, resource extraction, and pollution. Examples:

- \* discharge fees for each increment of pollution
- \* consumption-based fees for utilities
- \* peak-hour pricing for highway travel

Use revenues to lower taxes

Results:

- subsidies eliminated
- work is rewarded
- pollution is penalized
- incentives created that encourage closed-loop manufacturing

J. A. CHARLES



Working with more than 70 community wastewater treatment agencies to protect Oregon's water

25 NE 11th Avenue, Suite 200  
Portland, Oregon 97232  
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## Presentation to Oregon Environmental Quality Commission

Thursday, October 10, 1996

### Strategic Planning Session

*The Oregon Association of Clean Water Agencies represents over 75 wastewater agencies and associated professionals throughout Oregon - - all working to enhance and protect Oregon's water quality through efficient and effective wastewater and stormwater management.*

Our strategic priorities for the Commission and Department are in two key areas:

1. Permitting, and
2. Comprehensive planning to meet water quality standards.

#### **Permitting**

All of our agencies operate under a DEQ permit, either discharging (NPDES) or non-discharging (WPCF). Our priorities in the permitting element include:

#### **1. Partnering for environmental results**

ACWA would like to work collaboratively with the DEQ to develop a "green" municipal permit. After 20 years of permit history with major municipalities, we are now able to focus on an environmental permit which moves beyond environmental bean counting, and focuses on environmental results.

Concentrating municipal and state efforts in timely and appropriate oversight, while setting necessary environmental performance standards, will allow municipalities to focus their dollars on environmental results.

Municipalities are under increasing pressure to be more competitive and cost-effective. Many of our wastewater facilities discharge substantially less pollution than their water quality permitted levels. We are dedicated to this for environmental reasons - - but we have to be able to justify the additional costs we incur in electricity, chemicals, and staffing. We need to work with the Department to focus on the critical few indicators of environmental compliance that frees dollars for treatment.

Peter Ruffier, Chair  
984-8606

Garry Ott, Vice Chair  
669-2438

Diane Taniguchi-Dennis, Secretary/Treasurer  
588-6380

## **2. *Maintain Oregon delegation for all aspects of NPDES permitting***

ACWA members join DEQ and our industrial counterparts in having an extremely strong preference for Oregon operation of all federal water quality permitting programs. Maintaining and expanding the NPDES permitting elements of the program must be the top priority for Oregon DEQ. We are anxious for Oregon to assume delegation of the federal biosolids program by spring of 1998.

## **3. *Gather adequate resources***

The Water Quality Program cannot continue to routinely operate a fiscal deficit program. Adequate resources to operate the program must be secured, and the leadership for securing those dollars fall to the Department and Commission. Municipalities continue to support the DEQ program through a disproportional amount of permitting fees, and establishing an equitable split between the municipal and industrial users groups should be a high priority.

## **4. *Maintain programmatic control***

Allowing the prescriptive elements of the Clean Water Act, such as Triennial Standards Review, or the 305(b) report to lag invites litigation and diverts attention and resources. Base level efforts adequate to meet federal mandates must be maintained to forego litigation.

## **Comprehensive Planning to Meet Water Quality Standards**

### **1. *Permitting on a watershed basis***

ACWA supports moving the Department's permitting cycle to have permits renewed on a watershed basis. This shift would facilitate comprehensive watershed planning efforts, and allow better balancing of a wider range of necessary pollution control options with a watershed or basin.

### **2. *Effluent trading***

The concept of effluent trading is an important tool for meeting water quality standards in the 870 stream stretches which currently exceed water quality standards. ACWA would like to partner with DEQ, and other interest groups to examine how effluent trading programs have worked in other parts of the country and to build an effective Oregon program.

### **3. *Approach TMDL setting logically; maximize local resources***

A detailed position paper outlining ACWA's vision of working through the TMDL process is attached. We believe maximizing local watershed council efforts, using municipal and industrial source expertise as resources, and setting locally-based management plans is the best approach. A "bottom up" approach is preferred, and our members continue working to organize and develop local management plans.





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## POSITION PAPER

### 303(d) and TMDL Issues Facing Oregon

#### **Background**

The list of water quality-limited stream reaches in the state is ballooning from a handful to nearly 1,000. The dramatic increase could significantly affect the permit holders discharging to these streams - - both municipal and industrial.

Under state and federal regulations, generally no additional or increased discharges that would aggravate the pollution problem are allowed to a stream included on the water quality-limited list until a plan for meeting clean water standards has been developed and implemented.

Under the federal Clean Water Act, every state is required to routinely list those streams which do not meet water quality standards. Since the portion of the Clean Water Act which requires this list to be compiled is section 303(d) - - the list is often referred to as the 303(d) list. Under the Clean Water Act, stream reaches which are included on the 303(d) list must have Total Maximum Daily Loads (TMDLs) established, and point and non-point sources of water pollution reduced to set the maximum pollutant load the stream segment can assimilate and still achieve all applicable water quality standards.

To date, DEQ has been completing about two TMDLs per year, and will not be able to process the entire revised 303(d) list in the foreseeable future.

An additional complication in this clean water scheme is the fact that the majority of streams listed as water quality-limited have pollution problems related to non-point sources of pollution. Non-point sources of pollution include agriculture and forestry practices and stormwater runoff.

#### **General Principles**

##### **1. *Decisions should be based on good data.***

Prior to setting a TMDL or Waste Load Allocation, the existing water quality data must be adequate to define the sources of pollution, and accurately describe its impact on ambient water quality, its effect on beneficial uses, and its variability.

Peter Ruffier, Chair  
984-8606

Garry Ott, Vice Chair  
669-2438

Diane Taniguchi-Dennis, Secretary/Treasurer  
588-6380

The use of a scientific peer review panel is needed to ensure the data is adequate for decision-making. The level of peer review and the completeness of the data should parallel the significance of the decision. The level of peer review and the completeness of the data needed to prescribe general management practices is different than that which should be used when committing an industry or community to invest millions of dollars in pollution control equipment.

DEQ should determine the appropriate level of peer review and data quality.

***2. ACWA does not support legislative modifications to Section 303(d) elements of the Clean Water Act. Necessary revisions should be accomplished through an administrative process.***

ACWA shares the concerns of the federal Environmental Protection Agency and others that legislative remedies to modify the 303(d) section of the Clean Water Act could result in an unacceptable roll-back in the nation's commitment to clean water.

ACWA believes that adjustment in these provisions is necessary, however, and advocates that additional flexibility be inserted into federal rulemaking and associated guidance. ACWA supports efforts such as those in the pretreatment, effluent trading, and TMDL federal advisory committee processes to insert greater local flexibility to address water quality issues.

***3. Beneficial uses should be routinely reviewed for appropriateness.***

ACWA would like the State to initiate a routine process for evaluating the listed beneficial uses for each basin. A process similar to that used by the DEQ for triennially evaluating the water quality standards is needed. This process should examine not only the listed beneficial uses for each basin, but should also address the water quantity issues which affect water quality. Continued water withdrawals only aggravates water quality problems in some streams.

Where no reasonable efforts to control water pollution can restore a beneficial use, a use attainability study should be completed. The state should develop a reasonable process for developing a use attainability study, and should clearly state what types of data and information it will consider acceptable in such a study.

***4. Efforts to restore water quality should be undertaken on a watershed basis.***

A watershed approach should be taken to meet water quality standards. This approach should include evaluating both the water quality and quantity issues which cause pollution problems within a basin, and the point and non-point sources of the problems.

A watershed effort should be locally driven and jointly sponsored by point and nonpoint sources within the watershed.

All pollution sources within the basin should contribute proportionally to the watershed planning efforts. Point sources - - both industrial and municipal - - should not be obligated to carry the full burden of reducing pollution to meet TMDLs or load allocations.

In order to facilitate the review of water quality within a watershed, DEQ should revise its permitting procedures to issue wastewater discharge permits within a single basin or portion of a basin on a simultaneous basis. This type of permitting system would allow improved use of scientific information regarding the aggregate loading to a stream reach and improve the opportunity for citizen review and input in permitting decisions. This type of system could also facilitate effluent trading where appropriate.

A watershed-based trading program should be developed for Oregon. Trading should be used to maximize the environmental benefit for the dollars invested. DEQ should evaluate if it has the existing statutory power to initiate such a program, and to initiate rule making if its authority is adequate. If its authority is inadequate, DEQ should sponsor legislation to have the necessary authority.

***5. Best Management Practices should be applied to non-point sources of pollution.***

Non-point sources of pollution include agriculture, forest practices, and urban stormwater.

Water quality compliance activities for nonpoint sources of pollution should be based on best management practices. As is being advocated by EPA in its national approach for urban stormwater permitting, Best Management Practices should be applied to reduce water pollution loading. Expanded or improved BMPs should continued to be developed and applied over time.

Implementation standards for Best Management Practices should be set and regularly reviewed to ensure they are adequate to meet the water quality goals. This should be accomplished for all sources of nonpoint water pollution.

***6. The implications of 303(d) listing on the State's economy should be kept in mind.***

It is important to recognize the implications of listing a waterbody on the 303(d) list and the impact such a listing can have on the local and state economy.

Priorities for addressing 303(d) listed streams and in setting TMDLs should be based on watersheds with significant salmon or steelhead habitat consistent with

the Governor's Salmon Initiative, those which supply a drinking water source, or those with other beneficial uses which have a regional significance.

***7. The process for setting a TMDL-equivalent should encourage local efforts by allowing delisting of streams where restoration efforts are underway.***

A watershed approach should be used for setting a TMDL-equivalent where necessary to meet water quality standards on streams most heavily influenced by non-point source pollution problems. The watershed approach should involve all the treated wastewater sources and landowners within the basin. This group should develop a plan to meet water quality standards. The plan should outline the selected strategy, and should include measurement and accountability standards. The plan should be adequate to demonstrate that water quality standards will have a reasonable probability of being met as soon as practicable, or within 20 years.

If the plan shows that water quality standards cannot reasonably be met within the next 20 years, a use attainability study should be initiated to evaluate if the listed beneficial uses can be met. The listed uses should then be modified.

Once the plan for meeting standards is developed, it should be submitted to the DEQ for review and approval. Once DEQ approves a TMDL-equivalent watershed plan, the stream will be removed from the 303(d) list and will be added to the 305(b) list.

Watersheds will be obligated to periodically review their plan and progress towards meeting clean water standards, to adjust their plan and its associated pollution control programs as necessary, and to prepare a short evaluation for the DEQ. This review might be timed to coincide with the 303(d) listing process. Watershed councils could accept this as part of their function. Watersheds failing to complete such a plan or watersheds which do not demonstrate reasonable progress towards meeting water quality standards will be put back on the 303(d) list.

## Customer Relations

### DEQ's Customer Service Program Highlights

## Customer Service Focus

- Vehicle Inspection Program
- Technical Assistance
- Regionalization
- Customer Service Research

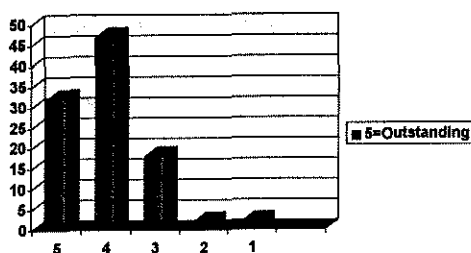
## Survey of Regulated Community - 1994

- Conducted by Bardsley & Neidhard Inc.
- Regulated Businesses and Municipalities throughout Oregon
- Early Regionalization
- Purpose: determine perceptions about DEQ's regulatory services

## Key Findings

- Overall rating of 3.4 on scale of 1-5
- Most recent contact received a higher rating - 4.1
- 2/3 believe service is better than five years ago
- DEQ's Service is better than EPA and other state agencies
- DEQ's Service perceived better in Portland area than in rural areas

## Most Recent Contact



## Performance by Purpose of Contact

- Technical Assistance - 4.3
- Inspection for permit compliance - 4.1
- Permit application or review - 3.8

## Type of Contact

- Face Face - 4.3
- Phone Contact - 4.2
- Site Visit - 4.1
- Written - 3.4

## Focus Group - May 1995

- Two groups in Portland
- Bend
- Medford
- LaGrande
- 48 people

## Key Findings

- Overall, DEQ is perceived as doing a good job.
- Cities say DEQ acts as a consultant and finds solutions
- Industries, especially wood products, tend to view DEQ as having an enforcement mentality

## Inconsistency

- Primary concern is inconsistency
- Reasons were thought to be high turnover and high workload

## Attitude

- Industry wants DEQ to be more of a facilitator or helper in the compliance process

## Regionalization

- Benefit is a greater focus on the local area
- Concern about consistent information

## Programs - Key Findings

- Air - cooperative attitude and staff knowledge; concern about delays in permit processing
- Water - high regard for individual staff members; concern about stormwater program
- Hazardous Waste - high regard for staff and education programs, concern about confusing federal rules

## Response to Findings

- Amnesty Programs
- Technical Assistance
- Improved Education and Outreach
- More emphasis on internal communications - consistency

## Amnesty Programs

- 1995 - VOC Amnesty Program - outreach to 850 small businesses in NR Region
- 1996 - Stormwater Amnesty - outreach to 3,000 businesses

## "The Blitz"

- Hazardous Waste technical assistance aimed at small business
- NWR - 540 contacts, 470 site visits
- WR - 182 contacts, 139 site visits
- ER - 300 contacts, 125 site visits

## Columbia Slough Technical Assistance

- Water and sediment concerns
- TMDL and Sediment issues - water quality and cleanup program
- 145 contacts (30 visits to date and continuing)

## Clean Up Rule Development

- Major outreach effort
- educational seminars
- workshops
- advisory committee
- 1200 face-to-face contacts
- mailings
- Web Page

## Tank Program

- Tank Cleanups and Upgrades
- Heating Oil Tanks - growing workload
- 1-800 phone number
- 20,000 technical assistance phone calls in 1995 - many related to heating oil

## Portland Air Quality

- Cars are largest source of air pollution
- Vehicle Inspection Program is DEQ's most visible program
- More than half of all Oregonians must get vehicles tested.
- Major outreach effort to raise awareness and improve customer service

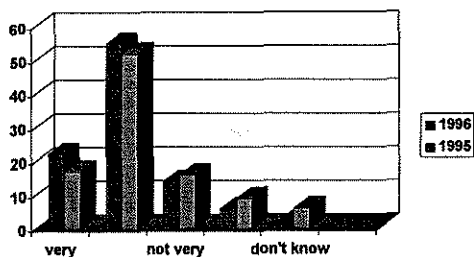
## Portland Area Air Quality Surveys

- Telephone Surveys by professional public opinion consultants
- Support advertising and educational efforts
- Conducted in 1992, 1995 and 1996

## Top Issues - 1995 and 1996

|                 |     |     |
|-----------------|-----|-----|
| • Crime         | 39% | 29% |
| • Education     | 11% | 28% |
| • Traffic       | 26% | 26% |
| • Population    | 20% | 18% |
| • Air Quality   | 17% | 18% |
| • Water Quality | 13% | 13% |

## How Effective is DEQ's Vehicle Inspection Program?



## VIP Program - Education

- Phone and complaint Enhancements
- Complaint and answer line
- New Brochure and signs
- Education and Advertising



### VIP Program - Customer Service

- Customer Service Advisory Committee - worked with Les Schwab and others
- Hired training coordinator to develop customer service training

### VIP Program Enhancements

- New Station in Sherwood
- DMV Tags
- Experiments with reservations and radio

### Complaint Response - 1995

- |                     |      |
|---------------------|------|
| • Air Quality       | 1579 |
| • Hazardous Waste   | 384  |
| • Water Quality     | 1043 |
| • Septic Sewage     | 305  |
| • Solid Waste       | 449  |
| • Oil               | 65   |
| • Underground Tanks | 119  |

**Environmental Quality Commission  
Work Session**

**August 22, 1996**

The Environmental Quality Commission work session was convened at 3:30 p.m. on Thursday, August 22, 1996, at the Hermiston Community Center, Main Hall, 415 Highway 395S, Hermiston, Oregon. The following members were present:

Henry Lorenzen, Chair  
Melinda Eden, Member  
Linda McMahan, Member  
Tony Van Vliet, Member  
Carol Whipple, Member

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

**EQC Questions for the Army Re: Umatilla Army Depot**

Lt. Colonel John Ontiveros, Project Manager for the U.S. Army's Chemical Stockpile Disposal, Kristina Iisa, Ph.D., with Oregon State University, and Gary Bort, Risk Analyst responsible for the U.S. Army's risk assessment were available to answer the Commissioners' questions. Kathy Massimino with the US EPA was also present to provide information to the Commission.

**Note:** The work session recessed for dinner at 5:30 p.m. and reconvened at 7:00 p.m.

**Comments from the Public Re: Umatilla Army Depot**

Following a brief introduction by State Representative Chuck Norris, the Commission listened to testimony from twenty nine people regarding the issuance of the Air Quality permit for the Umatilla Army Depot chemical demilitarization project.

A full transcript and list of presenters was made a part of the Umatilla Army Depot Permit public record.

Chair Lorenzen thanked the people who had testified and assured them all comments would be considered in the Commission's final decision.

There was no further business and Chair Lorenzen adjourned the work session at 9:07 p.m.

Approved \_\_\_\_\_  
Approved with Corrections \_\_\_\_\_

Minutes are not final until approved by the EQC

**ENVIRONMENTAL QUALITY COMMISSION**  
Minutes of the Two Hundred and Fifty-Fourth Meeting

**August 23, 1996**  
Regular Meeting

The Environmental Quality Commission meeting was convened at 8:30 a.m. on Friday, July 12, 1996, at the Hermiston Community Center, Altrusa Room, 415 Highway 395S, Hermiston, Oregon. The following members were present:

Henry Lorenzen, Chair  
Melinda Eden, Member  
Linda McMahan, Member  
Tony Van Vliet, Member  
Carol Whipple, Member

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

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

Chair Lorenzen called the meeting to order at 8:30 a.m.

**A. Approval of Minutes**

Commissioner McMahan moved approval of the meeting minutes for the July 11, 1996 work session and the July 12, 1996 regular meeting. Commissioner Van Vliet seconded the motion and it was unanimously approved.

**B. Approval of Tax Credits**

Mike Downs, Water Quality Division Administrator, and Charles Bianchi, Water Quality Division, presented this item to the Commission. The Department recommended the Commission approve certification for the tax credit applications listed below.

| Application No. | Applicant                                 | Description  |
|-----------------|---|--|
| TC 4287         | Dinihanian Manufacturing, Inc.<br>\$6,381 | A Reclaimed Plastic facility consisting of one single cavity injection mold for producing flower racks from reclaimed plastic.   |
| TC 4322         | Pacific Sanitation<br>\$9,205             | A Reclaimed Plastic facility consisting of a Kohlman-Hill, Inc. model KP2600F compactor.   |
| TC 4558         | Dinihanian Manufacturing, Inc.<br>\$8,352 | A Reclaimed Plastic facility consisting of a T & T non-ferrous metal separator, model Met-Sep 40FG, and associated screens, a loader and a hopper for cleaning reclaimed plastic.  |
| TC 4587         | City Garbage Service<br>\$96,170          | A Solid Waste Recycling facility consisting of a 1990 Freightliner collection truck, three 40 yd. drop boxes, five 20 yd. drop boxes and eighty one 5 yd. front load containers.   |
| TC 4618         | Northwest Pipeline Corporation<br>\$6,971 | A Noise Pollution Control facility consisting of a perforated disc diffuser and an associated relief valve that controls noise from the emergency venting of natural gas at the applicant's meter station in Marion, Oregon. |
| TC 4625         | Mt. Harris Farms<br>\$12,250              | An Air Pollution Control "Field Burning" facility consisting of an 18' x 40' x 60' pole construction grass seed straw storage building.  |
| TC 4629         | Alpha Nursery, Inc.<br>\$61,208           | An Air Pollution Control "Field Burning" facility consisting of a 22' x 80' x 130' steel structure grass seed straw storage building.  |

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

| Application No. | Applicant                           | Description  |
|-----------------|-------------------------------------|--|
| TC 4436         | Weyerhaeuser Company<br>\$1,866,744 | A Water and Air Pollution Control facility consisting of surface condensers, pumps, strainers, instrumentation and a control system that reduces the quantity of organic chemicals discharged to the McKenzie River and volatile organic emissions from pulp and paper processes that use recycled evaporator condensates. |

Commissioner Eden moved to approve the tax credits as recommended by the Department. Commissioner Whipple seconded the motion. The motion was passed with four yes votes and one no vote (Commissioner Van Vliet).

Commissioner Eden moved approval of the transfer of Tax Credit #2518 from Cynthia Squires dba Glide Auto Service, BP to North Umpqua Business Enterprises, a corporation owned by the previous certificate holder, as recommended by the Department. Commissioner Van Vliet seconded the motion and it was unanimously approved.

Mr. Downs announced Mr. Bianchi's departure from the Tax Credit program Department effective the end of August, 1996, and thanked him for his excellent work.

**C. Action Item: Appeal of Permit Denial of Kinross Copper Corporation's NPDES Application No. 997233**

Larry Knudsen with the Department of Justice presented an overview of this item to the Commission. Barbara Burton, Water Quality Manager of DEQ's Western Region-Salem provided background information about the Kinross permit process and answered questions from the Commission.

Commissioner Van Vliet moved the Commission adopt the Recommended Findings of Fact, Conclusions of Law, and Final Order, dated June 26, 1996, as its own. Commissioner Eden seconded the motion and it was unanimously approved.

**D. Rule Adoption: Temporary Rules Lifting the Sewage System Moratorium in the Clear Lake Watershed**

Barbara Burton, Water Quality Manager, Western Region, presented information to the Commission regarding the Department's recommendation to lift the thirteen year old moratorium on construction of new on-site sewage disposal systems in the Clear Lake watershed. The moratorium was instituted to protect the water quality in Collard Lake and Clear Lake, located near the City of Florence. Clear Lake is the drinking water source for area residents. Under the terms of the existing rule, the Department could only lift the moratorium upon approval of a plan which included adopted ordinances, agreements, and contracts to insure that water quality would be protected.

Chair Lorenzen expressed concern regarding the Department's recommendation, and requested the Department provide clarification of the options available to the Commission. He also proposed that the Commission hold an executive session prior to a final decision on the item. Larry Knudsen with the Department of Justice assured Chair Lorenzen that detailed information regarding the proposed settlement would be provided to the Commission prior to the meeting scheduled for October 10-11, 1996, at which time this item would again be taken up for consideration by the Commission.

**E. Information Item: Lower Columbia River Bi-State Water Quality Program Completion**

Kevin Downing and Don Yon of the Water Quality Division and Jean Cameron with the States-BC Oil Spill Task Force presented this information item to the Commission. The Lower Columbia River Bi-State Water Quality Program was established in 1990 to begin the process of addressing the water quality and health of the beneficial uses of the River. Mr. Downing discussed the history and purpose of the Lower Columbia River Bi-State Water Quality program. Mr. Yon summarized biological data from the Steering Committee's report and Ms. Cameron addressed the report's specific recommendations.

After summarizing the technical findings, public involvement activities and the Steering Committee's recommendations, Mr. Downing, Mr. Yon and Ms. Cameron outlined the next steps to be taken in the National Estuary Program for the Lower Columbia River, with particular focus on the implications and impacts of the Steering Committee's recommendations on the Department and the Commission. They urged the Commission to prioritize the Department's efforts to ensure these recommendations are implemented.

**NOTE:** Hermiston Mayor Frank Harkenrider briefly addressed the Commission at this time and thanked them for coming to the area for the Umatilla Army Depot portion of the meeting. The Commission then recessed temporarily at 10:05 a.m. and reconvened at 10:25 a.m.

**Public Forum** (The only person signed up for Public Forum asked to speak regarding this item, and the Commission took his comments at this time)

Mr. Bob Friedenwald, Manager of Facilities Service with the Port of Portland, told the Commission the Port of Portland supports the Department's recommendations regarding the Lower Columbia River Bi-State Water Quality program and offered the Port of Portland's assistance in their implementation. He also indicated concerns regarding the tone of the Steering Committee's final recommendations, characterizing the summary as perhaps "bleaker" than the information in the report would indicate.

**F. Action Item: Variance Application of Nona Henkel**

Larry Knudsen, Department of Justice, and Martin Loring and Sherm Olson of the Department's Water Quality Division appeared before the Commission on this variance application. There were no representatives of the applicant present. Chair Lorenzen recommended, and the Commission agreed, that this item be held over until the October 10-11, 1996 meeting so that Ms. Henkel would have the opportunity to present her case. They agreed that even if Ms. Henkel chose not to attend the October meeting, they would proceed with their consideration of the variance application at that time.

**G. Action Item: Appeal of Variance Approval by Del and Lyn Schuller**  
**NOTE: This item was withdrawn prior to the Commission Meeting**

**H. Informational Item: Umatilla Army Depot - Best Available Technology (BAT) Criteria for the Proposed Umatilla Chemical Demilitarization Facility Including Videotapes of Alternative Technologies**

Stephanie Hallock, Eastern Region Administrator, presented this item to the Commission. Larry Edelman, Department of Justice, and Peter Brewer, Eastern Region Air Quality Permit writer, were also available for questions from the Commission.

Before issuing the hazardous waste permit for the Umatilla Chemical Demilitarization facility, the Commission must make a set of findings. One of these findings is whether or not the proposed facility uses best available technology (BAT). The Department discussion with the Commission focussed on determining what criteria should be used to guide the Commission in making the BAT determination.

The Commission agreed that the following criteria recommended by Department staff are appropriate:

1. Types/quantities of discharges to the environment by operation of the proposed facility or any alternative technology.
2. Risks of discharge from a catastrophic event or breakdown in operation of the proposed facility or any alternative technology.
3. Safety of the operation of the proposed facility or any alternative technology.
4. The rapidity with which the technology can destroy the stockpile.
5. Impacts of the proposed technology on consumption of natural resources.

The Commission also asked that a sixth criteria be added:

6. Time needed to develop alternative technology and impact on risk of continued storage.

No formal action on this item was required by the Commission.

**I. Commissioner's Report**

There were no Commissioner reports.

**J. Director's Report**

Director Marsh distributed a report from the Department updating the Commission on the status of the total dissolved gas standard waiver that the Commission granted to the National Marine Fisheries Service at its April 12, 1996 meeting. Director Marsh confirmed that the Department will have representatives from the various fish management agencies involved in the spill program appear before the Commission at the next meeting to give an update on the spill program and answer questions and concerns the Commission may have.

The Commission reviewed the proposed EQC meeting dates for 1997 and agreed on the following:

January 9-10, 1997  
February 27-28, 1997  
April 17-18, 1997  
June 5-6, 1997  
July 17-18, 1997  
August 21-22, 1997  
October 2-3, 1997  
November 20-21, 1997

Director Marsh briefed the Commission on several items including the civil penalty action against the Talent Irrigation District and the recent ozone level exceedances in the Portland-Vancouver area. He provided an update on the Governor's Coastal Salmon Recovery Initiative plan, and indicated he and Department staff would be representing the Department in meetings throughout the state on the Governor's plan. He also updated the Commission on the 1995-1997 biennium budget and reviewed the Department's work on the 1997-99 budget in process.

**Note:** The Commission recessed temporarily at 12:15 and reconvened at 1:00 p.m.

**H. Umatilla Army Depot: Best Available Technology (BAT) Criteria for the proposed Umatilla Chemical Demilitarization Including Videotapes of Alternative Technologies  
(continued)**

Peter Brewer, Eastern Region Air Quality Permit writer, introduced alternative technology videotapes submitted by M4 and Eco Logic. The Commission viewed the tapes and asked questions about the applicability of the technologies presented to the Umatilla Depot project.

There was no further business and Chair Lorenzen adjourned the meeting at 1:30 p.m.



## REVISIONS

Please replace pages 1 and 2 of Agenda Item B (October 11) with **revised pages 1 and 2 of Agenda Item B.**

Please replace Application TC-4563 with **revised Application TC-4563.**

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

---

1. **Applicant**

Argay Disposal Service  
14814 S. E. Oatfield Road  
Milwaukie, Oregon 97267

The applicant operates a solid waste collection service.

2. **Description of Facility**

The facility consists of the following equipment: Collection Truck 1996 Model FL70, Serial Number 17V6HLBAZTL818461 with a Leach 20 yard Alpha Series compactor body # AL-2491 Used to collect yard debris and old corrugated cardboard.

Total cost claimed for collection truck and body                      \$91,036

The actual cost of the facility was certified by an independent public accountant. Copies of the original invoice and check for payment were also provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The components were purchased between October 3, 1995.
- b. The facility was placed into operation on October 15, 1995.
- c. The application for tax credit was submitted to the Department on December 7, 1995, within two years of substantial completion of the facility.
- d. The application was filed complete on September 5, 1996

4. **Evaluation of Application**

- a. The principal purpose of the facility is to provide yard debris and commercial cardboard collection service in compliance with requirements of the local government and the Department to provide the opportunity to recycle. This recycling collection service is a part of a material recovery process which obtains useful resources from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d).

- b. Eligible Cost Findings

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

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

The facility is used 75% of the time for collection of yard debris and recyclable cardboard, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$91,036. The Department as adjusted this value by 75% for an adjusted facility cost of \$68,277. the Department has not identified any ineligible costs relating to the collection truck and equipment.

B) Annual Percentage Return on Investment

The applicant has calculate the average annual cash flow for the recycling program directly related to the collection equipment as of the collection truck eligible for tax credit as \$6,834.

The useful life of the equipment is as 10 years.

The annual return on investment from Table 1, OAR 340-16 is 0%.

The portion of the adjusted 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 truck is collection and recycling of yard debris and cardboard in compliance with a requirement of the Department.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 0%.

6. Director's Recommendation

Based upon the findings, it is recommended that Pollution Control Facility tax credit certificate bearing the cost of \$91,036 with 75% allocable to pollution control be issues for the facility claimed in Tax Credit Application TC-4379.

State of Oregon  
Department of Environmental Quality

Memorandum†

Date: October 11, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director  
Subject: Agenda Item B, October 11, 1996 EQC Meeting

Approval of Tax Credit Applications

**Statement of the Need for Action**

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

**Tax Credit Application Review Reports:**

| Application No | Applicant                       | Description  |
|----------------|---------------------------------|--|
| TC4379         | WWDD Partnership<br>\$15,622    | A reclaimed plastic facility consisting of 1 screw feed for a plastic extruder |
| TC 4499        | Chevron Products Co<br>\$49,211 | Underground storage tank: air quality, stage II vapor recovery equipment       |
| TC 4500        | Chevron Products Co<br>\$42,979 | Underground storage tank: air quality, stage II vapor recovery equipment       |
| TC 4501        | Chevron Products Co<br>\$67,613 | Underground storage tank: air quality, stage II vapor recovery equipment       |
| TC 4520        | WWDD Partnership<br>\$14,535    | A reclaimed plastic facility consisting of 95 plastic storage bins.            |
| TC 4555        | Denton Plastics<br>\$15,767     | A reclaimed plastic facility consisting of 1 hyster forklift.                  |

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

Memo To: Environmental Quality Commission

Agenda Item B

October 11, 1996 Meeting

Page 2

| Application No | Applicant                                 | Description   |
|----------------|---|---|
| TC 4563        | Argay Disposal Service<br>\$91,036 / 75%  | A solid waste recycling facility consisting of a collection truck with a Leach 20 yard alpha series compactor body used to collect yard debris and old corrugated cardboard.  |
| TC 4568        | United Disposal Service, Inc.<br>\$45,759 | A solid waste recycling facility consisting of eleven 48.9 yard drop boxes, two 48 yard drop boxes.   |
| TC 4572        | United Disposal Service, Inc.<br>\$35,516 | A solid waste recycling facility consisting of ten 48.9 yard drop boxes.  |
| TC 4573        | United Disposal Service, Inc.<br>\$31,041 | A solid waste recycling facility consisting of three pull tarp systems, one hundred thirty 64 gallon Schaefer Compostainers, four 48.9 yard drop boxes, four 1 yard tote bins |
| TC 4578        | WWDD Partnership<br>\$ 8,100              | A reclaimed plastic facility consisting of a truck trailer.   |
| TC 4579        | United Disposal Service, Inc.<br>\$12,228 | A solid waste recycling facility consisting of 3 pulltarp systems, 5 one yard bins, one 20 yard drop box.   |
| TC 4581        | United Disposal Service, Inc.<br>\$47,151 | A solid waste recycling facility consisting of six 3 yard self dumping hoppers, thirty 1.5 yard tote bins   |
| TC 4588        | United Disposal Service, Inc.<br>\$22,191 | A solid waste recycling facility consisting of one Yale forklift.   |
| TC 4591        | Midtown Gas<br>\$2,242                    | A solid waste facility to recycle antifreeze.   |
| TC 4594        | United Disposal Service, Inc.<br>\$19,888 | A solid waste recycling facility consisting of Marathon TC2.5 HD/HF Compactor System.   |

## Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item B  
October 11, 1996 Meeting

**Title:**

Approval of Tax Credit Applications

**Summary:**

New Applications - Twenty three (23) tax credit applications with a total facility cost of \$2,361,825 are recommended for approval as follows:

|   |              |
|---|--------------|
| -13 solid waste recycling facilities with a total facility cost of: | \$ 371,136   |
| - 5 plastics recycling facilities having a total cost of:           | \$ 68,191    |
| - 3 underground storage tank facilities with a total cost of:       | \$ 159,803   |
| - 2 air quality facility with a total cost of:                      | \$ 1,762,695 |

One application with a claimed facility cost exceeding \$250,000 was reviewed by an independent accounting firm.

New Application for Precertification - One preliminary application for precertification of a stormwater control facility with an estimated cost of \$533,396 was reviewed by staff to determine eligibility for tax relief under ORS 468.170.

**Department Recommendation:**

Approve issuance of tax credit certificates for 23 applications as presented in Attachment A of the staff report.

Approve precertification of the stormwater control facility as eligible for tax relief under ORS 468.170.

*Margaret G. Vandehey*  
Report Author

*Michael Brown*  
Division Administrator

Director

*Angela Marshall*

September 11, 1996 (MW\WC14\WC14346.Doc)

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

Date: October 11, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director  
Subject: Agenda Item B, October 11, 1996 EQC Meeting  
Approval of Tax Credit Applications

**Statement of the Need for Action**

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

**Tax Credit Application Review Reports:**

| Application No. | Applicant                       | Description  |
|-----------------|---------------------------------|--|
| TC4379          | WWDD Partnership<br>\$15,622    | A reclaimed plastic facility consisting of 1 screw feed for a plastic extruder |
| TC 4499         | Chevron Products Co<br>\$49,211 | Underground storage tank: air quality, stage II vapor recovery equipment       |
| TC 4500         | Chevron Products Co<br>\$42,979 | Underground storage tank: air quality, stage II vapor recovery equipment       |
| TC 4501         | Chevron Products Co<br>\$67,613 | Underground storage tank: air quality, stage II vapor recovery equipment       |
| TC 4520         | WWDD Partnership<br>\$14,535    | A reclaimed plastic facility consisting of 95 plastic storage bins.            |
| TC 4555         | Denton Plastics<br>\$15,767     | A reclaimed plastic facility consisting of 1 hyster forklift.                  |

<sup>†</sup>A large print copy of this report is available upon request.

| Application No | Applicant                                 | Description   |
|----------------|---|---|
| TC 4563        | Argay Disposal Service<br>\$68,277        | A solid waste recycling facility consisting of a collection truck with a Leach 20 yard alpha series compactor body used to collect yard debris and old corrugated cardboard.  |
| TC 4568        | United Disposal Service, Inc.<br>\$45,759 | A solid waste recycling facility consisting of eleven 48.9 yard drop boxes, two 48 yard drop boxes.   |
| TC 4572        | United Disposal Service, Inc.<br>\$35,516 | A solid waste recycling facility consisting of ten 48.9 yard drop boxes.  |
| TC 4573        | United Disposal Service, Inc.<br>\$31,041 | A solid waste recycling facility consisting of three pull tarp systems, one hundred thirty 64 gallon Schaefer Compostainers, four 48.9 yard drop boxes, four 1 yard tote bins |
| TC 4578        | WWDD Partnership<br>\$ 8,100              | A reclaimed plastic facility consisting of a truck trailer.   |
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| TC 4588        | United Disposal Service, Inc.<br>\$22,191 | A solid waste recycling facility consisting of one Yale forklift.   |
| TC 4591        | Midtown Gas<br>\$2,242                    | A solid waste facility to recycle antifreeze.   |
| TC 4594        | United Disposal Service, Inc.<br>\$19,888 | A solid waste recycling facility consisting of Marathon TC2.5 HD/HF Compactor System.   |



| Application No. | Applicant                                   | Description   |
|-----------------|---|---|
| TC 4599         | United Disposal Service, Inc.<br>\$24,568   | A solid waste recycling facility consisting of Marathon TC3 Compactor System.             |
| TC 4600         | Denton Plastics<br>\$14,167                 | A reclaimed plastic facility consisting of one hyster forklift.                           |
| TC 4613         | United Disposal Service, Inc.<br>\$44,406   | A solid waste recycling facility consisting of twelve 48.9 yard drop boxes.               |
| TC 4630         | United Disposal Service, Inc.<br>\$ 9,643   | A solid waste recycling facility consisting of one Marathon Baler.                        |
| TC 4631         | Redmond Tallow Co.<br>\$58,408              | An air quality facility for odor control associated with cooking and drying meat.         |
| TC 4643         | United Disposal Service, Inc.<br>\$ 8,226   | A solid waste recycling facility consisting of two thousand 14 gallon recycling bins.     |
| TC 4368         | Wacker Siltronic Corporation<br>\$1,704,287 | Facility controls the gaseous emissions generated from the manufacture of silicon wafers. |

Tax Credit facility number 4368 had costs exceeding \$250,000 and are recommended for approval.

| Application No.           | Applicant                         | Description   |
|---------------------------|-----------------------------------|---|
| Preliminary Certification | Mt Hoods Metals Corp<br>\$533,396 | A water pollution control facility consisting of paving improvements, detention basin and oil-water separator to collect and treat stormwater runoff. |

**Background and Discussion of Issues**

There are no issues presented for discussion in this report.

**Summary of Any Prior Public Input Opportunity**

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

**Conclusions**

- o The recommendations for action on the attached applications are consistent with statutory provisions and administrative rules related to the pollution control facilities and reclaimed plastic product tax credit programs.
- o Proposed October 11, 1996 Pollution Control Tax Credit Totals:

| <u>Certificates</u> | <u>Certified Costs*</u> | <u>Allocable Costs**</u> | <u>No.</u> |
|---------------------|-------------------------|--------------------------|------------|
| Air Quality         | 1,762,695               | 1,762,695                | 2          |
| CFC                 | 0                       | 0                        | 0          |
| Field Burning       | 0                       | 0                        | 0          |
| Noise               | 0                       | 0                        | 0          |
| Hazardous Waste     | 0                       | 0                        | 0          |
| Plastics            | 68,191                  | 68,191                   | 5          |
| SW - Recycling      | 393,895                 | 371,136                  | 13         |
| SW - Landfill       | 0                       | 0                        | 0          |
| Water Quality       | 0                       | 0                        | 0          |
| UST                 | <u>159,803</u>          | <u>159,803</u>           | <u>3</u>   |
| <b>TOTALS</b>       | <b>\$ 2,384,584</b>     | <b>\$2,361,825</b>       | <b>23</b>  |

- o Calendar Year Totals Through August 23, 1996:

| <u>Certificates</u> | <u>Certified Costs*</u>   | <u>Allocable Costs**</u>  | <u>No.</u>       |
|---------------------|---------------------------|---------------------------|------------------|
| Air Quality         | \$2,212,282               | \$2,212,282               | 2                |
| CFC                 | 9,342                     | 9,342                     | 5                |
| Field Burning       | 667,545                   | 590,492                   | 10               |
| Noise               | 32,751                    | 32,751                    | 2                |
| Hazardous Waste     | 25,095                    | 25,095                    | 2                |
| Plastics            | 69,061                    | 69,061                    | 5                |
| SW - Recycling      | 114,364                   | 114,364                   | 2                |
| SW - Landfill       | 0                         | 0                         | 0                |
| Water Quality       | 840,225                   | 840,225                   | 3                |
| UST                 | <u>731,954</u>            | <u>663,729</u>            | <u>5</u>         |
| <b>TOTALS</b>       | <b><u>\$4,702,619</u></b> | <b><u>\$4,557,341</u></b> | <b><u>36</u></b> |

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

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

**Recommendation for Commission Action**

- A) The Department recommends that the Commission approve certification for the tax credit applications as presented in Attachment A of the Department Staff Report.
- B) The Department recommends that a requested stormwater control facility be precertified as eligible for tax relief under ORS 468.170.

**Intended Follow-up Actions**

Notify applicants of Environmental Quality Commission actions.

**Attachments**

- A. Pollution Control Tax Credit Application Review Reports.

**Reference Documents (available upon request)**

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

Approved:

Section: \_\_\_\_\_

Division: \_\_\_\_\_

*Michael Houns*

Report Prepared By: Margaret Vandehey  
Phone: 229-6878

Date Prepared: September 11, 1996



4. Evaluation of Application

a. The investment is eligible because the equipment is necessary to process reclaimed plastic.

b. Allocable Cost Findings

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

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

The equipment is to be used 100 percent of the time for processing reclaimed plastic.

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

No other factors were considered relevant.

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

5. Summation

a. The investment was made in accordance with all regulatory deadlines.

b. The investment is eligible for final tax credit certification in that the equipment is necessary to process reclaimed plastic.

c. The qualifying business complies with DEQ statutes and rules.

d. The portion of the investment cost that is properly allocable to reclaiming and recycling plastic is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$15,622 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4379.

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Chevron U.S.A. Inc.  
Chevron U.S.A. Products Company  
6001 Bollinger Canyon Rd., Bldg. L  
San Ramon, CA 94583

The applicant owns and operates retail gas station No. 9-9328 at 1510 NE 122nd Ave., Portland, OR 97230, DEQ Facility ID No. 507.

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

2. Description of Claimed Facility

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

Claimed facility cost \$50,126  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$49,211. This represents a difference of \$915 from the applicant's claimed cost of \$50,126 due to addition errors and inclusion by the applicant of a product pump (\$1,094) not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on September 18, 1993 and placed into operation on September 19, 1993. The application for certification was submitted to the Department on August 1, 1995. The applicant requested and received a one-year

extension to complete filing requirements. The application was considered to be complete and filed on August 21, 1996, within the one year extension period granted by the Department.

4. Evaluation of Application

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

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

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

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

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

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

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

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

|   | Eligible<br>Facility<br>Cost | Percent<br>Allocable | Amount<br>Allocable |
|---|------------------------------|----------------------|---------------------|
|   | _____                        | _____                | _____               |
| <u>Spill &amp; Overfill Prevention:</u> |                              |                      |                     |
| Spill containment basins                | \$2,533                      | 100%                 | \$2,533             |
| Automatic shutoff valve                 | 899                          | 100                  | 899                 |
| <u>VOC Reduction:</u>                   |                              |                      |                     |
| Stage II vapor recovery                 | 15,338                       | 100                  | 15,338              |
| Labor and materials                     | 31,535                       | 100                  | 31,535              |
|   | _____                        | _____                | _____               |
| Total                                   | \$49,211                     | 100%                 | \$49,211            |



5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$49,211 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4499.

Barbara J. Anderson  
(503) 229-5870  
August 21, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Chevron U.S.A. Inc.  
Chevron U.S.A. Products Company  
6001 Bollinger Canyon Rd., Bldg. L  
San Ramon, CA 94583

The applicant owns and operates retail gas station No. 9-1516 at 1820 NE Division, Gresham, OR 97030, DEQ Facility ID No. 1269.

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

2. Description of Claimed Facility

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

Claimed facility cost \$51,874  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$42,979. This represents a difference of \$8,895 from the applicant's claimed cost of \$51,874 due to the inclusion by the applicant of facility remodeling and other costs not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on September 18, 1993 and placed into operation on September 19, 1993. The application for certification was submitted to the Department on August 1, 1995. The applicant requested and received a one-year

extension to complete filing requirements. The application was considered to be complete and filed on August 21, 1996, within the one year extension period granted by the Department.

4. Evaluation of Application

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

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

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

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

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

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

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

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

|   | Eligible<br>Facility<br>Cost | Percent<br>Allocable | Amount<br>Allocable |
|---|------------------------------|----------------------|---------------------|
|   | _____                        | _____                | _____               |
| <u>Spill &amp; Overfill Prevention:</u> |                              |                      |                     |
| Spill containment basins                | \$ 760                       | 100%                 | \$ 760              |
| Automatic shutoff valve                 | 864                          | 100                  | 864                 |
| <u>VOC Reduction:</u>                   |                              |                      |                     |
| Stage II vapor recovery                 | 14,473                       | 100                  | 14,473              |
| Labor and materials                     | 26,882                       | 100                  | 26,882              |
|   | _____                        | _____                | _____               |
| Total                                   | \$42,979                     | 100%                 | \$42,979            |

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$42,979 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4500.

Barbara J. Anderson  
(503) 229-5870  
August 21, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Chevron U.S.A. Inc.  
Chevron U.S.A. Products Company  
6001 Bollinger Canyon Rd., Bldg. L  
San Ramon, CA 94583

The applicant owns and operates retail gas station No. 9-6587 at 8517 SW Terwilliger Blvd., Portland, OR 97034, DEQ Facility ID No. 966.

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

2. Description of Claimed Facility

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

Claimed facility cost \$71,913  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$67,613. This represents a difference of \$2300 from the applicant's claimed cost of \$71,913 due to the inclusion of labor related to a tank gauge system not claimed for tax credit.

3. Procedural Requirements

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

The facility was substantially completed on November 9, 1993 and placed into operation on November 10, 1993. The application for certification was submitted to the Department on August 1, 1995. The applicant requested and received a one-year extension to complete filing requirements. The application was considered to be

complete and filed on August 21, 1996, within the one year extension period granted by the Department.

4. Evaluation of Application

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

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

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

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

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

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

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

b. Eligible Cost Findings

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

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

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

2) The estimated annual percent return on the investment in the facility.  
  
There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

3) The alternative methods, equipment and costs for achieving the same pollution control objective.  
  
The applicant did not indicate that alternatives were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.  
  
The applicant claims no savings or increase in costs as a result of the installation.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.  
  
There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control of reduction of pollution.

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

|   | Eligible<br>Facility<br>Cost | Percent<br>Allocable | Amount<br>Allocable |
|---|------------------------------|----------------------|---------------------|
|   | _____                        | _____                | _____               |
| <u>Spill &amp; Overfill Prevention:</u> |                              |                      |                     |
| Spill containment basins                | \$1,267                      | 100%                 | \$1,267             |
| <u>VOC Reduction:</u>                   |                              |                      |                     |
| Stage II vapor recovery                 | 26,377                       | 100                  | 26,377              |
| Labor and materials                     | 33,454                       | 100                  | 33,454              |
|   | _____                        | _____                | _____               |
| Total                                   | \$67,613                     | 100%                 | \$67,613            |



5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$67,613 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4501.

Barbara J. Anderson  
(503) 229-5870  
August 21, 1996

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

WWDD Partnership  
230 N. W. 10th  
Portland, OR 97209

The applicant is a partnership which leases the claimed plastic recycling equipment to Denton Plastic. Denton Plastic is a recycling company located at 4427 NE 158th, Portland Oregon 97209. The claimed equipment will be used for plastic recycling at that location.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of ninety five plastic bins about 4' x4' x 4' with solid sides, serial numbers 001 through 095 that are used to handle reclaimed plastic and scrap plastic for reclaiming.

The claimed facility investment costs:                      \$14,535

A copy of the sales invoice and check for payment for the bins were provided.

3. Procedural Requirements

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

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on August 16, 1995. The 30 day waiting period was waived on September 12, 1995 and the request for preliminary certification was approved on September 27, 1995.
- b. The investment was made on September 22, 1995.
- c. The request for final certification was submitted on February 26, 1996 and was filed complete on July 2, 1996.

4. Evaluation of Application

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

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

- 1) The extent to which the claimed collection, transportation, processing or manufacturing process is used to convert reclaimed plastic into a salable or usable commodity.  
  
The equipment is to be used 100 percent of the time for storing and transporting reclaimed plastic or scrap plastic for reclaiming.
- 2) Any other factors which are relevant in establishing the portion of the actual cost of the investment properly allocable to the collection, transportation or processing of reclaimed plastic or to the manufacture of a reclaimed plastic product.

No other factors were considered relevant.

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

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$14,535 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4520.

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Denton Plastics, Inc.  
4427 N. E. 158th  
Portland, OR 97230

The applicant is plastic recycling company located at 4427 NE 158th, Portland Oregon 97230. The claimed equipment will be used for plastic recycling at that location.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a Hyster forklift model H30XE, Serial Number D001H02339S that is used to handle reclaimed plastic and scrap plastic for reclaiming.

The claimed facility investment costs:                      \$15,767

A copy of the sales invoice for the forklift was provided.

3. Procedural Requirements

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

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on November 11, 1995. The request for preliminary certification was approved and the 30 day waiting period was waived on November 22, 1995.
- b. The investment was made on March 29, 1996.
- c. The request for final certification was submitted on May 30, 1996 and was filed complete on June 6, 1996.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to transport reclaimed plastic.

b. **Allocable Cost Findings**

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

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

The equipment is to be used 100% of the time for transporting reclaimed plastic or scrap plastic for reclaiming.

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

No other factors were considered relevant.

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

5. **Summation**

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

6. **Director's Recommendation**

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$15,767 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4555.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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**1. Applicant**

Argay Disposal Service  
14814 S. E. Oatfield Road  
Milwaukie, Oregon 97267

The applicant operates a solid waste collection service.

**2. Description of Facility**

The facility consists of the following equipment: Collection Truck 1996 Model FL70, Serial Number 17V6HLBAZTL818461 with a Leach 20 yard Alpha Series compactor body # AL-2491 Used to collect yard debris and old corrugated cardboard.

Total cost claimed for collection truck and body                      \$91,036

The actual cost of the facility was certified by an independent public accountant. Copies of the original invoice and check for payment were also provided.

**3. Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The components were purchased between October 3, 1995.
- b. The facility was placed into operation on October 15, 1995.
- c. The application for tax credit was submitted to the Department on December 7, 1995, within two years of substantial completion of the facility.
- d. The application was filed complete on September 5, 1996

**4. Evaluation of Application**

- a. The principal purpose of the facility is to provide yard debris and commercial cardboard collection service in compliance with requirements of the local government and the Department to provide the opportunity to recycle. This recycling collection service is a part of a material recovery process which obtains useful resources from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d).

- b. Eligible Cost Findings

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

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

The facility is used 75% of the time for collection of yard debris and recyclable cardboard, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$96,170. The Department as adjusted this value by 75% for an adjusted facility cost of \$68,277. the Department has not identified any ineligible costs relating to the collection truck and equipment.

B) Annual Percentage Return on Investment

The applicant has calculate the average annual cash flow for the recycling program directly related to the collection equipment as of the collection truck eligible for tax credit as \$6,834.

The useful life of the equipment is as 10 years.

The annual return on investment from Table 1, OAR 340-16 is 0%.

The portion of the adjusted 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 truck is collection and recycling of yard debris and cardboard in compliance with a requirement of the Department.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 0%.

6. Director's Recommendation

Based upon the findings, it is recommended that Pollution Control Facility tax credit certificate bearing the cost of \$68,277 with 100% allocable to pollution control be issues for the facility claimed in Tax Credit Application TC-4379.

STATE OF OREGON  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of: Eleven 48.9 yard drop boxes, model 2296SC, serial numbers 7319 to 7323, 7362 to 7365, 7370 to 7371; two 48 yard drop boxes with lids, serial numbers 7109 and 7110.

Total cost claimed is \$45,759

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed, and placed in operation on October 4, 1994.
- b. The application for tax credit was submitted to the Department on December 18, 1995, within two years of substantial completion of the facility.
- c. The application was filed complete on July 3, 1996.

4. **Evaluation of Application**

a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.

b. Eligible Cost Findings



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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$45,759.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the drop boxes is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$45,759 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4568.

STATE OF OREGON  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of: Ten 48.9 yard drop boxes, serial number 7858 to 7867.

Total cost claimed is \$35,516

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on August 22, 1995.
- b. The application for tax credit was submitted to the Department on December 27, 1995, within two years of substantial completion of the facility.
- c. The application was filed complete on July 3, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.

b. Eligible Cost Findings

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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$35,516.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the drop boxes is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$35,516 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4572.

STATE OF OREGON  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of: Three pull tarp systems; one hundred thirty 64 gallon Schaefer Compostainers, model GMT240, serial numbers Y64001401 to Y64001530; four 4 yard roll dumps, model M240NC, serial numbers 12750 to 122753; four 48.9 yard drop boxes, model 2296SC, serial numbers 7366 to 7369; four 1 yard tote bins model M310, serial number 123804 to 123807.

Total cost claimed is \$31,041

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on November 22, 1994.
- b. The application for tax credit was submitted to the Department on December 27, 1995, within two years of substantial completion of the facility.
- c. The application was filed complete on July 3, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.

b. Eligible Cost Findings

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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$31,041.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the containers is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$31,041 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4573.

Application No. TC-4578

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

WWDD Partnership  
230 NW 10th  
Portland, OR 97209

The applicant is an investment partnership associate with Denton Plastics, which is a plastic recycling company located at 4427 NE 158th, Portland Oregon 97230. The claimed equipment will be used at the Denton Plastics facility.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a used 1986 Trailmobile 48' trailer, Serial Number IXV10V92GE002501, that is used to ship reclaimed plastic and scrap plastic for recycling.

The claimed facility investment costs:                      \$8,100

A copy of the purchase order for the trailer was provided.

3. Procedural Requirements

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

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on January 9, 1996. The request for preliminary certification was approved and the 30 day waiting period was waived on January 10, 1996
- b. The investment was made on January 15, 1996
- c. The request for final certification was submitted on February 26, 1996 and was filed complete May 17, 1996.

4. Evaluation of Application

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

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

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

The equipment is to be used 100 percent of the time for transporting reclaimed plastic or scrap plastic for reclaiming.

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

No other factors were considered relevant.

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

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$8,100 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4578.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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**1. Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

**2. Description of Facility**

The facility consists of: 3 pulltarp systems; 5 one yard roll dumps, model M210, serial # 125895 to 125899; 6 three yard roll dumps, Model M230; 1 twenty yard drop box with domed lid, serial # 7882.

Total cost claimed is \$12,228

Invoices and copies of checks documenting the cost of the facility were provided.

**3. Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on May 20, 1995.
- b. The application for tax credit was submitted to the Department on January 8, 1996, within two years of substantial completion of the facility.

**4. Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material from garbage service customers. This material would otherwise be disposed of as solid waste.

- b. Eligible Cost Findings

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



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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$12,228.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. **Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the containers is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$12,228 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4579.

STATE OF OREGON  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of: Six 3 yard self dumping hoppers, model M230, serial numbers 1334330 to 133435; three 1 yard self dumping hoppers, model M210, serial numbers 133436 to 133438; one 6 yard self dumping hopper, model M260, serial number 134532; eight 48.9 yard drop boxes, serial numbers 8451 to 8454 and 8457 to 8460; thirty 1.5 yard tote bins, model M315, serial numbers 133571 to 133600.

Total cost claimed is \$47,151

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on December 13, 1995.
- b. The application for tax credit was submitted to the Department on January 22, 1996, within two years of substantial completion of the facility.
- c. The application was filed complete on July 3, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.

b. Eligible Cost Findings

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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The applicant has claimed a facility cost of \$47,151.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the containers is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$47,151 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4581.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of: one Yale forklift truck, model GDP050RFNUE086, serial number 857421, ID 8B258.

Total cost claimed is \$22,191

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on October 16, 1995.
- b. The application for tax credit was submitted to the Department on February 12, 1996, within two years of substantial completion of the facility.
- c. The application was filed complete on July 5, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to handle recyclable material which would otherwise be disposed of as solid waste. The applicant claims that the forklift is used 100% of the time for recycling. " The Woodburn facility has four forklift trucks that are in use at our location. If each forklift truck is used 90% of the time to recover and convert waste products into salable or usable commodity and 10% of the time for other purposes, you could say that three forklifts are used for recycling and one forklift is used for other miscellaneous jobs. Looking at this forklift in this manner, I would say that this forklift is used 100% of the time for recycling."

**b. Eligible Cost Findings**

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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The applicant has claimed a facility cost of \$22,191.  
The Department as identified no ineligible costs relating to the facility.

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

**5. Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the forklift is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

**6. Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$22,191 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TIC-4588.

Application TC-4591

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

Midtown Gas  
126 N. F Street  
Lakeview, Oregon 97630

The applicant operates a service station.

2. **Description of Facility**

The facility consists of a Solar Kleen King Antifreeze Recycler No. 5010, Model 143-012-007, Serial Number, D907302.

Total cost claimed is \$2,242  
Invoice documenting the cost of the facility was provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility was purchased, installed and placed in operation on May 23, 1994.
- b. The application for tax credit was submitted to the Department on February 21, 1996, within two years of substantial completion of the facility.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The facility recycles antifreeze that would otherwise be disposed of as solid waste.

b. **Eligible Cost Findings**

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

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

The facility is used 100 percent of the time for recycling antifreeze, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$2,242. The Department has identified no ineligible costs relating to the antifreeze recovery machine.

B) Annual Percentage Return on Investment

ORS 468.190, as amended by Section 4 of Enrolled House Bill 2255 (1995 Session), provides that: "If the cost of the facility .... does not exceed \$50,000, the portion of the actual costs properly allocable shall be in the proportion that the ratio of the time the facility is used for prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil bears to the entire time the facility is used for any purpose."

The facility is 100% of the time as part of a recovery process for obtaining useful material from used antifreeze, and so under the new statute the portion of costs properly allocable is 100%.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the antifreeze recovery machine is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$2,242 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4591.

Application TC-4594

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operated solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of Marathon Model TC2.5 HD/HF Compactor System, serial number 37059.

Total cost claimed is \$19,888

Invoices and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on May 24, 1994.
- b. The application for tax credit was submitted to the Department on February 27, 1996, within two years of substantial completion of the facility.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The facility, located at a printing plant, recycles waste newsprint that would otherwise be disposed of as solid waste.

b. **Eligible Cost Findings**

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



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

The facility is used 100% of the time for recycling newsprint, a material recovery process.

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

A) The applicant has claimed a facility cost of \$19,888.  
The Department as identified no ineligible costs relating to the facility.

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual cost properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process so the portion of cost properly allocable is 100%.

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

5. **Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the compactor is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$19,888 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4594.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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**1. Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

**2. Description of Facility**

The facility consists of a Marathon TC3 Compactor system, serial number 39484

Total cost claimed is \$24,568

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

**3. Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on June 20, 1995.
- b. The application for tax credit was submitted to the Department on March 6, 1996, within two years of substantial completion of the facility.
- c. The application was filed complete on July 3, 1996.

**4. Evaluation of Application**

a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.

b. **Eligible Cost Findings**

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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The applicant has claimed a facility cost of \$24,568.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. **Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the compactor is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$24,568 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4599.

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Denton Plastics, Inc.  
4427 N. E. 158th  
Portland, OR 97230

The applicant is a plastic recycling company located at 4427 NE 158th, Portland Oregon 97230. The claimed equipment will be used for plastic recycling at that location.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a Hyster Forklift model H30XM, Serial Number D001H02338S that is used to handle reclaimed plastic and scrap plastic for reclaiming.

The claimed facility investment costs:                      \$14,167

A copy of the sales invoice for the forklift was provided to show the investment made.

3. Procedural Requirements

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

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on March 7, 1996. The request for preliminary certification was approved and the 30 day waiting period was waived on March 11, 1996
- b. The investment was made on March 28, 1996
- c. The request for final certification was submitted on May 30, 1996 and was filed complete on June 6, 1996.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to transport reclaimed plastic.

b. Allocable Cost Findings

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

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

The equipment is to be used 100% of the time for transporting reclaimed plastic or scrap plastic for reclaiming.

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

No other factors were considered relevant.

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

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$14,167 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4600.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of: 12 48.9 yard drop boxes, model 2296SC, serial numbers 8488 to 8497 and 8455 to 8456.

Total cost claimed is \$44,406

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on February 8, 1996.
- b. The application for tax credit was submitted to the Department on April 23, 1996, within two years of substantial completion of the facility.
- c. The application was filed complete on July 2, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.

b. Eligible Cost Findings

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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The applicant has claimed a facility cost of \$44,406.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the drop boxes is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$44,406 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4613.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of a Marathon V6030 baler.

Total cost claimed is \$9,643

An independent accountant's review, invoices, and copies of checks documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on December 25, 1995.
- b. The application for tax credit was submitted to the Department on March 6, 1996, within two years of substantial completion of the facility.
- c. The application was filed complete on July 3, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.
- b. Eligible Cost Findings

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



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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The applicant has claimed a facility cost of \$9,643.  
The Department as identified no ineligible costs relating to the facility

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control s calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. **Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the baler is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$9,643 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4630.

State of Oregon  
Department of Environmental Quality

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. Applicant

Redmond Tallow Company, Inc.  
3110 NE O'Neil Highway, P. O. Box 152  
Redmond, OR 97756

The applicant owns and operates a rendering plant at this address.

Application was made for tax credit for an odor control facility.

2. Description of Facility

The claimed facility controls odors associated with the cooking and drying of meat scraps from grocery stores, slaughterhouse wastes, dead livestock and grease from restaurants. Two air condenser units were installed to condense steam and the odor causing compounds from three cookers. The condensing process removes the odors from the cooker exhausts.

Claimed Facility Cost:       \$ 58,408

Accountant's Certification was provided.

The applicant indicated the useful life is 10 years.

3. Procedural Requirements

The facility is governed by ORS 468 and 468a and by OAR Chapter 340, Division 28-1720.

The facility met all statutory deadlines in that:

Construction and installation of the facility was begun on May 25, 1995 and completed on July 7, 1995. The facility was placed into operation on July 10, 1995. The application for final certification was received by the Department on July 1, 1996.

4. Evaluation of Application

a. Rationale for Eligibility

The facility is eligible because its sole purpose is to control odors.

The odors are controlled by the condensing of the steam and odorous compounds given off during the cooking portion of the rendering. The odors have been controlled by the addition of the condensers.

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 uses the water produced by the condensers for plant cleanup. This results in a small savings in water costs. This cost savings is insignificant compared to the maintenance costs for the condensers.

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

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

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

Condensers are effective in controlling odors from cooking processes which produce a significant amount of steam. Other means were evaluated by the applicant but found to have substantially higher installation costs.

- 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 costs to the facility for maintenance of the condensers. These costs are included in Exhibit E of the application. The costs shown include repair costs for pinhole leaks for the year 1996. These repairs are to the piping going from the cookers to the condensers. These costs are not directly applicable to operating the condensers. The estimated operating expense changes to \$5711 for 1996 if these costs are removed.

- 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 odors.*

Review of the application confirms the cost allocation as submitted. The sole purpose of the facility is to control odors.

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 and application for certification was made 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 control odors.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocated to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$58,408.14 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4631.

Frank Jones  
Lambier Professional Group, Inc.

August 6, 1996

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

United Disposal  
2215 N. Front Street  
Woodburn, Oregon 97071

The applicant operates a solid waste collection and recycling service in Marion, Clackamas and Washington Counties.

Application is for a pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of: two thousand 14 gallon recycling bins for residential curbside recycling.

Total cost claimed is \$8,226

An invoice and copy of check for payment documenting the cost of the facility were provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The facility purchased, installed and placed in operation on March 1, 1996.
- b. The application for tax credit was submitted to the Department on August 5, 1996, within two years of substantial completion of the facility.
- c. The application was filed complete on August 7, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The equipment described in the application is used to collect recyclable material which would otherwise be disposed of as solid waste.

b. **Eligible Cost Findings**

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

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

The facility is used 100% of the time for collection of recyclable material, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$8,226.  
The Department as identified no ineligible costs relating to the facility.

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable is 100%.

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

5. **Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the containers is recycling of a material that would otherwise be disposed of as solid waste.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$8,226 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4643.

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Wacker Siltronic Corporation  
P.O. Box 83180  
Portland, OR 97283-0180

The applicant manufactures hyperpure silicon wafers, which are used by the semiconductor industry for the manufacture of computer chips.

Application was made for tax credit for an air pollution control facility installed at the applicant's Portland facility, 7200 NW Front Street.

2. Description of Facility

The claimed facility controls the gaseous emissions of nitrogen oxide and nitrogen dioxide gases and acid mist generated from the manufacture of the silicon wafers. The claimed facility consists of a Tri-Mer<sup>R</sup> Corporation Tri-NO<sub>x</sub><sup>R</sup> NO<sub>2</sub> scrubber system, pumps, mixers, tanks, ductwork, fan, and support facilities.

Claimed Facility Cost: \$2,055,405.00

Like for Like Replacement Cost: \$ 282,200.00

Ineligible Costs \$ 68,918.00

Eligible Facility Cost: \$1,704,287.00

Accountant's Certification was provided.

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

3. Procedural Requirements

The facility is governed by Oregon Revised Statutes (ORS) 468.150 through 468.190, and by Oregon Administrative Rules (OAR) Chapter 340, Division 16.

The facility met all statutory deadlines in that:

Installation of the facility was substantially completed on March 9, 1994 and placed into operation on March 9, 1994. The application for final certification was received by the State of Oregon, Department of Environmental Quality (Department) on March 15, 1995, within two years of substantial completion of the facility. The application was found to be complete on May 8, 1995.

#### 4. Evaluation of Application

##### a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution. The Air Contaminant Discharge Permit for this source Permit No. 26-3002, condition 6a requires the applicant to limit the emissions of nitrogen oxides by the wafer manufacturing process to the atmosphere. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005

Prior to installation of the new facility, a different scrubber manufactured by the same firm was being used to control the nitrogen oxides ( $\text{NO}_x$ ). The old scrubber was of outdated design and repair parts were difficult to obtain. The old scrubber had reached the end of its useful life and the continuous monitoring equipment required calibration several times per month to maintain sufficient accuracy. The old scrubber used similar wet chemistry and gas phase chemistry as the new scrubber. The applicant estimates emissions from the old scrubber to be 80 pounds of  $\text{NO}_x$  per day.

The claimed facility consists of a TRI- $\text{NO}_x$  gas scrubber system, rated at 15,000 cubic feet per minute (cfm), ductwork, associated structural support, chemical delivery station, four bulk chemical storage tanks and ten distribution pumps, three chemical mix tanks and six distribution pumps, support facilities including secondary containment systems for treatment chemicals required by the scrubber, electronic control systems, displays, and auto calibrating continuous emission monitoring equipment.

The TRI- $\text{NO}_x$  gas scrubber system collects the process exhaust from the etching of the silicon materials surface, that contains nitrogen oxide, nitrogen dioxide, and the acid mist. Exhausts from the production equipment are collected by exhaust hoods installed at several places in the ducting and pulled into the scrubber system. The three absorption columns in the scrubber system are filled with polypropylene spherical packing with a high surface area. Scrubbing solutions consisting of water ( $\text{H}_2\text{O}$ ), sodium hydroxide ( $\text{NaOH}$ ), sodium sulfide ( $\text{Na}_2\text{S}$ ), sodium chlorite ( $\text{NaClO}_2$ ), and sulfuric acid ( $\text{H}_2\text{SO}_4$ ) scrub the process exhaust in either a countercurrent or cocurrent absorption scrubber column. The system fan pulls the exhaust through the various absorption columns of the scrubber system. The process exhaust is vented through a stack to the atmosphere. The blowdown from the three absorption columns is sent to an effluent treatment plant.



The applicants estimates the emissions of the new scrubber to be less than 10 pounds of emissions of  $\text{NO}_x$  per day at current production levels.

b. Eligible Cost Findings

In determining the percentage of the certified 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 annual operating expenses exceed income from the facility, so there is no return on investment.

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

Scrubber systems are technically recognized as an acceptable method for controlling the emissions of  $\text{NO}_x$  from silicon wafer manufacturing plants. The treatment technology of the claimed facility is state-of-the-art and considered best available control technology (BACT) for the type of control required. Two other scrubber manufacturers were asked to bid on the scrubber facility. Other scrubber manufacturer bids were considerable lower in cost, but performance was determined to be less than desired. The TRI- $\text{NO}_x$  scrubber system was chosen because it was the only scrubber system considered that had an extra oxidation column. This column oxidizes NO to  $\text{NO}_2$  which can be removed from the exhaust stream. Other scrubbers could treat nitrogen dioxide ( $\text{NO}_2$ ) at the high efficiencies needed but NO was treated to less than 50% efficiency.

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

The applicant estimates the average annual operating cost of the facility for the next five years to be \$1,376,400 per year.

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

The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional Departmental Accounting review, to determine if costs were properly allocated. This review was performed under contract with the Department by Symonds, Evans, & Larson (see attached report).

In addition to like for like replacement costs referenced in section 2, the cost allocation review of this application has identified an additional \$68,918 in non allowable costs. See the attached report for details.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by Department to control air pollution.
- c. The facility complies with the Department statutes and rules, and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings and pending review of the invoices to be provided by the applicant, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,704,287 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4368.

Anurag Gupta : PRC Environmental Management, Inc.: September 15, 1995

MWWC14\WC14366.Doc

**SYMONDS, EVANS & LARSON, P.C.**  
CERTIFIED PUBLIC ACCOUNTANTS

REPORT OF INDEPENDENT ACCOUNTANTS  
ON APPLYING AGREED-UPON PROCEDURES TO  
POLLUTION CONTROL TAX CREDIT APPLICATION NO. TC-4368

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

We have performed the procedures enumerated below, which were agreed to by Wacker Siltronic Corporation (the Company), the State of Oregon, Department of Environmental Quality (the DEQ) and the Environmental Quality Commission, solely to assist you with respect to the Company's Pollution Control Tax Credit Application No. TC-4368 (the Application) filed with the DEQ for the Air Pollution Control Facility in Portland, Oregon (the Facility). This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the specified users of the report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The Application has a claimed Facility cost of \$2,055,405. Our procedures and findings are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We inspected vendor invoices which aggregated approximately 80% of the claimed costs of the Facility.
3. We discussed certain components of the Application, the Statutes and OAR's with Brian Fields of the DEQ, Charles Bianchi, a contractor for the DEQ, Prabhaker Tadepali and Anuraq Gupta of PRC Environmental Management, Inc., also contractors for the DEQ, and Jeff Shilling of Arthur Andersen LLP, a contractor for the Company.

**SYMONDS, EVANS & LARSON, P.C.**  
CERTIFIED PUBLIC ACCOUNTANTS

4. We discussed certain components of the Application with Thomas McCue, Environmental Manager for the Company.
5. We toured the Facility with Mr. McCue.
6. We discussed the like-for-like replacement costs of the Facility with John Pardell of Tri-Mer Corporation.
7. We requested that Company personnel confirm the following assertions:
  - A) There were no related parties or affiliates of the Company which had billings which were included in the Application.
  - B) The \$282,200 in like-for-like replacement costs of the pre-existing air pollution control facility as estimated by Tri-Mer Corporation is materially accurate.
  - C) The Company presently derives no income or cost savings from operating the Facility.
  - D) All supply costs included in the Application related to the installation of the Facility and did not include ongoing operating supplies.
  - E) No previously existing equipment was sold as a result of the installation of the Facility.

Findings:

1. through 6.

As a result of applying these procedures, we noted the following matters which caused us to believe that the Application should be adjusted:

|  |                   |
|--|-------------------|
| Like-for-like replacement costs identified by the Company                      | \$ 282,200        |
| Additional non-allowable costs identified by Symonds,<br>Evans & Larson, P.C.: |                   |
| • Unsupported costs of internal labor  | 59,541            |
| • Contractor retainage not yet paid  | <u>9,377</u>      |
|  | <u>68,918</u>     |
| Total non-allowable costs  | <u>\$ 351,118</u> |

Accordingly, the allowable costs for the Application should be decreased to \$1,704,287.

7. Company personnel confirmed in writing that such assertions were true and correct.

**SYMONDS, EVANS & LARSON, P.C.**  
CERTIFIED PUBLIC ACCOUNTANTS

We were not engaged to, and did not, perform an audit, the objective of which would be the expression of an opinion on the specified elements, accounts or items. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the use of the specified users above and should not be used by those who have not agreed to the procedures and taken responsibility for the sufficiency of the procedures for their purposes.

*Symonds, Evans + Larson, P.C.*

August 19, 1996

State of Oregon  
Department of Environmental Quality

REQUEST FOR PRECERTIFICATION REVIEW REPORT

---

1. Applicant

Mt. Hood Metals, Inc.  
9645 N. Columbia Blvd.  
Portland, OR 97283

The applicant operates a scrap metal yard in Portland, Oregon.

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

2. Description of Proposed Facility

The proposed facility consists of three components:

- a. Yard paving improvements including an impermeable asphalt concrete cap, storm drains, manholes, and catch basins.
- b. Detention basin.
- c. Oil/water separator.

The proposed cap consists of full-depth asphalt concrete or portland cement concrete over a low permeable asphalt concrete layer. The cap is being installed to collect and divert contaminated storm water to the treatment system. It will also prevent the infiltration of contaminated storm water to the soil and eventually to the groundwater. The proposed detention basin is designed for detaining one-third of the 2 year, 24 hour storm runoff as recommended by the Portland Bureau of Environmental Services. The overall dimension of the basin is 56.1 m x 6.1 m x 1.13 m deep. This basin is designed to remove 80% of the total suspended solids in storm water. The proposed oil/water separator (OWS) is designed to effectively treat the runoff for a one-third of the 2 year, 24 hour storm. The OWS is a Utility Vault Model 818-3-CPS with space for three coalescing media units. The coalescing media units can be installed if needed to increase the level of treatment.

3. Procedural Requirements

The facility tax credit precertification is governed by OAR Chapter 340, Division 52 - Review of Plans and Specifications and ORS 468.167 - Application for Precertification.

The facility presented detailed descriptions and plans for the proposed facility that were reviewed and approved by the Northwest Region office of the Department.

4. Evaluation of Application

The facility is eligible for precertification because the Department is requiring stormwater runoff control and the principal purpose of the facility is to control a substantial quantity of water pollution. This control is accomplished by the use of treatment works for industrial waste as defined in ORS 468B.005.

Under the federal storm water permitting program, certain categories of industries are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for contaminated storm water that is discharged to the waters of the state. One category is the metal scrapyards. Mt. Hood Metals, Inc. applied for and was issued General Permit NPDES 1200-R and one major requirement of the permit is the development and implementation of a Storm Water Control Plan (SWCP). Several best management practices are recommended as components of the SWCP including containment, storm water diversion, debris and sediment control, oil and grease separation and covering of storage and manufacturing areas.

The Department inspected this site and discussed the facility with Mt. Hood Metals and its facility engineering consultant. The proposed Mt. Hood Metals facility can meet the requirements of the SWCP.

5. Summation

The facility is eligible for a tax credit because it will be built to comply with permit conditions of the Department to control, reduce or prevent a substantial amount of water pollution from storm water run off. The facility also meets the requirements of ORS 468B.005.

6. Director's Recommendation

Based upon these findings, it is recommended that the claimed facility be precertified as being eligible for tax relief under ORS 468.170.

Elliot J. Zais  
(503) 229-5292  
September 11, 1996  
MW\WC14\WC14349.Doc

State of Oregon  
Department of Environmental Quality

Memorandum

Date: September 25, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director *Langdon Marsh*  
Subject: Agenda Item C, Variance Application of Nona Henkel, EQC Meeting: October 11, 1996

**Background**

Nona Henkel, as the administrator of the estate of Richard Hohanshelt, submitted a variance application on May 14, 1992. The property is located at the south end of the Beverly Beach subdivision and is approximately .24 acres. The developable area of the property is limited by an escarpment on the western side of the property and Avery Street which borders the east property line.

In February 1992, Lincoln County staff evaluated the property for sewage disposal. The soil limitations found by the county would prohibit the installation of a conventional system. While the soil limitations do not prohibit the installation of a conventional sand filter system, the size of the developable area of the property is not large enough to locate both the initial system and a complete replacement system. The area for the system and its replacement is approximately 37 feet by 30 feet. Due to these constraints, Lincoln County denied the application for on-site sewage disposal.

Ms. Henkel, in her variance application dated May 1, 1992, proposed to install a sand filter system that would discharge treated wastewater through the bottom of the filter. The system would contain approximately 308 square feet of seepage area. The future replacement system would be a conventional sand filter unit located on the east side of the initial filter. A driveway is proposed across the north side of the property, over a portion of the groundwater interceptor and the dosing septic tank.

The application would require a variance from the following administrative rules:

- (1) OAR 340-71-150(4)(a) - limits the use of sewage treatment and disposal systems to properties that comply with the requirements of OAR 340-71-220 or the requirements of OAR 340-71-260 through OAR 340-71-360 depending the proposed system. The rule also requires sufficient area to accommodate an initial and replacement system which would be in compliance with the on-site rules.
- (2) OAR 340-71-290(3)(b)(A) - limits the use of conventional sand filter systems to sites where a minimum separation distance of 24 inches can be maintained between the highest level of a permanent water table and the bottom of the effective seepage area.



- (3) OAR 340-71-290(5) - limits the use of conventional sand filter systems that discharge effluent through the bottom to sites where the soils are rapidly drained and a minimum separation distance of 24 inches can be maintained between the highest level of the water table and the bottom of the sand filter.
- (4) OAR 340-71-290(6)(f) - requires the sand filter to be constructed in compliance with OAR 340-71-295.
- (5) OAR 340-71-295(2)(a) - restricts the effective medium sand surface area of a conventional sand filter system serving a single family dwelling to not less than 366 square feet.
- (6) OAR 340-71-315(1)(d) - provides that a tile dewatering drainage system be used in conjunction with a conventional sand filter system if the water table can be lowered to meet the requirements of OAR 340-71-290(3).
- (7) OAR 340-71-315(2) - requires a minimum horizontal separation distance of 20 feet between the side of the conventional sand filter unit and the dewatering drainage tile.

A variance hearing was held at the property on August 18, 1992 by Sherm Olson, variance officer of the Department of Environmental Quality. The variance officer determined that there were three significant issues that would not allow the installation of the proposed system. The first issue was the very limited area for the system and the replacement system. Both the initial system and the replacement system would be 14% smaller than the recommended size. Due to these size limitations, the driveway would be placed over a portion of the system and could lead to soil compaction and physical damage to the system. Secondly, the system proposed was determined to not to be appropriate for the soil conditions on the property. The proposed system was designed for deep, rapidly draining soils below the filter bottom. The soils on the property were determined to be cemented sand by both the variance officer and Lincoln County staff. Finally, the potential for harm to the public health and for pollution to the waters of the state would be great. Due to the limited setback of the filter from the groundwater inceptor (50% less than recommended) and the fact that the effluent would be discharged into the ground where the permanent groundwater table is expected, the variance officer felt that the sand filter effluent which would contain pathogens and pollutants, would be discharged to the groundwater table. This would cause discharge of the contaminated water to the land surface west from the escarpment, which is directly above a public beach. For these reasons, the variance application was denied.

The applicant appealed the denial and the appeal was referred to Hearings Officer Linda B. Lee for review and drafting of a preliminary order. The hearings officer recommended that the variance be granted, with whatever limitations that the Department deemed necessary. This recommendation is based on the fact that there are several homes within the area of the applicant's lot which have sewage disposal systems.

Memo To: Environmental Quality Commission

**Agenda Item C**, Variance Application of Nona Henkel, EQC Meeting: October 11, 1996

Page 3

In response to the preliminary order from the hearings officer, Sherm Olson (the variance officer) completed a memorandum dated July 12, 1996. In this memo, Mr. Olson once again expressed his concern with the limited size of the property and thus the size of the system. Both the initial system and the proposed replacement system would be 14% undersized and the separation distance between the filters and the groundwater interceptor would be half of the recommended distance. Furthermore, the potential for significant harm to the public health or waters of the state would be great. The treated sewage that would be discharged from the filters (which would contain pathogens and pollutants) could easily enter the groundwater. As per the engineering geologist who reviewed the property, the groundwater from the property is discharged in seeps on the escarpment (the cliff above Highway 101). Harm to the health of the public on the beach below and pollution to the ocean are likely.

In regards to the hearings officer's assertion that there was other homes that have been developed in the adjacent area, Mr. Olson contacted Lincoln County Public Works Department regarding the development. None of the properties on the ocean side of Avery Street have been approved as meeting the necessary standards for installation of sewage disposal systems. On the opposite side of the street, only one has received variance approval for a sand filter system. The majority of the development relies on seepage pits as the method of sewage disposal.

In a letter dated July 28, 1996, Ms. Henkel asserts that she is willing to install any kind of system that the Department would find acceptable. The variance officer has stated that he does not know of a system that would be adequate to protect the public health or waters of the state due to the size and soil limitations of the property.

#### **Authority of the Commission with Respect to the Issue**

ORS 454.605 to 454.745; OAR 340-71-415

#### **Department Recommendation**

The Commission may either uphold or reverse either part or all of the Hearings Officer's Preliminary Order and Opinion. The Variance Officer recommends that the Commission deny the variance application as per his February 24, 1993 denial letter.

#### **Attachments**

1. Letter from Nona Henkel, dated July 28, 1996
2. Letter from Susan M. Greco to Nona Henkel, dated July 15, 1996
3. Memorandum from Sherman Olson to Susan M. Greco, dated July 12, 1996
4. Letter from Susan M. Greco, dated June 11, 1996

Memo To: Environmental Quality Commission

**Agenda Item C**, Variance Application of Nona Henkel, EQC Meeting: October 11, 1996

Page 4

5. Preliminary Order and Opinion, dated June 7, 1996
6. Letter from Nona Henkel to Linda B. Lee, dated July 24, 1995
7. Letter requesting an appeal of the variance denial from Richard E. Lyons, dated March 14, 1993
8. Variance Denial, dated February 24, 1993
9. Letter from Sherm Olson to Nona Henkel, dated August 13, 1992
10. Variance Application, dated May 14, 1992
11. Notice of Denial for On-Site Sewage Disposal from Lincoln County, dated February 28, 1992
12. Site Evaluation Application from Lincoln County, dated February 3, 1992

**Reference Documents (available upon request)**

ORS Chapter 454

Oregon Administrative Rules, Chapter 340, Division 71

Report Prepared By: Susan M. Greco  
Phone: 229-5213

RECEIVED

AUG 05 1996

Environmental Quality Commission

OFFICE OF THE DEPUTY DIRECTOR

811 S.E. 6 th

Portland , Oregon 97204

RE: Variance Application

Tax Lot 500; Section 8AC; Township 10 South

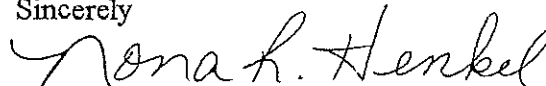
Range 11 West, W.M.; Lincoln County

Dear Ms. Greco;

Mr. Sherman still says my land is not large enough for a dwelling ,sandfilter and repair field. If I built a home on pillars, that would open up the entire area for a septic system and driveway. Mr. Sherman said the land was 50 x 97 which is 4850 usable square feet ,even with set backs and driveway that should be more than enough room. As I have said before I am willing to put in any kind of an acceptable system that D.E.Q. would allow.

If I should be turned down, can I at a later date reapply to D.E.Q., should a more favorable system become available ?

Sincerely



321 N.E. 4 th

Newport , Oregon 97365

Att. 1 (1 page)

July 15, 1996

Nona Henkel  
321 NE 4th Street  
Newport OR 97365

RE: Variance Application  
Tax Lot 500; Section 8AC; Township 10 South;  
Range 11 West, W.M.; Lincoln County

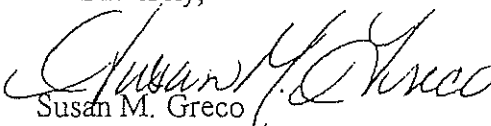
Dear Ms. Henkel:

Attached you will find the Department's objections to the hearing officer's Preliminary Order and Opinion in your variance application. The variance officer is recommending to the Environmental Quality Commission that your variance application be denied. You are welcome to file a written response to the Department's objections prior to August 1, 1996. Please forward your written response to the Environmental Quality Commission, c/o Susan M. Greco, 811 S.W. 6th Avenue, Portland, Oregon, 97204.

As I previously informed you, the Environmental Quality Commission will be considering your application at their August 23, 1996 meeting. The meeting will be held at the Hermiston Community Center, 415 Highway 395-S, Hermiston, Oregon. No oral argument from either side will be allowed at this meeting, thus each side's case will be based on the written documentation in the record only.

If you should have any questions, please feel free to call me at (503) 229-5213 or (800) 452-4011 ext. 5213 within the state of Oregon.

Sincerely,

  
Susan M. Greco  
Rules Coordinator

cc: Sherm Olson, WQ



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1



Att 2. (1 page)

State of Oregon  
Department of Environmental Quality

Memorandum

Date: July 12, 1996

To: Susan Greco

From: Sherman Olson *Sherm*

Subject: Nona Henkel Variance

Linda B. Lee is a hearings officer for the Employment Department of the State of Oregon. She reviewed the record of a variance appeal denial submitted by Ms. Nona Henkel. Ms. Lee recommends that the variance be granted, finding "that special physical conditions render strict compliance unreasonable, burdensome, or impractical". Ms. Lee goes on to state that: "The lot size and soil type preclude installation of most sewage systems. However, subject to certain conditions and if a variance is allowed a system can be installed that will meet the needs of the applicant and have minimal adverse effect on the environment." The Department respectfully disagrees with the findings and conclusions of the hearings officer, and asks the Commission to deny the variance requested by Ms. Henkel.

The hearings officer's report does not identify the special physical conditions upon which she relied to conclude that strict compliance (with the on-site rules) was unreasonable, burdensome or impractical. However, the logical inference is that reliance was placed on the facts Ms. Henkel related in her July 24, 1995 letter about development near her property. That is, there are 17 homes in the area of which only four are on lots larger than Ms. Henkel's, and that two homes were built on lots similar in size to hers between the time the variance was denied and the hearings officer's review. Several points in the record need to be considered by the Commission.

As a variance officer qualified in soil sciences and possessing knowledge and experience in sewage disposal methods, I examined the Henkel property to determine its physical and morphological limitations. It is located

*Att. 3 (4pgs)*

between Avery Street and Highway 101. The overall size of the property is less than a quarter acre in area. The level portion is 50 feet wide by approximately 97 feet deep to the escarpment (or cliff). It extends past the escarpment an additional 87 feet (approximately) to Highway 101. The soils are shallow (18 inches deep) to a moderately to strongly cemented sand horizon 40 to 50 inches thick. Below that depth, weakly to moderately cemented sands are present. County staff observed water seeping at 32 inches into a pit they examined, and standing water as close as 54 inches from the surface in February of 1992. In August of 1992, the top of the water table was located at 137 inches from the surface.

I conducted a variance hearing so as to develop a record of the facts relevant to Ms. Henkel's request to allow installation of a modified and undersized sand filter treatment and disposal system at the proposed site. After the hearing I reviewed the facts and evaluated the proposal in consideration of those facts. The area within which to install a system is very limited. The sand filter treatment unit (and its future replacement), and the groundwater interceptor trench, dwelling, driveway, utilities, etc. must all be placed within a 5,000 square foot area between Avery Street and the top of the escarpment. The engineering geologist has recommended the dwelling be placed at least 22 feet back from the top of the escarpment. The plan submitted with the variance application places the sand filter system between the dwelling and Avery Street. The area for the system is so small that the sand filter is 14% undersized, the future replacement filter is 14% undersized, and the separation distance between the filters and the groundwater interceptor trench is half of the established minimum separation distance (10 feet instead of 20 feet). Further, cemented sands are not considered suitable to placement of a sand filter that would discharge out the filter bottom because they are not rapidly or very rapidly drained.

The site has both a temporary water table and a permanent water table. Given the high rainfall in the area (estimated at 70 to 80 inches), a temporary water table will occur at the top of or within the moderately to strongly cemented sand horizon. The permanent water table below the moderately to strongly cemented sands is expected to

consistently rise to within 67 inches (or closer) of the surface (as evidenced by the lack of iron coatings on the cemented sand below that depth and previous observations by the County). The variance proposal would have the sand filter discharge effluent below the bottom of the moderately to strongly cemented sands, into the moderately to weakly cemented sands where groundwater is expected.

A preliminary site reconnaissance investigation was conducted by an engineering geologist. He reported the level area of the property appears to be stable, but that the area of the lot west from the escarpment is temporarily stabilized by the vegetation present. He reports the presence of groundwater seeps below the escarpment and along the exposed sandstone face above Highway 101. Increased groundwater levels caused by septic systems or severe rain could accelerate slope movement and top of slope recession.

My decision not to grant the Ms. Henkel's request was based on my experienced judgment that it would not be protective of the public health or waters of the state. Reduction of the size of the sand filter treatment is not warranted. Sand filters are very susceptible to failure due to hydraulic overloading, reducing the filter's size increases the risk of failure. If the filter should fail, untreated sewage will rise within the filter, thus creating a flow gradient towards the interceptor trench 10 feet away. The interceptor could easily pick up the sewage and pipe it directly to the toe of the slope, next to Highway 101. The treated sewage discharged from a sand filter contains pathogens (primarily bacteria and viruses) and dissolved pollutants (nitrates and phosphorous). Given the shallow depths to temporary and permanent water tables and the sandy texture of the soil (above and below the strongly cemented horizon), the treated wastewater will move downward to the water table, and then move laterally with the groundwater to locations of discharge. The seeps reported by the engineering geologist below the top of the escarpment are very likely to be the discharge locations. From there, the pathogens would move with the surface water to Highway 101 and eventually cross the highway to the public beach and ultimately to the ocean. This presents a significant health risk to people recreating on the beach.



The decision letter of February 24, 1993, mailed to Ms. Henkel summarizes the facts and describes how the decision was reached. It is attached to this memorandum. I request it be provided to the EQC as a part of this response.

I was not able to find that strict compliance with the commission's rules was inappropriate for cause, nor could I find that the property had special physical conditions to render strict compliance to be unreasonable, burdensome, or impractical. In fact, the physical limitations of the property, as described in my report, clearly do not justify the granting of variance from the rules. Ms. Lee did not address the public health issues in her report, or how her proposed order would be protective of public health.

In response to information about other properties in the area, staff with Lincoln County Public Works Department reported to me that of the 19 lots located on the ocean side of Avery Street (on tax lot maps 10-11-8 AB and 10-11-8 AC), one lot was granted a variance in 1986, two lots were denied through the variance process, nine lots have had failing systems and been repaired or are under repair, there are no records for six lots, and none have been approved as meeting established standards for installation of a new system. Some of these lots with dwellings on them have seepage pits installed prior to 1969 as the method of sewage disposal, and some of these have failed and been replaced/repaired. With respect to the 10 lots on the opposite site of Avery Street: five have been combined to make two lots (one of the combined lots has been approved for a seepage trench system, the other has been denied for development); three lots (two of these were combined to make a single lot) have had seepage pits, one failed and has been repaired); and one lot was approved for a sand filter system.

June 11, 1996

Nona Henkel  
321 NE 4th Street  
Newport OR 97365

RE: Variance Application  
Tax Lot 500; Section 8AC; Township 10 South;  
Range 11 West, W.M.; Lincoln County

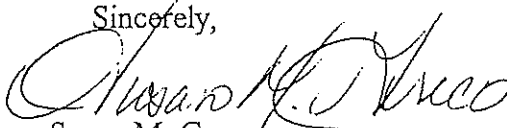
Dear Ms. Henkel:

The Environmental Quality Commission will be considering the Preliminary Order and Opinion of the hearings officer in your variance application for the property located in Lincoln County at their regularly scheduled meeting to be held August 23, 1996. The location of the meeting has not yet been determined. Your application will be heard in the regular course of the meeting. At this meeting the Commission will be making a final determination on your variance application.

If you do not agree with the hearings officer's order, I will need to receive, in writing, any objections that you have to the proposed order prior to July 12, 1996. Please forward to the Environmental Quality Commission, c/o Susan M. Greco, 811 S.W. 6th Avenue, Portland, Oregon, 97204. Similarly, if the Department has any objections to the hearings officer's order, those objections will be forwarded to you prior to July 12, 1996.

If you should have any questions or require special accommodations for the meeting, please feel free to call me at (503) 229-5213 or (800) 452-4011 extension 5213 within the state of Oregon.

Sincerely,

  
Susan M. Greco  
Rules Coordinator

cc: Sherm Olson, WQ



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993

DEQ-1

AH.4 (1 page)

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

|  |   |                                 |
|--|---|---------------------------------|
| Regarding the variance application of: | ) | PRELIMINARY ORDER AND           |
|  | ) | OPINION                         |
| Nona Henkel,                           | ) | WQ-IOSWW-Variance               |
|  | ) | Section 8 AC; Township 10 South |
| Applicant                              | ) | Range 11 West, W.M.             |
|  | ) | Lincoln County                  |

HISTORY

The Department of Environmental Quality (DEQ) received an application from Nona Henkel (hereinafter applicant) dated May 1, 1992, for a permit to construct an on-site sewage system on an oceanview lot. A variance hearing was conducted August 18, 1992. Variance officer Sherman O. Olson, Jr. issued a variance denial on February 24, 1993. On March 17, 1993, applicant appealed the denial.

The Environmental Quality Commission (EQC) referred the appeal to Hearings Officer Linda B. Lee on July 10, 1995, for initial review and preliminary order under ORS 454.660 and OAR 340-71-440. This preliminary order is based on a complete review of the file.

The documents considered were: Letter and site map from Nona Henkel, July 24, 1995; Variance Appeal from Richard E. Lyon, registered sanitarian, March 14, 1993; Variance Denial by Sherman O. Olson, Jr., February 24, 1993; Letter from Sherman O. Olson, Jr., scheduling August 18, 1992, visit to property, August 13, 1992; Letter from Richard E. Lyon regarding application for variance, May 14, 1992; Land Use Compatibility Statement, signature not legible, May 8, 1992; Three site maps prepared by Lyon & Associates, dated May 3, 1992 (1) and May 4, 1992 (2); Application for Variance signed by Nona Henkel, May 1, 1992; Preliminary Site Reconnaissance Report prepared by Richard Larrett, engineering geologist, April 3, 1992; Cross section maps prepared by Richard Larrett, March 30, 1992; Notice of Denial for On-Site Sewage Disposal, John Earls, registered sanitarian, Lincoln County, Department of Planning and Development, February 28, 1992.

ISSUE

Whether the application for variance should be denied.

OPINION

The application for variance is granted.

DISCUSSION

ORS 454.657 states in part:

(1) After hearing the Environmental Quality Commission may grant to applicants for permits required under ORS 454.655 specific variances from the particular requirements

of any rule or standard pertaining to subsurface sewage disposal systems for such period of time and upon such conditions as it may consider necessary to protect the waters of the state, as defined in ORS 468B.005. The commission shall grant such specific compliance with the rule or standard is inappropriate for cause or because special physical conditions render strict compliance unreasonable, burdensome, or impractical.

Section (2) of this statute allows for variance based on hardship. The applicant did not request such a variance.

ORS 340-71-415(3) states:

No variance may be granted unless the Commission or a special variance officer finds that:

- (a) Strict compliance with the rule or standard is inappropriate for cause; or
- (b) Special physical conditions render strict compliance unreasonable, burdensome, or impractical.

By seeking a variance, applicant concedes that her application cannot meet the requirements of a particular rule or standard. Applicant is the proponent of a certain fact (a variance from the rules and/or standards), so applicant has the burden of proof.

As of May 1992, the applicant was administrator of the property, part of the estate of her deceased brother, Richard Hohanshelt. The property was an oceanview lot, Tax Lot 500; Section 8 AC; Township 10 South; Range 11 West, W.M., Lincoln County. The applicant is hoping to obtain a variance for a subsurface sewage system so that a two bedroom dwelling can be built on the site.

In February 1992, Lincoln County staff evaluated the property for sewage disposal methods. They found cemented sand within the soil profiles of two pits at a shallow depth. The cemented sand is considered to be a horizon that limits effective soil depth. The soil type, the fact the property is in a high rainfall area, and the groundwater table, are limitations that preclude the use of a standard system and most alternative systems. Richard Lyons, a registered sanitarian, hired by the applicant, proposed installation of a conventional sand filter treatment system. The DEQ variance officer concluded that the property was not large enough to physically locate a sand filter system and a complete replacement system while maintaining appropriate setbacks from the property lines and escarpment.

The property is located in an area that is zoned R 1 and will be served by the Beverly Beach water district. There are a number of adjacent lots of similar size on which dwellings are built. On at least one of the adjacent lots a variance was obtained from DEQ to install a sewage system substantially similar to the one proposed by the applicant. In the letter submitted by the applicant dated July 24, 1995, she states that there are 17 homes in the area, 13 of which are on lots that are the same size as hers and that homes were built on two of the lots within the two year period prior to the date of her letter. This means that the homes were built after applicant's application for variance was denied. The applicant is "willing to install any kind of an acceptable sewer system recommended by DEQ or any other agency."

Applying the rule to the facts presented, the hearings officer finds that special physical conditions render strict compliance unreasonable, burdensome, or impractical. The lot size and soil type preclude installation of most sewage systems. However, subject to certain conditions and if a variance is allowed a system can be installed that will meet the needs of the applicant and have minimal adverse effect on the environment.

The case was referred to the hearings officer in 1995. There is no information in the file forwarded to the hearings officer to explain what the status of the case was from April 1993 until July 1995, or the delay in disposing of the matter during that time period. Were this matter being decided in 1993 or 1994, the hearings officer would order that the variance be granted subject to such conditions as DEQ deems appropriate. However, in view of the severe winter weather during late 1995, and early 1996, the hearings officer must impose a further condition that the variance be granted if the condition of the site is substantially similar to the condition that existed in August 1993, when the variance officer visited the site. In light of the already inordinate delay it is recommended that DEQ complete any further review within 60 days from the date this decision is mailed.

#### ORDER

The applicant's variance request is granted under ORS 454.467, provided that the condition of the site is substantially similar to the condition that existed in August 1993, and with such additional conditions as DEQ deems appropriate.

ENVIRONMENTAL QUALITY COMMISSION



Linda B. Lee, Hearings Officer

This Proposed Order and Opinion was mailed to DEQ and the applicant on June 7, 1996.

#### FURTHER REVIEW

If the applicant and DEQ agree with this order and opinion, the director of the Environmental Quality Commission (EQC) will enter a final order. If the applicant or DEQ disagree with this preliminary order and opinion, the proposed order will be sent to the EQC for review and action. You will be notified of the EQC meeting date when this preliminary order and opinion will be considered.

July 24, 1995

Linda B Lee  
Administrative Law Judge  
800 NE Oregon St. #6  
Portland, Ore. 97232

RE: WQ-IOSWW-Variance Denial  
Tax Lot 500; Section 8 AC: Township 10 South;  
Range 11 West, W.M.; Lincoln County

Dear Ms Lee:

I am in receipt of your letter dated July 21, 1995 and wish to thank you for offering to let me respond to it.

This property of which I am seeking a sewer system on, sits on a bluff overlooking the ocean to the west, along with 17 other homes, a gravel road on the east is actually the front of the property as it is the only way to gain entry.

Enclosed are copies of block 1 and block 2 properties, all on this same bluff and most with homes on them. Please note that the lots for the most part are the same in size. Out of the 17 homes only 4 have lots larger than mine, the other 13 are the same size with homes built on them, two of which have been built within the last two years.

Then I would like to direct your attention to the enclosed letter from Mr. Olson dated Feb. 24, 1993, to page 4 and to the paragraph directly under #7. starting with the 3rd sentence which starts out " The most significant issue restricting placement of an on - site system on this property is the very limited area the property offers for placement of the system " My question now is if all or most of the lots on the bluff are the same size as mine and according to the above mentioned paragraph why were these people allowed a sewer system that I can not acquire when I plan on a house no larger than any one else? I have always been willing to install any kind of an acceptable sewer system recommended by DEQ or any other agency.

Thank you again for your time and patience.

Sincerely



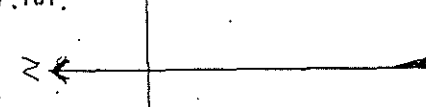
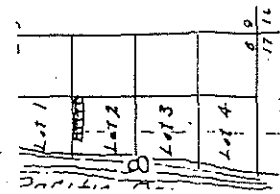
Nona R Henkel  
321 N.E. 4th St.  
Newport, Ore. 97365  
Tel. 503-265-5122

Att. 6 (2 pages)

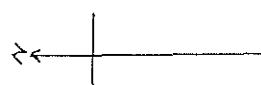
# ADDITION TO BEVERLY BEACH.

N. 8. T. 10. S. R. 11. W. W. M.

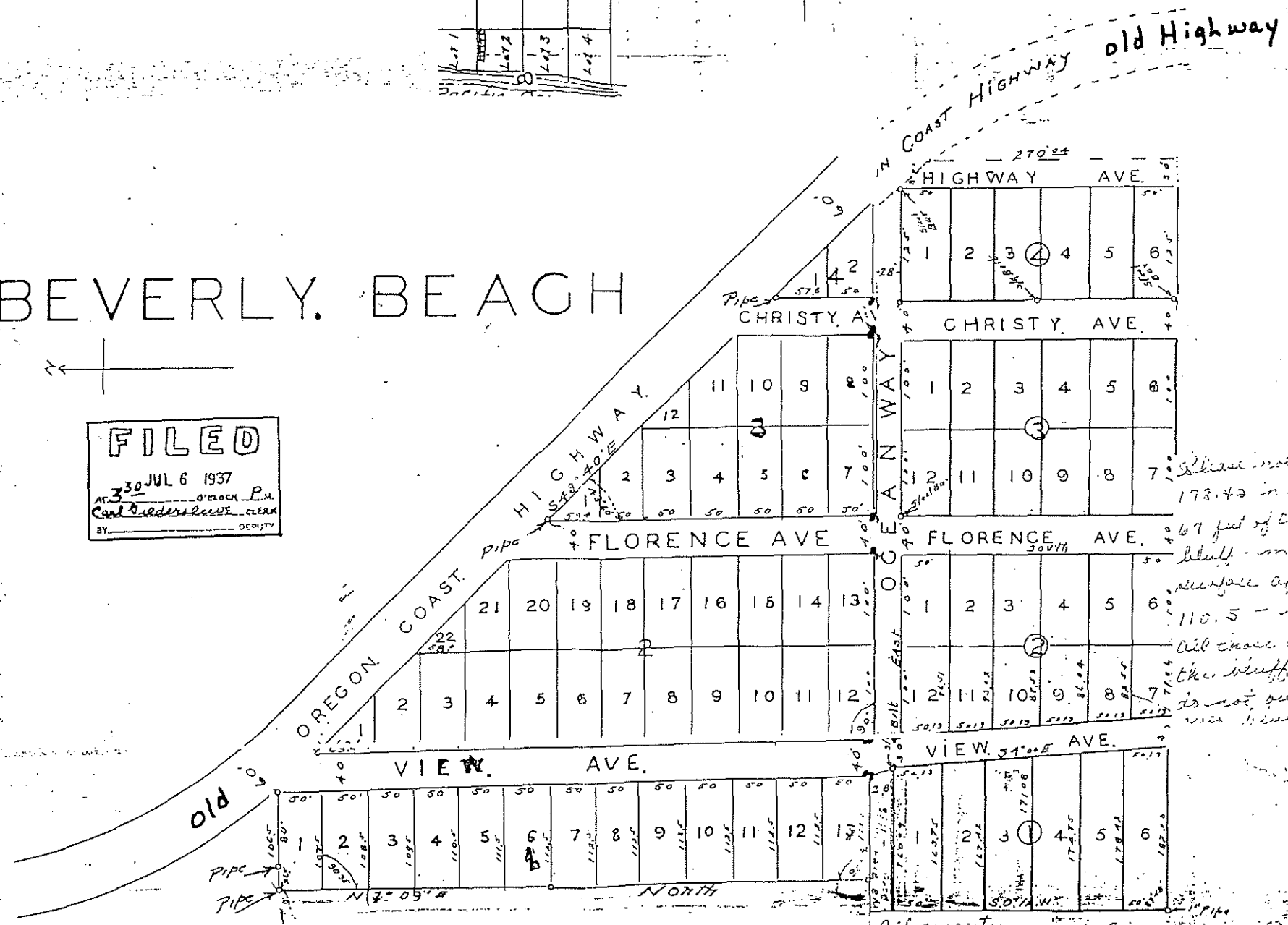
FIRST  
ADDITION  
TO Beverly Beach  
BOOK 7, PAGE 65



# BEVERLY BEACH



**FILED**  
JUL 6 1937  
AT 3:30 O'CLOCK P.M.  
Carl C. ...  
BY ...



Please note lot 5 is  
173.42 in length - some  
67 feet of that is over the  
bluff - making usable  
area approximately  
110.5 - map should show  
all those who own on  
the bluff - map I own  
does not own property  
with bluff

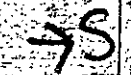
All property  
marked in  
green belongs  
to Ronald Rice  
NO. 11.

NEW LOCATION.  
Note Size  
of Lots

OREGON COAST HIGHWAY

OCEAN

OCEAN



MAR 17 1993

**Lyon & Associates**  
Environmental Consultants/Designers

OFFICE OF THE DIRECTOR

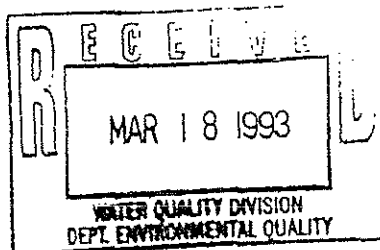
Date: 3/14/93  
To: Mr. Sherman Olson, Jr., R.S.  
From: Richard E. Lyon, R.S. *R. Lyon*  
Re: Nona Hinkel Variance Denial Appeal  
T.10, R.11, Sec.8AC, Tax Lot 500; Lincoln Co.

As per our discussion in your office last Wednesday 3/10/93 regarding our expressed intent to appeal the decision to deny the above mentioned variance request. You informed us there is no fee and no particular application form only that we notify and send our appeal to the director through you directly.

Please consider this letter our application. The basis of our case is listed herewith but must request a bit more time to gather the necessary information to present a reasonable case to the Environmental Quality Commission. That will include technical information on the drainage characteristics of weakly and moderately cemented sands. We will continue to maintain that the presence of the "fluctuating permanent" water table is of no real concern given the location of this lot is high on a bluff above highway 101 and the Pacific Ocean and the fact that effluent is of such high quality. Additionally the lot is served by Beverly Beach Community Water. Further, it is our contention that the weakly and moderately cemented sands found at the discharge point are well drained enough to permit proper disposal with no adverse environmental impact for the 300 gpd system. Additionally we are fortunate in that there exist 4 almost identical systems approved by the department in the immediate area and at least 5 more close by that we can monitor system functioning data.

I hope this meets your needs and think a period of 30 days will be sufficient to gather the necessary information. Feel free to call at 265-6826 if you have questions or concerns or if this time frame is not acceptable.

Richard E. Lyon R.S.  
Registered Sanitarian  
Oregon - Washington



12035 N.E. Beverly Dr.  
Newport, OR 97365  
(503) 265-6826

Att. 7 (1 page)



February 24, 1993

CERTIFIED MAIL

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

Ms. Nona Henkel  
321 N.E. 4th Street  
Newport, Oregon 97365

Re: WQ-IOSWW-VARIANCE DENIAL: Tax Lot 500; Section 8 AC; Township  
10 South; Range 11 West, W.M.; Lincoln County.

Dear Ms. Henkel:

This correspondence confirms that a variance hearing was held on the above described property on August 18th, 1992, as provided for under Oregon Administrative Rules for On-Site Sewage Disposal, OAR Chapter 340, Division 71, Rule 430. The hearing was conducted to consider your request for the Department to waive certain rules which govern the siting of a conventional sand filter treatment and disposal system.

Lincoln County staff evaluated the property for sewage disposal methods in February of 1992. They found cemented sand within the soil profiles of two pits at a shallow depth. The cemented sand is considered to be a horizon that limits effective soil depth. In areas of high rainfall (estimated to be 70 to 80 inches in the area of the property), a temporary groundwater table will commonly occur above the cemented sand horizons during the rainy season. Water was observed seeping into one pit at about 32 inches below the surface, and standing water was measured in the pits at 54 inches and 64 inches, respectfully. Although these limitations preclude the use of a standard system and most alternative systems, they do not prevent consideration of a conventional sand filter system. However, the developable area of the property, between the top the western escarpment and the east property line along Avery Street, is not large enough to physically locate a sand filter system and a complete replacement system, while maintaining appropriate setbacks from the property lines and the escarpment. When these are taken into account, the area for the system and its replacement is approximately 37 feet by 30 feet (1110 square feet). This limited area may be reduced further due to the locations of the dwelling and driveway. In consideration of these factors, Lincoln County issued their notice of denial for on-site sewage disposal on February 28, 1992.

Mr. Richard Lyon, Lyon and Associates, proposed installation of a conventional sand filter treatment system (to serve a two bedroom home) that would discharge treated wastewater through the bottom of the filter, at about 66 inches below the surface. The filter would contain approximately 308 square feet of effective seepage area. A groundwater interceptor trench 48 inches deep is proposed to be placed 10 feet from the north, east, and south sides of the filter, to drain the perched water table expected to be present during the



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

AH. 8 (5 pages)



rainy season. The future replacement system is proposed to be a conventional sand filter treatment and disposal unit located on the east side of the initial filter, having the same configuration as the initial sand filter. The east side of the groundwater interceptor trench would be relocated along the east property line so as to provide a 10 foot separation distance to the replacement sand filter. The home would be located at least 11 feet west from the initial sand filter and 22 feet east from the top of the escarpment. A driveway is proposed be along the north side of the property, over a portion of the groundwater interceptor and the dosing septic tank.

Just prior to the information gathering hearing, I viewed the property and examined two pits. The property is on an uplifted marine terrace. The level portion of the property is about 97 feet deep (between Avery Street and the top of the escarpment to the west), and 50 feet wide. At the escarpment the property extends farther to the west, approximately 78 feet, to Highway 101. Soil profiles within the two pits were found to be similar, and can be described as having very dark grayish brown loam to sandy loam soil textures from the surface to 18 inches, above a variegated (brownish yellow and very pale brown) moderately to strongly cemented sand to a depth of approximately 58 to 68 inches, with moderate to weakly cemented sand below. Roots were abundant from the surface to the top of the cemented sands (about 18 inches), and were few to non-existent below that depth. Iron coatings were not observed on the moderately to weakly cemented sands below 67 inches, suggesting the presence of a fluctuating water table that rises to this level. The sand was damp below 67 inches. An auger was used to examine the soils further in one of the pits. The sand appeared to be weakly cemented to the bottom of the auger hole (12 feet). A groundwater table was located at 137 inches from the surface. In my view, the site has both a perched water table and a permanent water table. A seasonal water table is expected to perch above and within the moderately to strongly cemented sands during the rainy season, and dissipate after the rainy season is over. A fluctuating permanent water table is expected to be present within the moderately to weakly cemented sands, and rise as high as 67 inches or closer to the surface. I also observed the property has very little area available within which to site a sewage system and a replacement system.

A preliminary site reconnaissance investigation for this property was conducted by Richard Larrett, Engineering Geologist, and a report was issued dated April 3, 1992. The report will not be summarized in this letter, however, portions of the report are of interest with respect to the variance request. Mr. Larrett reports the building area (east from the top of the escarpment) appears to be stable. On the lower portions of the slope to the west, vegetation has temporarily stabilized areas of slope movement. Groundwater seeps occur on the slope west from the top of the escarpment, at an elevation of about 90 feet, and water flows along the top of the exposed sandstone east of the road cut for Highway 101. Increased groundwater levels caused by septic systems or

severe rain could accelerate slope movement and top of slope recession. Mr Larrett recommends the foundation footings for the house be located at least 22 feet east from the top of the slope. All captured water from surface drains and downspouts should be drained in tight-jointed pipe to the toe of the slope on the west.

The proposal sought variance from the following rules:

1. OAR 340-71-150(4)(a)--which limits the use of standard and/or alternative sewage treatment and disposal systems to properties that comply with the requirements of OAR 340-71-220 and/or the requirements of OAR 340-71-260 through OAR 340-71-360 (as appropriate for a specific type of alternative system). The rule also requires the property to contain sufficient area to accommodate an initial and replacement system, both in full compliance with the on-site rules. The property does not comply with these requirements.
2. OAR 340-71-290(3)(b)(A)--which limits the use of conventional sand filter systems to sites where a minimum separation distance of 24 inches can be maintained between the highest level of a permanent water table and the bottom of the effective seepage area. The bottom depth of the effective seepage area is proposed to be about 66 inches from the surface. The water table is expected to rise as close as 67 inches from the surface.
3. OAR 340-71-290(5)--which limits the use of conventional sand filter systems that discharge effluent through the bottom of the filter to sites where the soils are rapidly or very rapidly drained and a minimum separation distance of 24 inches can be maintained between the highest level of the water table and the bottom of the sand filter. As described above, the separation distance to the water table is expected to be less than 24 inches. The sand present in the lower horizon of the profile appeared to be moderately to weakly cemented, thus it is not considered to have rapid or very rapid permeability.
4. OAR 340-71-290(6)(f)--which requires the sand filter be constructed in compliance with OAR 340-71-295. The proposal presented for consideration requests approval to construct a sand filter that does not meet the requirements of OAR 340-71-295.
5. OAR 340-71-295(2)(a)--which restricts the effective medium sand surface area of a conventional sand filter system serving a single family dwelling to not less than 366 square feet. The proposal asks that this minimum area be reduced to 308 square feet.
6. OAR 340-71-315(1)(d)--which provides that a tile dewatering drainage system can be used in conjunction with a conventional sand filter system if the water table can be lowered to meet the requirements within OAR 340-71-290(3). The proposal does

not place the tile dewatering drainage system deep enough to lower the permanent water level to provide a minimum separation distance of 24 inches.

7. OAR 340-71-315(2)--which requires a minimum horizontal separation distance of 20 feet between the side of the conventional sand filter unit and the dewatering drainage tile. The proposal asks this separation distance be reduced to 10 feet.

Variance from particular requirements of the Oregon Administrative Rules for On-Site Sewage Disposal may be granted if a finding can be made that strict compliance with the rules is inappropriate for cause, or that special physical conditions render strict compliance to be unreasonable, burdensome or impractical. Based upon the variance record and information obtained relevant to this matter, such findings can not be made. The most significant issue restricting placement of an on-site system on this property is the very limited area the property offers for placement of the system. Because of the severity of this single limitation, the consultant is not able to propose the type of system appropriate for the soil conditions. Instead, he proposes a type of sand filter that requires deep, rapidly drained soils below the filter bottom. These soils are not present. Therefore, it is my view the proposal is inappropriate for the site. With respect to the groundwater interceptor trench, it would need to be placed several feet deeper to lower the expected permanent water table deep enough to provide 24 inches of separation between the filter bottom and the water table. However, with a 10 foot setback to the filter, it is very likely that sand filter effluent (which still contains pathogens) will be collected by the groundwater interceptor and be discharged to the land surface west from the escarpment, thus creating a potential health hazard. Also, again due to the small lot size, the driveway must pass over portions of the system. Potentially, this could cause soil compaction and could cause physical damage to the system. Based upon the information and evidence obtained relevant to this matter, there does not appear to be adequate means to overcome the physical limitations present at the site, or which would provide reasonable assurance that an on-site system could perform satisfactorily. In my judgement, development of the proposed system would not be in the best interest of public health or environmental concerns. As a result, I am regretfully unable to grant your variance request.

Pursuant to OAR 340-71-440, my decision to deny your variance request may be appealed to the Environmental Quality Commission. Requests for appeal must be made by letter, and must clearly state the technical grounds for the appeal. The appeal must be directed to the Environmental Quality Commission, in care of Mr. Fred Hansen, Director, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon, 97204-1390, within twenty (20) days of the certified mailing date of this letter.

Please feel free to contact me if you have questions concerning this decision. My telephone number is 229-6443, or toll free 1-800-452-4011.

Sincerely,



Sherman O. Olson, Jr.  
Variance Officer  
On-Site Sewage Disposal Program  
Water Quality Division

soo

IW\WQ

cc: Richard E. Lyon, Lyon & Associates  
Bill Zekan, Lincoln County  
Joe Petrovich, Willamette Valley Region:DEQ

August 13, 1992

Ms. Nona Henkle  
321 N.E. 4th Street  
Newport, Oregon 97365

Re: WQ-IOSWW-Variance Assignment: Tax Lot 500; Section 8 AC;  
Township 10 South; Range 11 West, W. M.; Lincoln County.

Dear Ms. Henkle:

The Department of Environmental Quality is in receipt of your on-site sewage variance application. That application has been assigned to me for further action. I plan to visit the property in Block 1 of Beverly Beach First Addition at approximately 1:30 p.m., on August 18th. At that time I will evaluate soil, topographic and other information relevant to your proposed variance from Oregon Administration Rules (OAR) governing on-site sewage treatment and disposal. Prior to my visit, please be sure to do the following: (1) flag the corners of the initial and future sand filter units, dosing septic tank, groundwater interceptor, home location, driveway, water line, and nearby property lines; and (2) have available at least one test pit within the area where the filters are proposed to be located.

Following my evaluation of the site conditions, I will conduct an information gathering hearing (as provided under OAR 340-71-430). You or any person you desire to attend the hearing are welcome. The hearing will provide an opportunity for you to offer additional facts or reasons which would allow a finding that strict compliance to the rules regulating on-site sewage treatment and disposal are inappropriate for cause, or to indicate why physical conditions render strict compliance to be unreasonable, burdensome, or impractical.

Staff with the Lincoln County On-Site waste Management Section have been made aware of this pending variance action. They will have an opportunity to provide comments on your proposal.



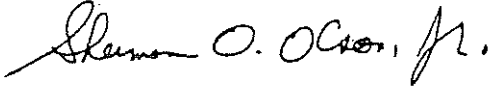
811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696

AH.9 (2 pages)  
DEQ-1



If you have any questions concerning the variance process or hearing arrangements, feel free to contact me at (503) 229-6443.

Sincerely,



Sherman O. Olson, Jr.  
Variance Officer  
On-Site Sewage Program  
Water Quality Division

SOO

IW/WQ

cc: Richard E. Lyon, Lyon & Associates  
Bill Zekan, Lincoln County  
Joe Petrovich, WVR:DEQ

Lyon & Associates  
Environmental Consultants/Designers

Date: 5/14/92

To: Mr. Sherman Olson, Jr., R.S.  
Department of Environmental Quality  
811 S.W. 6th Ave.  
Portland, Or. 97204

From: Richard E. Lyon, R.S.

Re: Nona Henkel/Richard Hohanshelt estate; variance application  
T.10, R.11, Sec.8AC, Tax Lot 500, Lincoln Co.

Dear Mr. Olson,

Enclosed please find application for a variance to Oregon Administrative Rules regulating On-Site sewage Disposal Systems prepared for the estate of Richard Hohanshelt, administered by sister of the deceased, Nona Henkel. Subject property is located at the south end of Beverly Beach subdivision, approximately .65 miles north of Newport. Mrs. Henkel's property consists of .24 acres and has an approximately 50' x 100' area of fairly level ground with a spectacular unobstructed ocean view. The property is currently zoned R-1 and will be served by Beverly Beach water district. I hope the enclosed documents are complete enough to meet the needs of the department.

AH. 10 (29 pages)



Application for site evaluation was made to Lincoln Co. February 3, 1992 under Tax Lot # 600, which later was found to be in error. The correct Tax Lot # is 500. Application was subsequently denied February 28, 1992. The system is currently staked out on site, with deep test pits (~9 ft.) provided. The system is proposed to serve a two bedroom single family dwelling/retirement home.

As the file shows, the soils found were not of a texture approvable under current rules for bottomless sand filters. The proposed disposal areas are in a raised marine terrace with variably cemented sands ranging, in our opinion, from unconsolidated to weakly and moderately cemented. The degree of cementation is such that roots were observed as low as 46" in the east hole and 36" in the west hole. The temporary water table is apparently (mottling evidence) at the 34" and 36" level. The water table is a question though as no water was encountered in the west hole (to 102") and water was only found seeping in at 98" in the east hole during early february. About 20 days later when the pits were re-dug the County observed water at 64" in the west pit, and 54" in the east pit. The property is not in a drainage swale and slopes slightly southwest. The proposal is to install a buried reduced size bottomless sand filter with a large lens of filter material below, while staying above the temporary water table. There will be a 48" deep ground water collection system surrounding the filter on three sides to in effect, create a 'dry island' for the filter effluent disposal as shown on the development plan enclosed. This plan is very similar to a plan approved up the street under a D.E.Q. Variance application by Mr. James Smith also of Beverly Beach (TL 700, sec 8, T10s, R11w, WM, Lincoln Co. June 4, 1986). The site and soil conditions are fairly similar. Two other similar designs were approved and installed on this same street as repairs and are functioning well with no apparent sign of failure (Wilson; 10-11-8AB TL500, & Sheridan; 10-11-8AB TL300). There are no known wells in this area. A 12" crown of native top soil with a 3-1 taper at the edges will be placed at the ground surface, where the distribution manifold and D.F. rock are situated

(See cross section detail of filter plan enclosed). It is believed the soils will provide a suitable medium for the disposal of sand filtered effluent provided seasonal groundwater infiltration is excluded. Sufficient relief exists immediately west of Tax Lot 500 to dewater soils to a depth in excess of 48".

While the bottomless sand filter system uses a gravity disposal technique, the effluent will flow in doses since flow only occurs when the filter is dosed, thus facilitating unsaturated flow conditions. The soil profiles appear sufficiently well drained to accept treated, high quality sand filtered effluent and the 30" lens of filter material opening to the designated depth is designed to insure this. Even using a conservative infiltration rate, each filter provides a combined bottom and sidewall area of 488 Sq.ft., and has the capacity to infiltrate 2,196 gpd - 7,320 gpd of sand filtered effluent per day ( $526 \text{ sq.ft.} \times 0.3 \text{"/hr/sq.ft.} \times 24 \text{hrs./day} \times 0.625 \text{gal/sq.ft./d/1"} = 2,196 \text{gpd}$ ;  $488 \text{sqft.} \times 1.0 \text{"/hr/sqft.} \times 24 \text{hrs./day} \times 0.625 \text{gal./sqft./d/1"} = 7,320 \text{gpd}$ ).

As you know, Oregon Experimental intermittent sand filter studies revealed 2.3 to 7.7. gal./sqft/d sand filtered effluent were assimilated where gravity serial disposal trenches were installed and studied in Western Oregon(1). Information from those studies show 560 to 1540 gallons or more of sand filtered effluent could be assimilated by a single 50 ft. disposal trench ( $200 \text{ sqft.} \times 2.8 \text{gal./sqft./day} = 560 \text{ gpd}$ ;  $200 \text{sqft.} \times 7.7. \text{ gal./sqft./day} = 1540 \text{gpd}$ ). Sewage flow data from the same study of 81 single family homes (three and four bedroom units) showed the homes normally discharged an average of 173.5 gallons of wastewater per day(1). Using the highest flow observed in that study of 384 gpd., the first 50 ft. trench would be capable of accepting from 1.5 to 4 times the maximum anticipated daily discharge.

When conditions that promote unsaturated flow are maintained, maximum sand filter effluent treatment can take place, reducing the likelihood of groundwater or surface water contamination from bacteria or nutrients. Oregon study of sand filters showed BOD-5, suspended solids, total nitrogen, fecal coliform and total coliform were reduced 98%, 93%, 43%, 3 logs and 2 logs, respectively.(1)

Several laboratory and field studies have shown fecal and total coliform (1,2, and 3) and virus (4,5, and 6) were readily removed in sand columns and through sand filtration of septic tank effluent. The removal of the constituents typically occurred within 24" of the point where the wastewater was applied. In the column studies the application of bacteria and virus to the surface was at a level much greater than the number of these organisms normally found in residential septic tank effluent.

At this site, the filtered wastewater having first passed through 24" of medium sand will be discharged to the 30" lens. Bacterial populations having been markedly reduced by the filter, would be expected to be reduced further in the unsaturated biologically and chemically active sandy soil horizon. Several investigators have suggested that while 60-cm (about 24") of separation to a water table, in example provides sufficient microbial treatment and a margin of safety, even 30-cm separation (slightly less than 12") can also provide a fairly high degree of treatment. (7) A 1982 study showed again the importance of utilizing designs that maximize conditions of unsaturated flow and uniform distribution of effluent to the most biologically active and aerobic soil horizons. A more recent study showed limited migration of fecal coliform even during high water periods. (8) This again supported the earlier work of Reneau (1979), Stewart and Reneau(1981) and Otis et al (1974) where they established early on support for using low pressure distribution to maintain unsaturated flow. For the reasons cited, there should be minimal environmental concern for siting a bottomless sand filter at this location.

We are seeking a variance from O.A.R. 340-71-290 (5) which requires the site to have saprolite, fractured bedrock, gravel or soil textures of sand, loamy sand or sandy loam. Also the part of this same rule that requires a 24" separation from a water table. From O.A.R. 340-71-315-(2) (c) which requires a 20' separation from drainage tile and soil absorption system. From O.A.R. 340-71-150(4)(a)(A) & (B) which requires each parcel contain sufficient area for full initial and replacement system.

## System construction

The proposed bottomless sand filter is to be in the area shown on the enclosed site development plan, except it is rising 12" above natural ground surface (12" backfill). The filter material at the bottom of the filter will be 30" deep to compensate for the degree of cementation and provide extra storage/treatment capacity. The total depth will be 66". The 12" rise will be accomplished by mounding to a 3 to 1 slope extending 3' away from the edge (see attached diagram). The mound will then be cultivated and planted with deep rooting rye grasses, azaleas and rohadendrums.

Similar to above, the repair system if needed, is to be located adjacent to the initial system. The ground water collection system east of the filter will have to be excavated and filled with soil and moved to the east property line, providing a 10 ft. setback from the filter as shown in the enclosed diagrams. The systems and dwelling are staked-out on site as shown.

## Directions

Proceed north from Newport on Highway 101 approximately 6.5 miles to the Beverly Beach exit, turn right and continue south .3 miles to a difficult to see 'Y' in the road, bear to the right, this is Avery St. Follow Avery St. so. .2 miles to the end. Subject property is 3rd from end on your right.

-----Note concerning soil profile documents: County pit numbers are reversed from applicant's.-----

Richard E. Lyon R.S.  
Registered Sanitarian  
Oregon - Washington

12035 N.E. Beverly Dr.  
Newport, OR 97365  
(503) 265-6826

Application for Variance from Administrative Rules  
Regulating On-Site Sewage Disposal Systems

CR # 207 \$ 225<sup>00</sup>

Please complete this application form and submit the application fee\* (\$225) and required attachments to:  
Department of Environmental Quality, Sewage Disposal Section, 811 S.W. Sixth Avenue, Portland, Oregon 97204

REFERENCE INFORMATION—Please Print

|  |                 |              |   |           |                  |
|--|-----------------|--------------|---|-----------|------------------|
| <u>Richard Hohanshelt Estate / Nona Henkel</u> |                 |              | <u>10</u>   | <u>11</u> | <u>8 A C</u>     |
| Name of Owner                                  |                 |              | Township  | Range     | Section          |
| <u>321 NE. 4<sup>th</sup> St.</u>              |                 |              | <u>5</u>  |           |                  |
| Address  |                 |              | <u>\$00</u>   |           | <u>.24 acres</u> |
|  |                 |              | Tax Lot or Account No.  |           | Parcel Size      |
| <u>Newport O</u>                               | <u>OR</u>       | <u>97365</u> | Subdivision Name <u>Beverly Beach 1<sup>st</sup> addition</u> |           |                  |
| City   | State           | Zip Code     |   |           |                  |
| <u>(Lyon) 265-6426</u>                         | <u>265-5122</u> |              | Lot <u>5</u> Block <u>1</u>                                   |           |                  |
| Business Phone                                 | Home Phone      |              |   |           |                  |

ATTACHMENTS

Provide The Following Items:

1. Complete and accurate directions to the property. A locator map would be helpful.
2. Two (2) copies of the parcel's legal description (metes and bounds, warranty deed, sales contract, or approved subdivision plat). Include the protective covenants, deed restrictions and easements, if applicable.
3. Two (2) copies of an assessor or title company plat map or a surveyor plat map.
4. Two (2) copies of a land use compatibility statement from the appropriate land use authority that your proposed land use is compatible with the LCDC acknowledged comprehensive plan or statewide planning goals.
5. Copies of all correspondence and field notes relating to past evaluations for septic tank-drainfield development on the subject property. A copy of the site evaluation report must be included.
6. Two (2) copies of narrative description of your variance proposal including the system construction specifications. Please list the step-by-step procedures that you propose to be followed for the installation of this system.
7. On a plot plan draw to a defined scale not smaller than one inch equals thirty feet, show the location and dimensions of the proposed drainfield and its replacement area. Indicate separation distances between disposal trenches, wells, springs, water courses, agricultural drainage tile, ditches, drainage ways, waterlines, buildings, roads, embankments, and other identifying features which help demonstrate parcel to drainfield relationships. Please provide two (2) copies.
8. Two (2) copies of a profile view of the proposal which illustrates the projected drainfield layout, trench dimensions, backfill depth, boundaries, (in cases where a crown over the drainfield is proposed), slope direction and percent of slope.

Hardship variances may be considered in cases of extreme and unusual hardship. The following factors may be considered: Advanced age or bad health of applicant; need of applicant to care for aged, incapacitated or disabled relative; and relative insignificance of the environmental impact of granting a variance. Documentation of hardship must be provided. FOR HARDSHIP CONSIDERATION MARK THIS BOX. [ ]

A minimum of two test pits must be provided within the specific area where the actual variance system is being proposed. The pits should be approximately two feet wide, four feet long, and excavated to either bedrock or to a depth of five (5) feet. Similar pits must be provided in the area of the repair system. The Variance Officer may require the proposed drainfield and the future replacement drainfield be staked out.

Please note that it is your responsibility to present all of the facts and the reasoning which you feel justifies the granting of the variance.

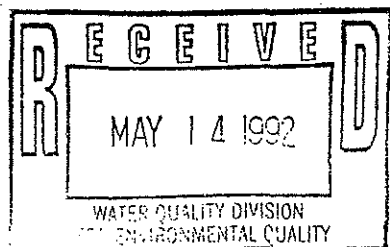
By my (our) signature(s), I (we) request the Department of Environmental Quality act on this application and hereby grant permission to enter onto the above described property.

Nona H. Henkel 5/1/92  
Signature of Owner Date

\_\_\_\_\_  
Signature of Owner Date

NOTE: All owners must sign this application form. If there are more than two (2) owners, attach additional duplicate applications.

\* Pursuant to ORS 454,662, the applicant is not required to submit the application fee if, at the time of filing the application, the applicant is 65 years of age or older, is a resident of the State of Oregon, and has an annual household income, as defined in ORS 310.630, of \$15,000 or less. Appropriate documentation must be submitted with the application.



**SITE EVALUATION FIELD WORKSHEET**

Tax Reference: 10 S 11 W BAC 500      Evaluator: STEVENSON  
 Applicant: Hinkel      Date: 8-18-92      Parcel Size: ± 0.24 acre

| DEPTH         | TEXTURE                        | SOIL MATRIX COLOR AND MOTTLING (NOTATION), % COARSE FRAGMENTS, ROOTS, STRUCTURE, LAYER LIMITING EFFECTIVE SOIL DEPTH, ETC. |
|---------------|--------------------------------|--|
| Pit 1<br>0-18 | LOAM TO S <sup>1/2</sup>       | 10YR 3/2 STRONGLY CEMENTED, Many FINE ROOTS  |
| 18-58         | MOD. TO STRONGLY CEMENTED SAND | Variegated 10YR 6/8 + 10YR 7/3 No ROOTS  |
| 58-84         | MOD. TO WEAKLY CEMENTED SAND   | No IRON COATINGS, Below 67" Sand in damp.  |
| Pit 2<br>6-17 | }                              | SLAY #1  |
| 17-68         |                                |  |
| 68-96         |                                |  |
| Pit 3         |                                |  |
|               |                                |  |
|               |                                |  |
|               |                                |  |
|               |                                |  |
|               |                                |  |

Landscape Notes: Main Terrace above HWY 101  
 Slope: 0 ±      Aspect: \_\_\_\_\_      Groundwater Type: PERM. - NONE OBSERVED TO 12'  
 Other Site Notes: NO iron coating on sand below ≈ 58"-68" Water at 137" from Surface

**SYSTEM SPECIFICATIONS**

Peak Daily Flow: \_\_\_\_\_ gpd      Average Daily Flow: \_\_\_\_\_ gpd

- Initial System: \_\_\_\_\_ Disposal Facility: \_\_\_\_\_ (linear feet/square feet) Max. Depth: \_\_\_\_\_ inches
- Replacement System: \_\_\_\_\_ Disposal Facility: \_\_\_\_\_ (linear feet/square feet) Max. Depth: \_\_\_\_\_ inches

Special Conditions: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

PLOT PLAN ON REVERSE SIDE

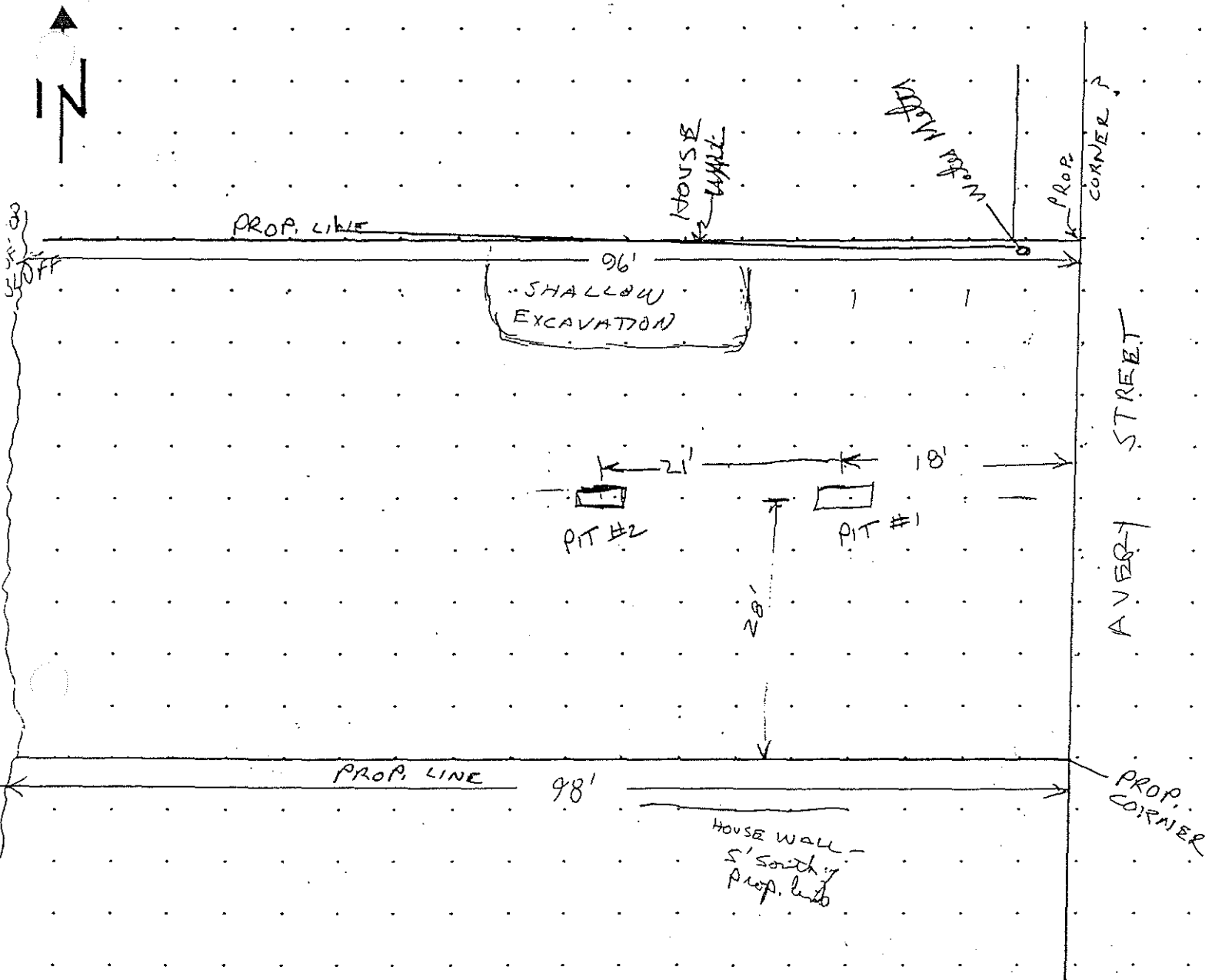
Tax Reference: 10-11-BAC-500

Evaluator: OLSOAN

Applicant: NONA HENKEL

Date: 8/18/92

Parcel Size: 50 X





DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND USE COMPATIBILITY STATEMENT REQUIREMENTS

FOR

ON-SITE SEWAGE DISPOSAL PERMITS

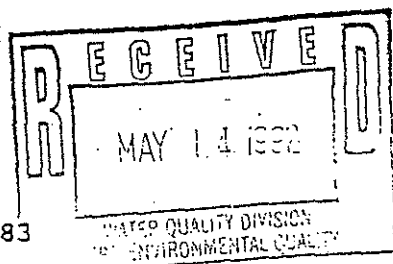
A Statement of Compatibility with applicable local comprehensive land use plans and Statewide Planning Goals is required for new or expanded on-site sewage disposal systems. A statement may be required before an Authorization Notice can be issued. The statement must certify that proposals are compatible with LCDC-Acknowledged local comprehensive land use plans and implementing ordinances, or Statewide Planning Goals. The Department prefers that its Land Use Compatibility Statement form be used, however, it will accept an equivalent statement in lieu of the form.

In urbanizing areas between city limits and urban growth boundaries, applicants must provide evidence of both city and county concurrence as to the land use compatibility of the proposal. This evidence must be:

1. Sign-off by both jurisdictions on DEQ's Land Use Compatibility Statement form.
2. A copy of the city/county management agreement included in the Urban Area Plan acknowledged by LCDC, or
3. A written statement covering the applicant's proposal.

If DEQ receives a negative local Statement of Compatibility, a permit or approval cannot be issued. DEQ would then expect the applicant to work with the local jurisdiction to obtain the needed zone change, variance, or other modification to produce compatibility with the Acknowledged Plan and ordinances or the Statewide Planning Goals.

Applicants for on-site sewage disposal permits must submit a completed Statement of Compatibility or an approved equivalent along with their application or request.



LAND USE COMPATIBILITY STATEMENT  
FOR ON-SITE SEWAGE DISPOSAL SYSTEMS

|  |                          |                |
|--|--------------------------|----------------|
| APPLICANT'S NAME<br>LYON & ASSOCIATES<br>12035 NE BEVERLY DR<br>NEWPORT OREGON 97365<br>503.265-6826 | MAILING ADDRESS<br><br>← | PHONE<br><br>← |
| CITY _____ STATE _____ ZIP _____   |                          |                |

|                   |                                    |                    |         |                    |
|-------------------|------------------------------------|--------------------|---------|--------------------|
| PROPERTY LOCATION | TOWNSHIP                           | RANGE              | SECTION | TAX LOT OR ACCT NO |
|                   | 10                                 | 11                 | 8 AC    | 500                |
|                   | SUBDIVISION/PROJECT                | LOT                | BLOCK   | COUNTY             |
|                   | Beverly Beach 1 <sup>st</sup> Addn | S 1/2 #3 + N 1/2 4 | 1       | Lincoln            |

PROPERTY IS A LOT OF RECORD CREATED BEFORE AUGUST 1, 1981.

PROPOSED LAND USE

Single family Dwelling (2 bedrooms)

STATEMENT OF COMPATIBILITY FROM APPROPRIATE LAND USE AUTHORITY  
(An equivalent statement may be provided in lieu of this form)

PROPERTY'S ZONING DESIGNATION

R-1

THE ABOVE PROPOSAL HAS BEEN REVIEWED AND FOUND TO BE:

COMPATIBLE WITH THE LDCG ACKNOWLEDGED COMPREHENSIVE PLAN
  CONSISTENT WITH THE STATEWIDE PLANNING GOALS  
 NOT COMPATIBLE WITH THE LDCG ACKNOWLEDGED COMPREHENSIVE PLAN
 OR
 NOT CONSISTENT WITH THE STATEWIDE PLANNING GOALS

REASON FOR FINDING OF COMPATIBILITY/INCOMPATIBILITY

May require geotechnical report prior to issuance of building perm

PROPERTY IS LOCATED (CHECK ONE)

INSIDE CITY
  INSIDE URBAN GROWTH BOUNDARY
  OUTSIDE URBAN GROWTH BOUNDARY
  OUTSIDE CITY LIMITS

LAND USE AUTHORITY

LINCOLN COUNTY PLANNING DEPARTMENT

|                   |                   |        |
|-------------------|-------------------|--------|
| SIGNED            | TITLE             | DATE   |
| <i>J. Semmels</i> | ASSOCIATE PLANNER | 5-8-92 |

CITY/COUNTY CONCURRENCE IF INSIDE URBAN GROWTH BOUNDARY

|        |       |      |
|--------|-------|------|
| SIGNED | TITLE | DATE |
|        |       |      |

SW 1/4 NE 1/4 SECTION 8 T10S R11W N1M  
LINCOLN COUNTY

1" = 100'

Sec 8 Map 10 T10S R11W

LOT 2-33-71 AC

Tr. 753-63-7

OCEAN WAY N

15

FIRST

BEACH

NE BENTON ST FLORENCE AVE

VIEWAVERY AVE

(New Location)

HWY

3307  
104 AC

144

3306  
133A

3700  
08 AC

3800  
07 AC

3900  
06 AC

3600  
40 AC

ROAD

ROAD

Vegetation Line

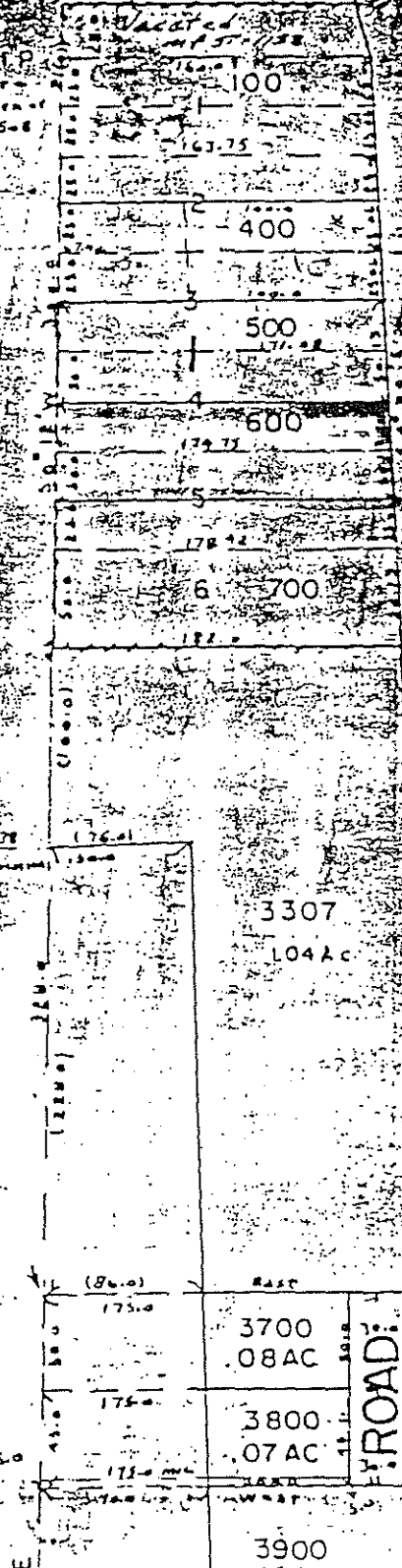
POI

50.29' W

54.30' W

(1924.0)

BEACH



IN THE MATTER OF THE ESTATE )

OF )

RICHARD A. ECHAMSHILT,  
Deceased. )

WA 228MA 1430

ABSTRACT OF INVENTORIZED  
REAL PROPERTY  
(ORS 113.143(2))

The Decedent's name is: RICHARD A. ECHAMSHILT  
Address at time of death: 353 N.E. 3th Street  
Newport, Oregon 97363

Probate #: 910374

County where probate proceedings are pending:

LINCOLN COUNTY, OREGON

Personal Representative is: NORMA HENKIL

Personal Representative's Address:

321 N.E. 4th Street  
Newport, Oregon 97363

Attorney's Name: Kurt Carstans  
Litchfield, Carstans & Hammersley

Attorney's Address: P. O. Box 1730  
Newport, Or 97363

The following real property is subject to probate proceedings:

See attached Exhibit "A"

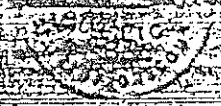
DATED: April 22, 1991.

Kurt Carstans OSB #72048  
Attorney for Personal  
Representative

STATE OF OREGON )

County of Lincoln ) ss.

The foregoing instrument was acknowledged before me this  
\_\_\_\_\_ day of \_\_\_\_\_, 1991, by Kurt Carstans.



Notary Public for Oregon  
My commission expires: 3/3/92



228-1131

EXHIBIT 12-13

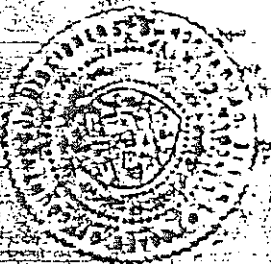
REPORT OF JOHN A. BULLOCK, CLERK

TO THE BOARD OF COUNTY COMMISSIONERS

Showing the location of Lots 1 and 2, Block 12, JOHN AND SARAH STEPHENS' OFFICE BLOCK, Lincoln County, Oregon.

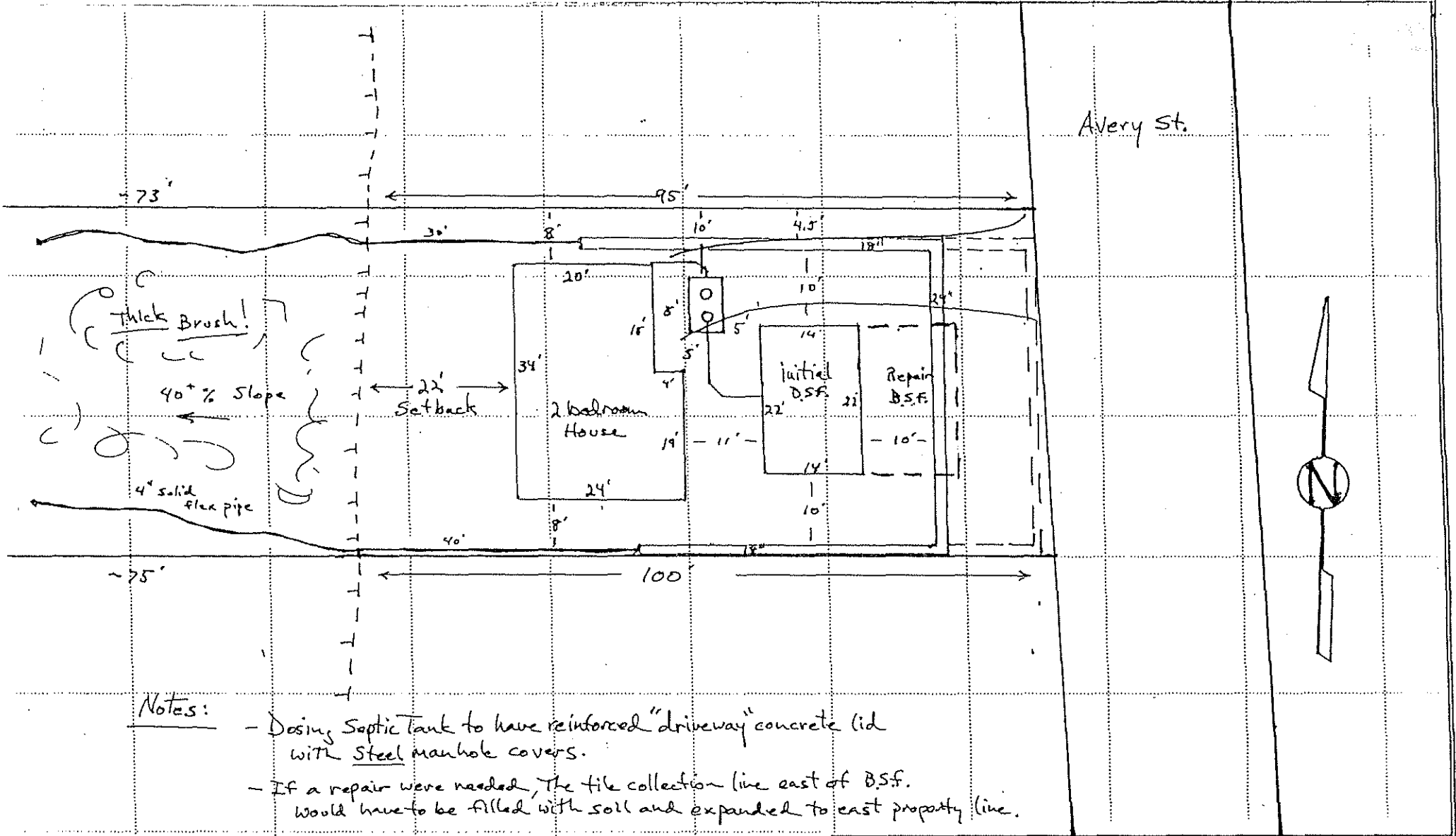
**PART II:**  
The South half of Lot 2, all of Lot 3, and the North half of Lot 4, all in Block 1, FIRST ADDITION TO BEVERLY BEACH, in Lincoln County, Oregon.

**PART III:**  
Lot 8, Block 34, CASE AND BAILEY'S SECOND ADDITION TO THE CITY OF NEWPORT, in the City of Newport, County of Lincoln and State of Oregon.



Witness my hand and seal this 12th day of December, 1913.

JOHN A. BULLOCK, CLERK



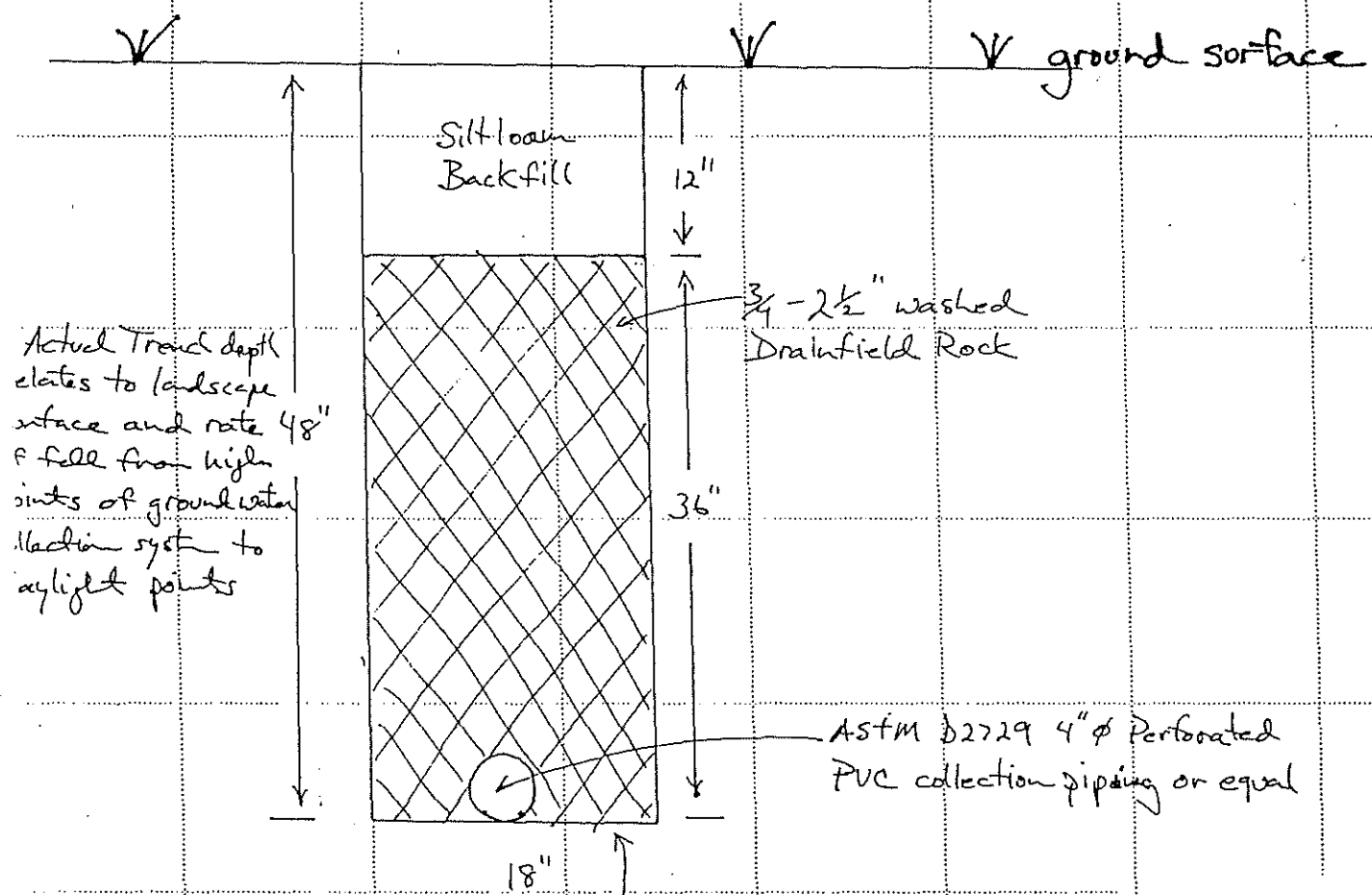
Notes:

- Dosing Septic Tank to have reinforced "driveway" concrete lid with Steel manhole covers.
- If a repair were needed, the tile collection line east of B.S.F. would have to be filled with soil and expanded to east property line.

Nona Henkel Variance

|                    |                      |
|--------------------|----------------------|
| SCALE: 1" = 20 ft. | 10-11-BACTL 5<br>000 |
| DATE: 5/4/92       |                      |

LYON & ASSOCIATES  
 12035 NE Beverly Dr., Newport, OR 97365 (503) 265-6826



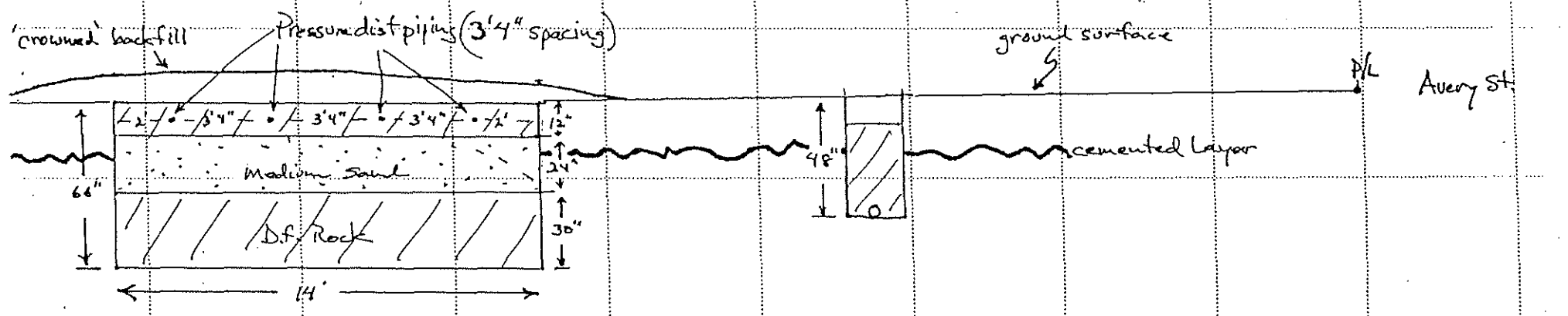
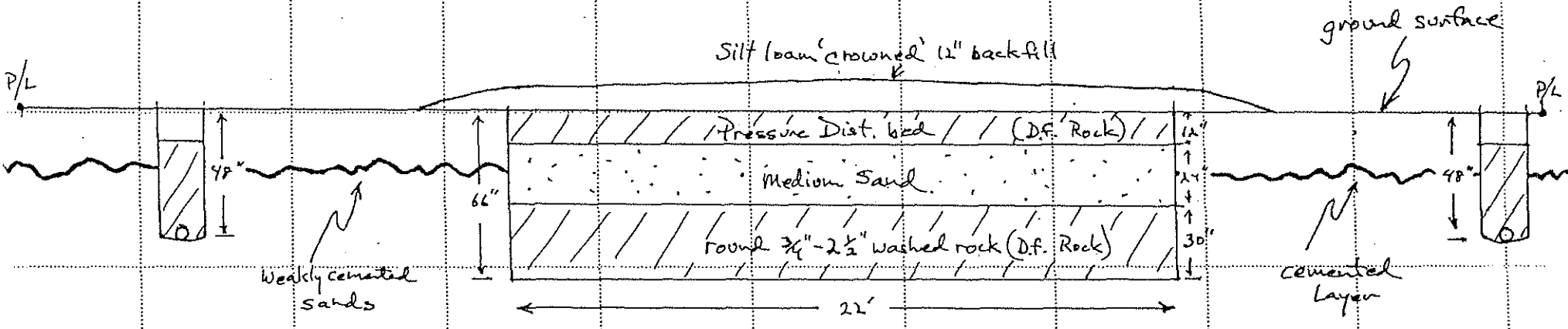
Actual Trench depth relates to landscape surface and rate 48" fall from high points of groundwater location system to daylight points

Note: daylight at bank will use flex/corrugated solid pipe to extend down slope ~70 feet.

Trench bottom and piping to slope from high points to daylight points at a rate of .3'/100'

|  |                  |
|--|------------------|
| <h3>Nona Henkel Variance</h3>                          |                  |
| SCALE: 1" = 1 ft.                                      | 10-11-8AC TL 500 |
| DATE: 5/4/92   |                  |
| <b>LYON &amp; ASSOCIATES</b>                           |                  |
| 12035 NE Beverly Dr., Newport, OR 97365 (503) 265-6826 |                  |

East View



North view

Nonattenuated Variance

|        |            |                  |
|--------|------------|------------------|
| SCALE: | 1" = 5 ft. | 10-11-8AC TL 500 |
| DATE:  | 5/3/92     |                  |

**LYON & ASSOCIATES**  
 12035 NE Beverly Dr., Newport, OR 97365 (503) 265-6826



Preliminary Site Reconnaissance

Tax Lot 500  
on  
Lincoln County Tax Assessor's Map 10-11-8 AC

Beverly Beach  
Otter Rock, Oregon

Prepared for  
Nona Henkel  
&  
Richard Hohanshelt Estate

by  
Richard Larrett  
Engineering Geologist

April 3, 1992

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This Preliminary Site Reconnaissance Report is for an ocean view lot in Beverly Beach and was requested by Nona Henkel, Personal Representative for the Richard Hohanshelt Estate.

#### **PURPOSE**

The purpose of the investigation was to determine existing geologic and geotechnical conditions for the lot and adjacent area and potential for construction of a single family residence on the lot.

#### **CONCLUSIONS**

The building area for this ocean view lot appears stable with no indications of recent mass slope movement. On the lower portions of the slope to the west, areas of slope movement have been temporarily stabilized by a thick growth of vegetation.

Foundation footings for a house should be a minimum of 22-feet east of the top of slope. Vegetation in this area and on the slope to the west should be maintained to minimize erosion and aid in slope stabilization.

#### **LOCATION**

This ocean view lot is located east of Highway 101 in an area of single family residences in the First Addition to Beverly Beach Subdivision. It is Tax Lot 600 on Lincoln County Tax Assessor's Map 10-11-8 AC and is located on the west side of Avery Street, 0.2 miles south of old Highway 101. Access to the old highway is at Mile Post 134.1 on Highway 101.

#### **SITE DESCRIPTION**

This site is rectangular in shape with the long dimension in the east/west direction. The upper portion is about 95-feet deep on the north and about 100-feet on the south. The east side is level with the grade on Avery Street with 1.5-feet of fall to the top of slope, about 70-feet above Highway 101. Houses have been constructed on the adjacent lots to the north and south.

A thick cover of vegetation on the slope aids slope stabilization and protecting the surface against erosion by wind and water. The vegetation identified consists of salal, rhododendron, blackberry, salmonberry, fern, horsetail, and several varieties of grasses. The trees were spruce and pine.

#### INVESTIGATION

A field investigation for this lot, including the beach and adjacent area, was conducted on March 27th and 28th, 1992. A cross section was surveyed in from the east property line west to Highway 101 using a Brunton Compass, Sunto Clinometer, hand level and cloth tape. Horizontal control was from an iron rod located on the east side of the Avery Street, about a foot south of the power pole. An elevation of 60-feet MSL was designated for the east fogline on Highway 101 and was used for vertical control of the cross section.

Two previously excavated septic test pits are located on the east portion of the lot. Soil materials encountered in cuts and exposed surfaces were classified using field methods for the Unified Soils Classification System. The unit weight of soil materials was field calculated using an Ely Volumeter. A Torvane CL-600 Tester was used to field calculate the apparent shear strength of cohesive soil materials. Bearing capacity for cohesive soils was calculated at 2.25 times the apparent shear strength.

#### GEOLOGICAL & GEOTECHNICAL CONDITIONS

This area is located on an ancient, uplifted, marine terrace which is underlain by sandstone. Two significant soil units and one rock unit were recognized in the exposed surfaces of the slope, road cuts, and septic test pits.

Soil Unit A. This Sandy Silt is brown in color and ranges in depth from less than 1.5-feet to 3-feet. It is Damp at the natural moisture content and Above the Plastic Limit (APL). The consistency is Stiff and remolds with finger pressure to Medium. Field estimates of the contents are less than 10% partly decomposed organic materials, 25% poorly-graded, fine, sub-round to sub-angular sands and more than 65% Fines (MH). It has a field estimated Unit Weight of 93 Pounds per Cubic Foot (PCF) and a field calculated bearing capacity of 1150 Pounds per Square Foot (PSF). This unit grades into the underlying Soil Unit B.

Soil Unit B This unit is Sand and ranges in color from tan to red brown. The natural moisture content is Damp, which changes to Moist with depth and it is Non Plastic. The unit is well consolidated and stands in near vertical faces up to 15-feet in height in exposed surfaces in the adjacent area.

It consists of poorly-graded, fine to medium, sub-round to sub-angular marine sands with less than 5% Fines, and has been identified as Marine Terrace Deposits by Schlicker and Others. The field estimated Unit Weight is 104 PCF.

Rock Unit 10 This unit is Sandstone and ranges in color from gray to dark gray. Bedding ranges from less than 0.1-feet to more than 3-feet in thickness and dips to the west in exposed surfaces of the beach slope. The beds consist of fine to medium grained sand sizes with siltstone interbeds. Calcareous, cemented sandstone beds are resistant to erosion and form ledges in existing cuts and the beach cliff. Fossils are present in some of the beds exposed along the beach. This unit is resistant to erosion by high ocean waves.

#### Water

No water was observed on the upper portion of the site adjacent to Avery Street. Ground water seeps occur in the slope to the west at about elevation 90, and water flows along the top of the exposed sandstone east of the road cut for Highway 101. No standing water was observed in the septic test pits.

#### Slope Stability

The upper portion of the site appears stable with no indications of recent mass slope movement. Areas of movement have occurred along the boundary between the sandstone and the overlying terrace deposits in the slope to the west. These areas of movement have been temporarily stabilized by the growth of vegetation. Increased ground water levels from septic systems or severe rain could accelerate slope movement and top of slope recession.

Analysis of air photos indicates the house 2 lots to the south was constructed prior to 1939. The owners stated they purchased the house in 1958 and there has been no noticeable recession to the top of slope during this period. Due to the quality and scale of the air photos, and lack of reference points for comparison, it is difficult to establish a rate of recession for the top of slope.

#### **RECOMMENDATIONS**

The following general recommendations are made for consideration in the planning and development of this lot.

1. The setback for the west foundation footings should be a minimum of 22-feet east of the top of slope. A deck could be constructed in the setback area.

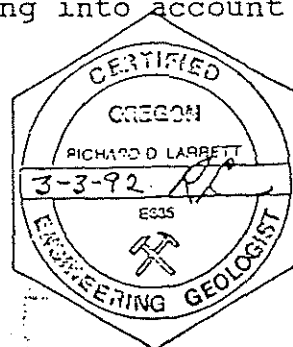
2. Foundation footings should be placed on undisturbed soil material of Soil Unit B or on structural fill to minimize the potential for differential settlement. Structural fill should be placed in 6-inch loose lifts compacted to 95% as determined by AASHTO T-99 test.
3. Continuous or spread footings could be used for the foundation for a single family residence on this lot.
4. No water should be allowed to pond or stand on the site during construction. Finished grade should drain all surface water away from the house and top of slope into surface drains. All captured water from surface drains and downspouts should be drained in tight jointed pipe to the toe of the slope on the west. Cleanouts should be conveniently located in the drain line to facilitate regular cleaning and maintenance.
5. Vegetation beyond the construction area should be protected from damage during construction. The site should be landscaped as soon after construction as possible. Vegetation on the lot and slope to the west should be maintained to minimize the potential for erosion and help maintain slope stability.

The analysis, Conclusions, and Recommendations contained in this report are based on site conditions as they presently exist. It assumes that soil conditions in cuts, exposed surfaces, and test pits are representative of sub-surface conditions for the lot. The opinions contained in this report are not intended to be nor should they be construed to represent a warranty of sub-surface conditions or site longevity.

If more than one year elapses between the submission of this report and the start of construction, or if conditions at or adjacent to the site have changed due to natural causes or construction operations, this report should be revised by a qualified Engineering Geologist, taking into account the time lapse and changed conditions.

*Richard Larrett*

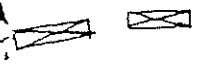
Richard Larrett  
Engineering Geologist



Reference: "Environmental Geology of Lincoln County, Oregon"  
State of Oregon; Bulletin 81

H I G H W A Y 1 0 1

A V E R Y S T R E E T



LEGEND

CROSS LOCATION & ORIENTATION

EDGE OF PAYEMENT HWY 101

TOP OF SLOPE

SEPTIC TEST PIT



SCALE  
1" = 40'

|  |          |          |
|--|----------|----------|
| SITE MAP                                 |          |          |
| HENKEL ~ BEVERLY BEACH                   |          |          |
| RICHARD LARRETT<br>ENGINEERING GEOLOGIST |          |          |
| DATE 4-1-92                              | JOB# 662 | FIGURE 1 |
| DRAWN BY RL                              |          |          |

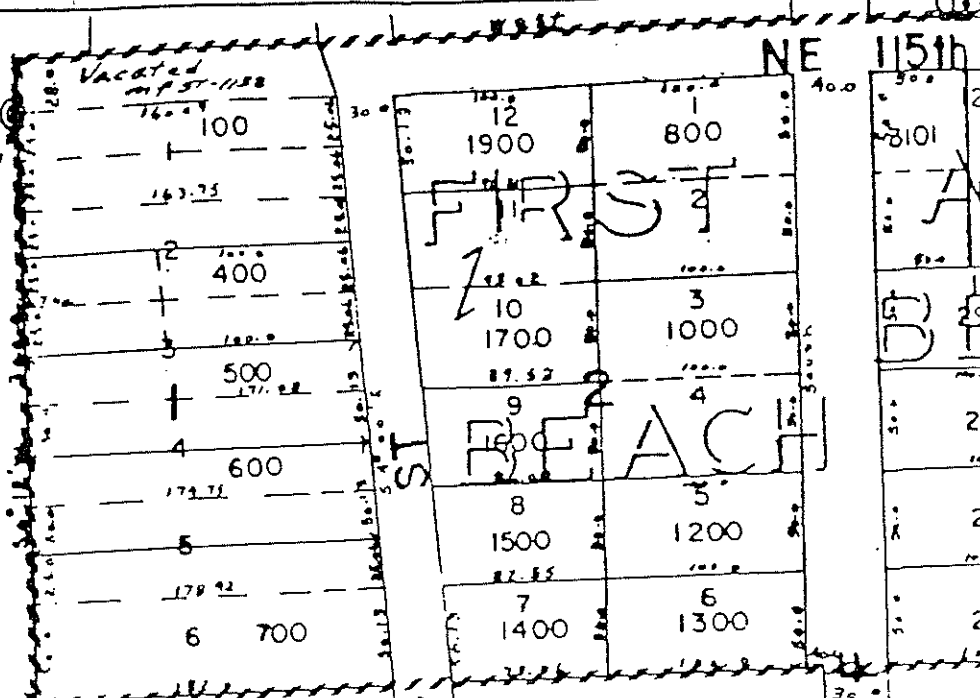
LOT 2-33.71 AC

PT. 753+63.7

I.P.  
124.24 East  
1348.0 South  
7 C. To Sec. 5+8

Vacated  
M.P. 57-128

NE 115th



(New Location)

COAST HWY

Vegetation Line

50° 28' W

RR R/W LINE  
57° 0' MIN (344.0)

757+11.38  
(1994 Loc. 1)

3307  
1.04 AC

3306  
1.33 AC

144

3700  
.08 AC

3800  
.07 AC

3900  
4.51 AC

3600  
.40 AC

ST AVERY

ST NE BENTON

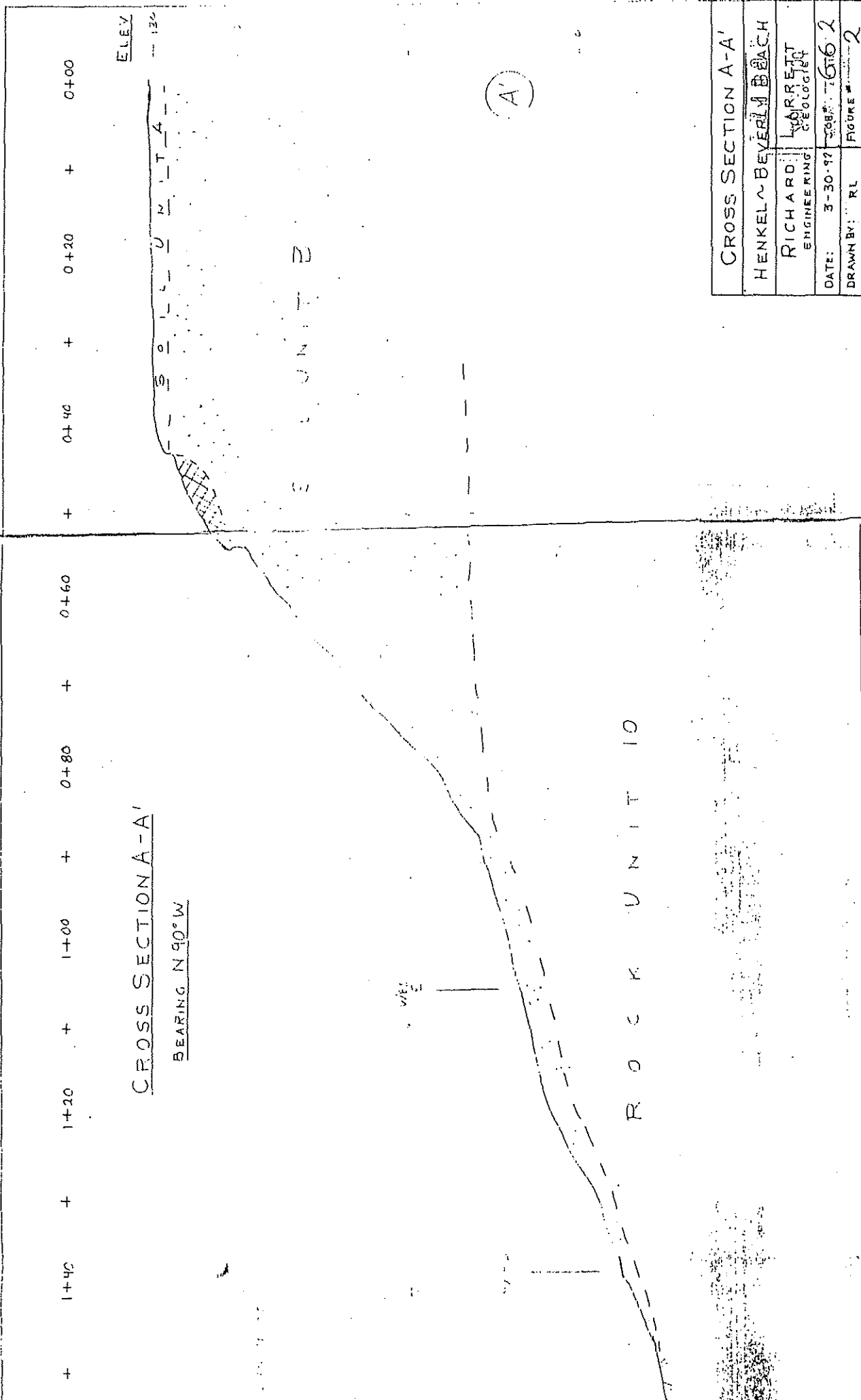
ROAD

ROAD









|                        |            |
|------------------------|------------|
| CROSS SECTION A-A'     |            |
| HENKEL & BEVERLY BEACH |            |
| RICHARD                | LAURETT    |
| ENGINEERING            | GEOLOGIST  |
| DATE: 3-30-97          | JOB # 1662 |
| DRAWN BY: RL           | FIGURE # 2 |

ELEV  
130 -

1+80 + 1+60 + 1+40 + 1+20 + 1+00 + 0+80 + 0+60

CROSS SECTION A-A'

BEARING N 90° W

LEGENDE

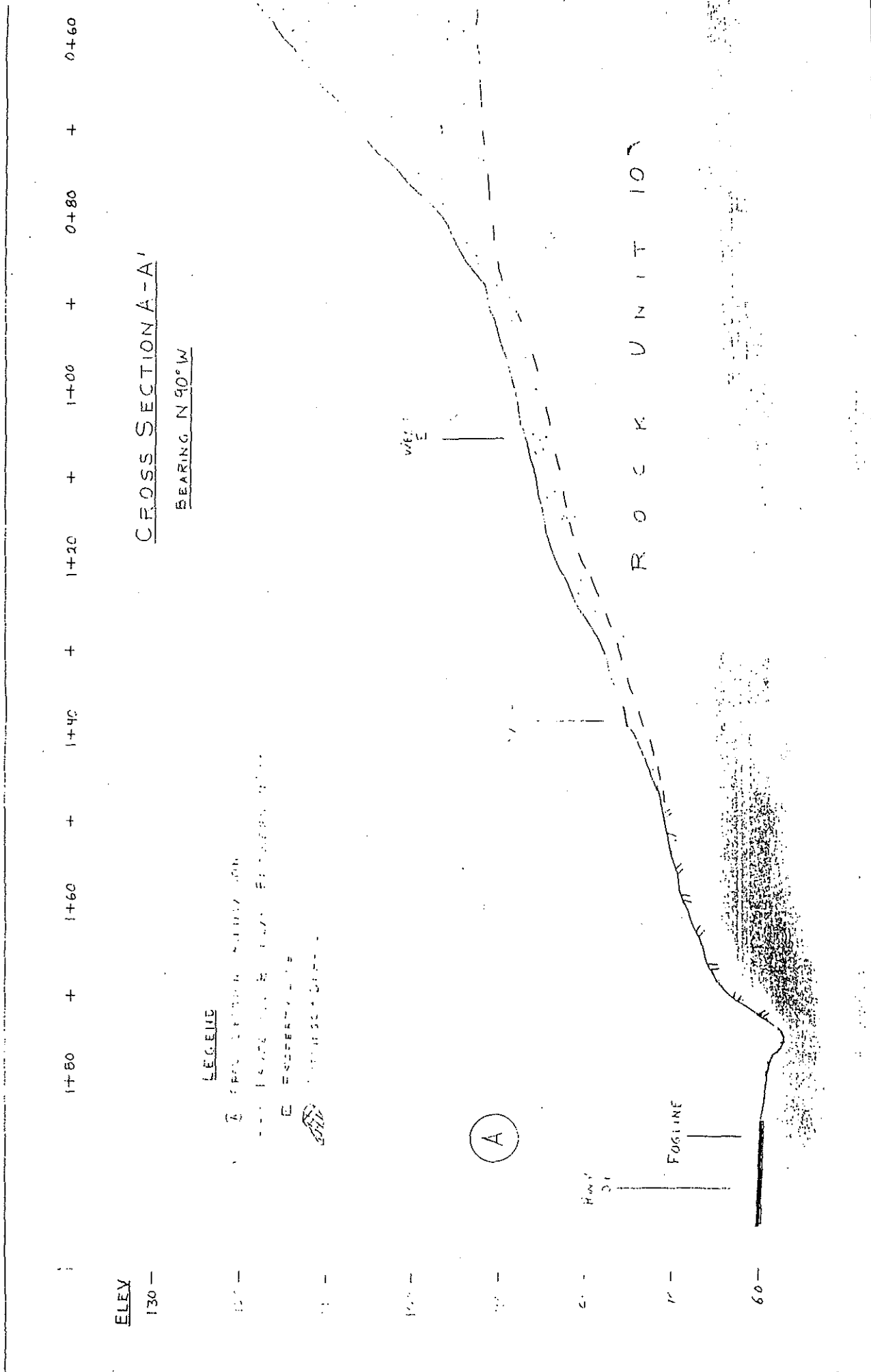
- (dashed line) —
- (solid line) —
- (dotted line) —
- (dash-dot line) —
- (long-dash line) —
- (short-dash line) —
- (stippled area) —

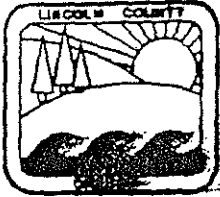
(A)

FOG LINE

R O C K U N I T I O N

WATER





**DEPARTMENT OF PLANNING  
AND DEVELOPMENT**

Public Service Building  
210 S.W. 2nd St.  
Newport, Oregon 97365

(503) 265-6611

Building Division  
Ext. 251

On-Site Waste Mgmt.  
Ext. 253

Code Enforcement  
Ext. 292

Planning Division  
Ext. 292

February 28, 1992

Richard A. Hohanshelt Estate  
c/o Kurt Carstens  
353 N.E. 8th  
Newport, Oregon 97365

Re: NOTICE OF DENIAL FOR ON-SITE SEWAGE DISPOSAL  
TAX LOT 600, COUNTY ASSESSOR'S MAP 10-11-8AC

Dear Mr. Hohanshelt,

This office has completed its evaluation of the above described property for subsurface sewage disposal. Unfortunately, the property has been found unsuitable due to the following:

The test pits evaluated revealed layers of cemented sand which limited the effective soil depth and perched temporary water tables. These conditions and required setbacks from property lines and an escarpment on the property preclude the use of a standard system.

A sand filter system would be allowed, however, there is insufficient area available to construct the system and a dwelling. Therefore, we must deny your proposed system installation.

It may be possible to apply for a variance from the Oregon Administrative Rules which would allow the system to be constructed on a smaller area.

Oregon Administrative Rules, chapter 340-71-150 (5) provides applicants with an opportunity for a site evaluation denial review. request for a denial review must be submitted with the required fee within thirty (30) days of the site evaluation report issue date. In this area the Northwest Regional office of the Department of Environmental Quality should be contacted. Their telephone number is 229-6443.

Another possible option available for applicants is a variance request made directly to the Department of Environmental Quality. Rules governing variance applications are contained in O.A.R. 340-71-415.

Sincerely,

  
JOHN EARLS, R.S.  
LINCOLN COUNTY SANITARIAN

AH:11 (1 page)

SITE EVALUATION APPLICATION

Date: 2/3/92

Fee: 220<sup>00</sup>

S.I. # 5418-1364

PROPERTY'S LEGAL DESCRIPTION 10-110-8AC TL 600

REQUESTOR: LYON & ASSOCIATES for Hankel DAYTIME PHONE: \_\_\_\_\_

ADDRESS: 12035 NE BEVERLY DR  
NEWPORT OREGON 97365  
503 265-6826

ZIP \_\_\_\_\_

REASON FOR SITE EVALUATION REQUEST: to sell property

NUMBER OF DWELLINGS ON PROPERTY: 0

SIZE OF PROPERTY: 50' x 100' #ACRES: \_\_\_\_\_

HAS PLANNING DEPARTMENT BEEN CONSULTED CONCERNING DEVELOPMENT PLANS?

YES  NO

HAS PROPERTY BEEN EVALUATED BEFORE? IF SO, WHEN? No

TAX LOT(S) WAS CREATED:

- PRIOR TO MAY 1, 1973.  AFTER MARCH 1, 1978
- PRIOR TO JANUARY 1, 1974.  YET TO BE LEGALLY CREATED.
- PRIOR TO MARCH 1, 1978.

DETAILED DIRECTIONS TO SITE WITH LANDMARKS: Beverly Beach  
go South on Old 101 (Beverly Dr) - 1/4 - 1/2 mile + turn (R)  
on Avery (used to be View Ave) go down almost to end  
(see map) property is just past Grey house (for sale by CW)

DATE TEST HOLES WILL BE DUG: Please call 265-6826 1 day ahead -  
deep holes for B.S.F. can't leave open - kids play

PLANNING DEPARTMENT USE ONLY

PROPOSAL CONFORMS TO ZONING REQUIREMENTS

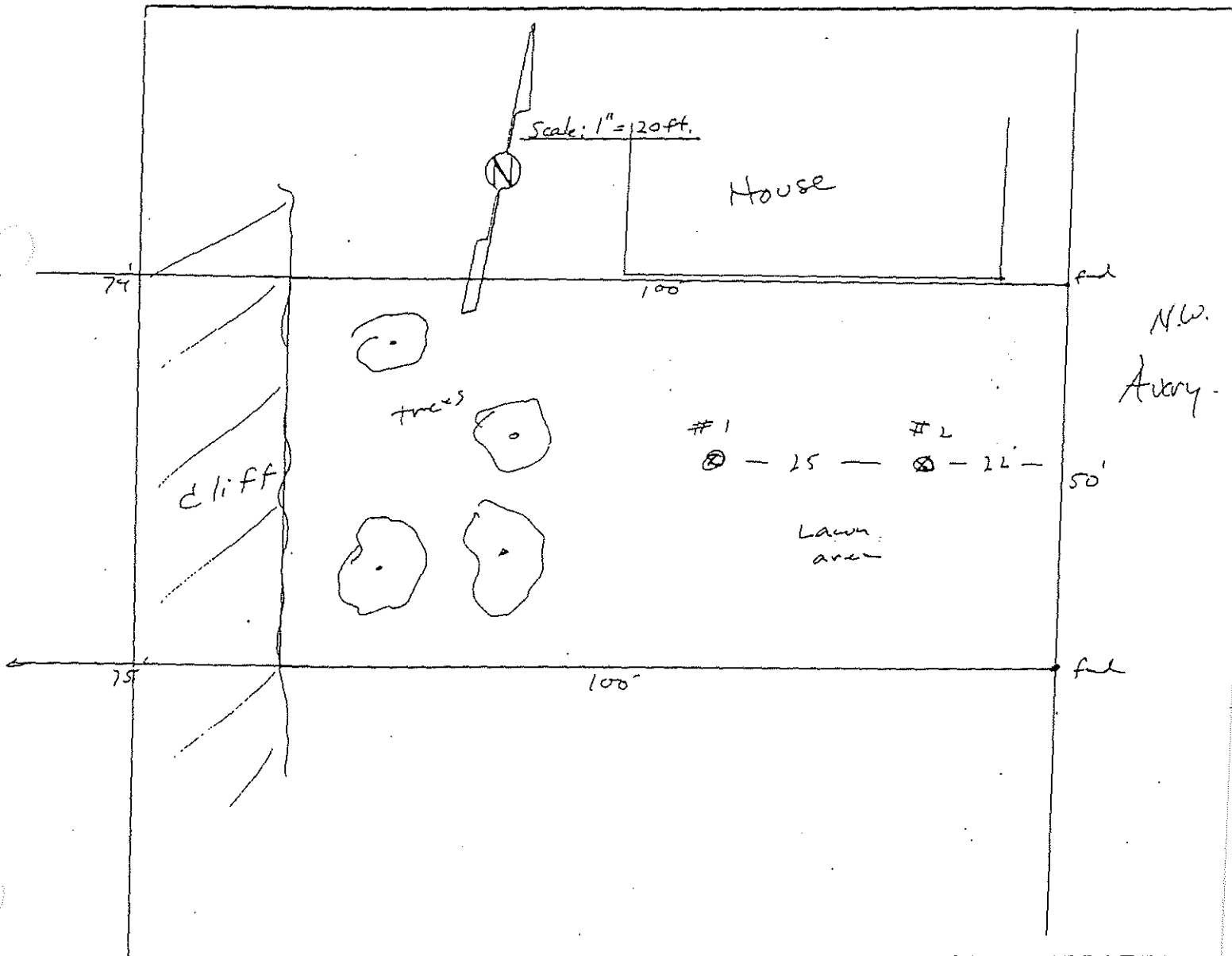
PROPOSAL DOES NOT CONFORM TO ZONING REQUIREMENTS.

Att 12 (to map)

PLOT PLAN

SHOW AND CHECK OFF:

- |                          |                                 |                          |  |
|--------------------------|---------------------------------|--------------------------|--|
| <input type="checkbox"/> | EXISTING SEPTIC TANK & ITS SIZE | <input type="checkbox"/> | PLANNED STRUCTURES                     |
| <input type="checkbox"/> | WELLS AND WATER LINES           | <input type="checkbox"/> | REPLACEMENT DRAINFIELD AREA            |
| <input type="checkbox"/> | ALL SUBSURFACE DRAINS           | <input type="checkbox"/> | ALL LOCATOR RIBBONS PLACED ON PROPERTY |
| <input type="checkbox"/> | PROPERTY LINES                  | <input type="checkbox"/> | NORTH                                  |
| <input type="checkbox"/> | SPRINGS AND CREEKS              |                          |  |
| <input type="checkbox"/> | DRAINLINES AND THEIR LENGTHS    |                          |  |



PREPARED BY: R Lyon DATE: 2/3/92

Tax Reference \_\_\_\_\_  
 Applicant Lyon for Henkel Date 2/1/92 Parcel Size 50' x 100'

Soil Matrix Color and Mottling (Location), % Coarse Fragments, Roots, Structure, Layer Limiting Effective Soil Depth, etc.

| Depth                     | Texture                             |  |
|---------------------------|-------------------------------------|--|
| <u>West</u><br>#1<br>0-20 | <u>S:L</u>                          | <u>10YR 4/3; Many U.fine + fine Rts; Mod, U.F, Sbk</u>                       |
| 20-26                     | <u>Weakly Centered LS</u>           | <u>10YR 6/6 + 6/8; few U.fine Rts; Weak, F, Sbk</u>                          |
| 26-36                     | <u>"</u>                            | <u>10YR 6/4 + 6/6; few U.fine Rts; "</u>                                     |
| 36-59                     | <u>SL</u>                           | <u>10YR 5/4 + some <sup>6/4</sup> mottling; No Roots; Mod-Weak, U.F, Sbk</u> |
| 59-80                     | <u>LS</u>                           | <u>10YR 6/6; " ; "</u>   |
| #2<br>80-102              | <u>Compacted-Not cemented Sands</u> | <u>10YR 6/4 + 6/6 + 5/4; No Roots; Massive, Sg</u>                           |
|                           |                                     | <u>No H<sub>2</sub>O</u>   |

|                           |                           |  |
|---------------------------|---------------------------|--|
| <u>East</u><br>#3<br>0-25 | <u>S:L</u>                | <u>10YR 3/3; Many <sup>U.fine +</sup> fine Rts; Mod, U.F, Sbk</u>          |
| 25-34                     | <u>Weakly centered LS</u> | <u>10YR 6/6 + 6/8; few fine Rts; Weak, F, Sbk</u>                          |
| 34-46                     | <u>Weakly centered S</u>  | <u>10YR 6/6 w/ 7/2 mottling (sploche); Very fine U.fine Rts; Weak, Sbk</u> |
| 46-54                     | <u>Sand</u>               | <u>10YR 6/4 + 7/2 (mottling) No Rts; massive, Sg</u>                       |
| 54-73                     | <u>"</u>                  | <u>10YR 5/3 + 5/6; No Rts; "</u>   |
| 73-97                     | <u>"</u>                  | <u>10YR 5/2; No Rts; "</u>   |
| 97"                       | <u>H<sub>2</sub>O</u>     | <u>H<sub>2</sub>O coming in at 98"</u>                                     |

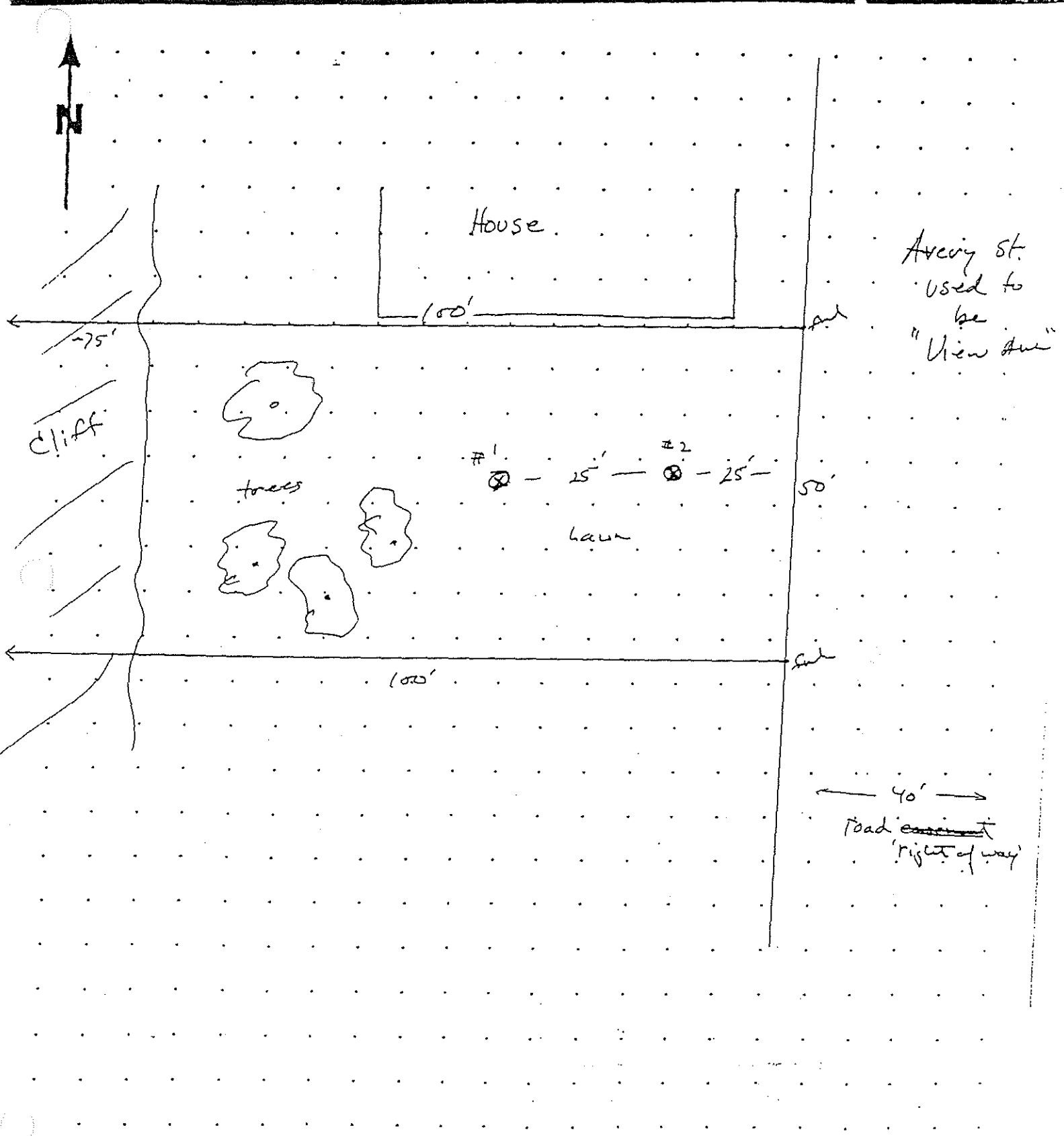
Landscape Notes raised main terrace  
 Slope flat Aspect \_\_\_\_\_ Groundwater Type temporary  
 Other Site Notes Lawn

SYSTEM SPECIFICATIONS

778 System: Bottomless Design Flow 450 gpd Disposal Field Size 366 sq ft (Linear Feet)  
 Initial Sand filters System Sizing \_\_\_\_\_ /150 g. Max. Depth Absorption Facility (in) \_\_\_\_\_  
 Replacement \_\_\_\_\_ System Sizing \_\_\_\_\_ /150 g. Max. Depth Absorption Facility (in) \_\_\_\_\_

Special Conditions probable newish, raised variance candidate





DATE 2/3/92

Rh  
Signature of Evaluator

SITE EVALUATION FIELD WORKSHEET

Map & Tax Lot 10-11-8-AC  
 Date 2-21-92 Parcel Size 175X50'

Applicant HOHANSHELT  
 Evaluator J. EARLES + Robt VanCleave

JUST BELOW  
 RAINFALL

| Depth | Texture        | Mottling       | ESD                     | Soil Matrix Color, Structure, Consistence, % Coarse Fragments, Roots, etc.                       |
|-------|----------------|----------------|-------------------------|--|
| 0-3   | (SIL-)<br>(L-) |                |                         | 10YR 3/2; MOD F SBK; H F SS P MANY VF, VERTS<br>FEW INCL 10YR 5/2 SS NODULES (CONCENTR)          |
| 3-18  | SIL            |                |                         | MOD F-MSBK; 10YR 3/4; SH-H; SS PS; COMM VF VERTS<br>10YR 3/3 MOIST MIX                           |
| 18-27 | FSL            |                |                         | 10YR 5/3-5/4 MASSIVE SBKs OR MED SBK VSS SH F PS<br>FEW COMM VF VERTS;                           |
| 27-44 | STR COM SAND   | * 27" 10YR 5/3 | ASSOC WITH ROOT CHANNEL | STRONGLY CEM. SANDS 2.5Y 6/3 MOIST<br>IN 10YR 5/8 MASSIVE COARSE SBK H-VH FIRM-VF<br>NS PN NORTS |
| 44-60 | STR COM SAND   |                |                         | 2.5Y 5/2 HARD, FIRM NS, PN   |

Pit 1

(3)

|       |                         |            |       |  |
|-------|-------------------------|------------|-------|--|
| 0-2   | <del>FSL</del>          |            |       | 10YR 3/2-3/3 MOD, F SBK SH F; VSS PS; MANY VF FEW C                                |
| 2-16  | <del>FSL</del>          |            |       | 10YR 4/2-4/3 M, F MSBK SH-H, F SS PS COMM VF, FEW                                  |
| 16-26 | <del>STR COM SAND</del> | * 10YR 5/3 | * 18" | 7.5YR 10YR 5/6 W/INCL 5/2-6/2 MOTTLES OF 5/3                                       |
| 26-58 | <del>WK CEHLS</del>     |            |       | 10YR 5/6 MOTTLES OF 5/3 WK, COARSE SBK H, F, NS, VSP                               |
| 58-65 | <del>FSL</del>          | 50"        |       | 10YR 5/6 MATRIX 5/4 MOTTLES; MASSIVE COAR STR H, F SS PS<br>10YR 5/2 MOTTLES @ 50" |
| 65-72 | <del>Fe COM SAND</del>  |            |       | 10YR 6/8 IRON STAINS 16YR 5/2-5/3 MATRIX H, FIRM NS, PN                            |

PIT 2

Pit

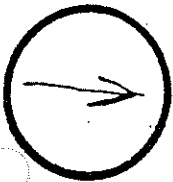
Pit

Denial to allow "..."  
 Denial to allow "..."  
 Denial to allow "..."

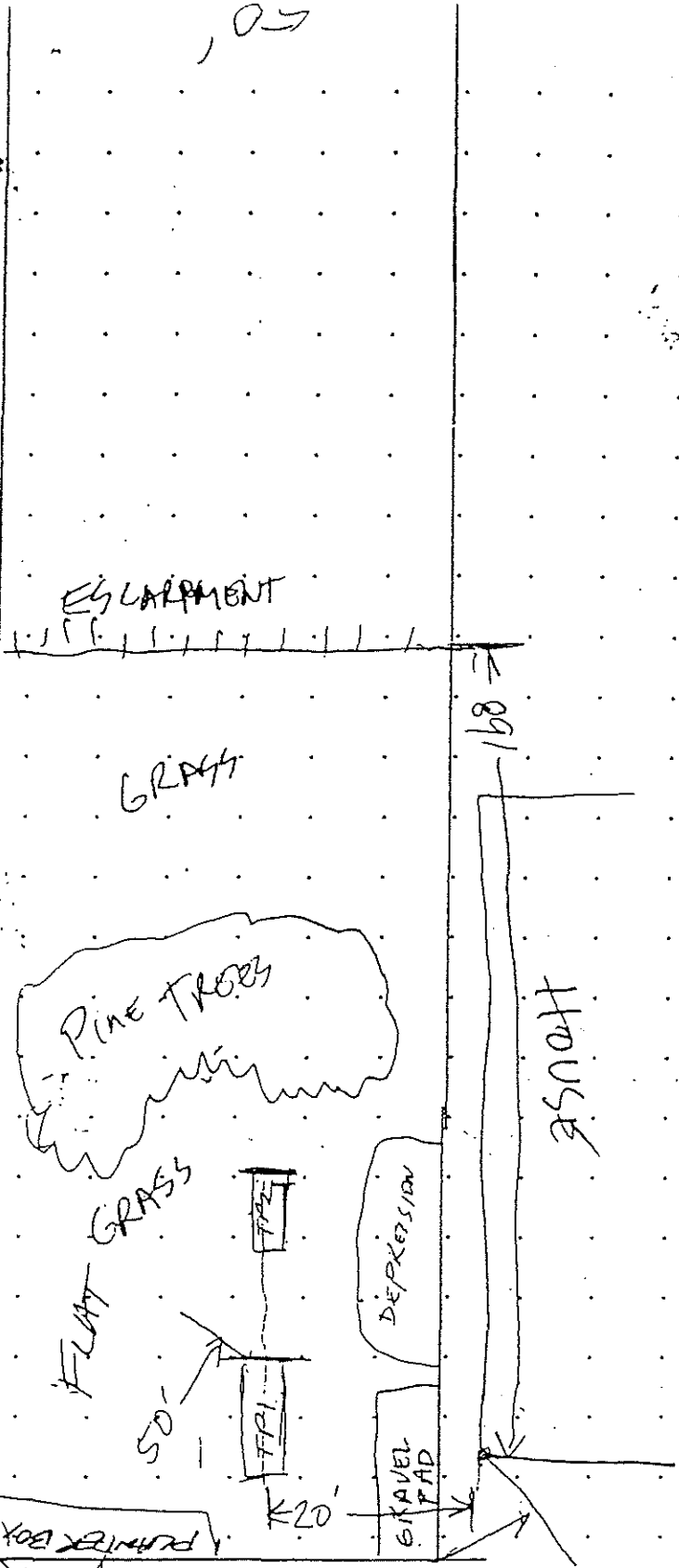
SYSTEM SPECIFICATIONS

Type System: \_\_\_\_\_ Design Flow \_\_\_\_\_ gps Disposal Field Site \_\_\_\_\_ Linear Feet \_\_\_\_\_  
 Initial \_\_\_\_\_ System Sizing \_\_\_\_\_ /150g Max. Depth Absorption Facility (in) \_\_\_\_\_  
 Replacement \_\_\_\_\_ System Sizing \_\_\_\_\_ /150g Max. Depth Absorption Facility (in) \_\_\_\_\_

Special Conditions TP1 54" to standing H<sub>2</sub>O / TP2 64" to H<sub>2</sub>O 9' depth into Pit @ 72"



NORTH



Across Avery  
 TEL Pole  
 COST  
 12

NW AVERY ST.

PUMPER BOX

45' to CORNER HWY

Landscape Notes

Slope 0

Aspect W

Groundwater Type

Other Site Notes

This agenda item was postponed until the November 14-15, 1996 EQC meeting.

# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item E  
10/10/96 Meeting

|  |
|--|
| <b>Title:</b><br>Adoption by reference of National Emission Standards for Hazardous Air Pollutants (NESHAPs)                 |
| <b>Summary:</b><br>New rules would amend OAR 340 Divison 32 by adopting new federal NESHAP standards for major sources only. |
| <b>Department Recommendation:</b><br>Approve rule language included as attachment 'A' in this report.                        |
| Report Author <i>John Amrey</i> Division Administrator <i>Gregory A. Gre</i> Director <i>Hayden Nash</i>                     |

State of Oregon  
Department of Environmental Quality Memorandum

---

**Date:** 9/18/96  
**To:** Environmental Quality Commission  
**From:** Langdon Marsh  
**Subject:** Agenda Item E, EQC Meeting October 10, 1996

**Background**

On June 6, 1996, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on proposed rules which would adopt by reference newly promulgated federal National Emission Standards for Hazardous Air Pollutants (NESHAPs).

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on July 1, 1996. The Hearing Notice and informational materials were mailed to the mailing list of those persons who have asked to be notified of rulemaking actions, and to a mailing list of persons known by the Department to be potentially affected by or interested in the proposed rulemaking action on July 14, 1996.

A Public Hearing was held July 24, 1996 with Josh Weber serving as Presiding Officer. Written comment was received through July 26, 1996. The Presiding Officer's Report (Attachment C) summarizes the oral testimony presented at the hearing and lists all the written comments received. (A copy of the comments is available upon request.)

Department staff have evaluated the comments received (Attachment D). Based upon that evaluation, modifications to the initial rulemaking proposal are being recommended by the Department. These modifications are summarized below and detailed in Attachment E.

The following sections summarize the issue that this proposed rulemaking action is intended to address, the authority to address the issue, the process for development of the rulemaking proposal including alternatives considered, a summary of the rulemaking proposal presented for public hearing, a summary of the significant public comments and the changes proposed in response to those comments, a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

---

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

**Issue this Proposed Rulemaking Action is Intended to Address**

This adoption will amend OAR 340 Division 32 with maximum achievable emission (MACT) standards for the affected source categories. This rulemaking is also part of a continuing effort to amend the Division 32 rules with new regulations as promulgated by the federal government.

**Relationship to Federal and Adjacent State Rules**

Identical, as these are an adoption of federal standards by reference.

**Authority to Address the Issue**

ORS 468.020 and ORS 468A.310

**Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)**

This rulemaking is one of a continuing series of adoptions by reference of new federal standards, paralleling the federal progress in standard promulgation according to the schedule set at Section 112(d) in the Clean Air Act. This proposal was considered and approved by the Industrial Source Advisory Committee (ISAC), and then followed Oregon's Administrative Procedures Act through legal and public notice and public hearings. The original proposal, which sought to eliminate redundant regulation by standards addressing volatile organic compounds (Division 22) and hazardous air pollutants (Division 32) has been deferred after considering EPA's comments on this rulemaking. These comments identified State Implementation Plan (SIP) issues, that were beyond the scope and timeframe allowed for this rulemaking. The deferral will extend until such time as the EPA issues guidance detailing the required steps states must take to amend SIP regulations addressing similar chemical and compounds addressed by new federal NESHAP standards.

**Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.**

The rulemaking proposal is limited through this adoption to major stationary industrial sources only, although the federal chromium electroplating and anodizing standard (40 CFR Part 63, Subpart N) contains substantive control and compliance standards for area sources. Discussions with the ISAC committee revealed a consensus position recommending direct Oregon DEQ implementation of area source provisions of this, and some additional previously adopted NESHAP standards. Reflecting

Reflecting the ISAC committee consensus, DEQ will advance new rulemaking in October, 1996, which will expand the scope of OAR 340 Division 32 to implement both major and area source NESHAP standards.

### **Summary of Significant Public Comment and Changes Proposed in Response**

DEQ received two significant public comments on the proposed rules; one from EPA Region X, and one from Douglas S. Morrison. EPA's comments detailed State Implementation Plan (SIP) problems associated with DEQ's proposed amendment of the existing VOC regulations in Division 22. These revisions were proposed in order to eliminate redundant regulation of sources that would be subject to two different sets of regulations for the same emission; specifically where the emission is both a hazardous air pollutant and a volatile organic compound. In response to EPA's comments, DEQ has decided to defer the proposed Division 22 amendments until EPA issues guidance concerning the integration of the new NESHAP standards into Oregon's existing SIP program. In the interim, DEQ will work directly with industrial sources to avoid conflicting or redundant regulation.

Douglas Morrison's comments, on behalf of several clients engaged in chromium electroplating in the State of Oregon, pointed out that DEQ had already adopted the chromium electroplating and anodizing rule by reference (340-032-0510). Additionally, Mr. Morrison suggested that DEQ's adoption of the NESHAP should include area sources.

DEQ acknowledges the presence of the citation of Subpart N in Division 32. However, this is the result of a clerical error, and DEQ's previous NESHAP adoption of May 18, 1995 specifically excluded the chromium electroplating/anodizing source category from the list of source categories in the rulemaking. However, because Subpart N will be adopted through this rulemaking, DEQ will leave unaltered this section of Division 32.

DEQ agrees with Mr. Morrison's second comment, and as previously indicated, will initiate rulemaking in October 1996 to adopt both the area and major source provision of existing and future federal NESHAPs.

### **Summary of How the Proposed Rule Will Work and How it Will be Implemented**

These new rules will establish maximum achievable emissions control (MACT) standards for the following source categories: chromium electroplating and anodizing, wood furniture coating, ship building and repair, aerospace, marine vessel loading and unloading, polymers and resins production, secondary lead smelters, and coke oven batteries. The rules will be implemented through



Oregon's Title V permit program for major stationary industrial sources. Title V permits must contain all air quality requirements applicable to the Title V source. Additionally, through the delegation process of Section 112(l), Oregon will request from EPA full delegation of implementation and enforcement responsibilities associated with these standards.

**Recommendation for Commission Action**

DEQ recommends that the Commission adopt the rules/rule amendments regarding OAR Chapter 340 Division 32 as presented in Attachment A of the Department Staff Report.

**Attachments**

- A. Rule (Amendments) Proposed for Adoption
- B. Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Fiscal and Economic Impact Statement
  - 3. Land Use Evaluation Statement
  - 4. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
  - 5. Cover Memorandum from Public Notice
- C. Presiding Officer's Report on Public Hearing
- D. Department's Evaluation of Public Comment
- E. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- F. Advisory Committee Membership and Report
- G. Rule Implementation Plan
- H. (Other Attachments as appropriate)


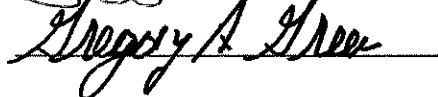
**Reference Documents (available upon request)**

Written Comments Received (listed in Attachment C)  
(Other Documents supporting rule development process or proposal)

Approved:

Section:

Division:

Report Prepared By: John M. Kinney

Memo To: Environmental Quality Commission  
**Agenda Item E, EQC Meeting**  
Page 5

Phone: 503-229-6819

Date Prepared: September 6, 1996

F:\TEMPLATE\FORMS\EQCRULE.DOT  
10/19/95

## PROPOSED RULE AMENDMENTS

Division 32

### HAZARDOUS AIR POLLUTANTS

#### NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Federal Regulations Adopted by Reference

##### Federal Regulations Adopted by Reference

###### 340-032-0510

- (1) Except as provided in section (2) of this rule, **40 CFR Part 63, Subpart A, F, G, H, I, L, M, N, O, Q, R, T, W, X, Y, CC, and EE, GG, II and JJ** are by reference adopted and incorporated herein.
- (2) Where "Administrator" or "EPA" appears in **40 CFR Part 63, Subpart A, F, G, H, I, L, M, N, O, Q, R, T, W, X, Y, CC, and EE, GG, II and JJ**, "Department" shall be substituted, except in any section of **40 CFR Part 63, Subpart A, F, G, H, I, L, M, N, O, Q, R, T, W, X, Y, CC, and EE, GG, II and JJ** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.

##### National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions

###### 340-032-0520

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart A**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart A** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart A** under authority retained by EPA]

##### National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry

###### 340-032-0530

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart F**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart F** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart F** under authority retained by EPA]

##### National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater

**340-032-0540**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart G**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart G** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart G** under authority retained by EPA]

**National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks**

**340-032-0550**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart H**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart H** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart H** under authority retained by EPA]

**National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulations for Equipment Leaks**

**340-032-0560**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart I**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart I** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart I** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries**

**340-032-0570**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart L**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart L** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart L** under authority retained by EPA]

**National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities**

**340-032-05700580**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40**

- CFR Part 63 Subpart M.**
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart M** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart M** under authority retained by EPA]

**National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks**

**340-032-0590**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart N**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart N** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart N** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Ethylene Oxide Commercial Sterilization and Fumigation Operations**

**340-032-05800600**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart O**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart O** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart O** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers**

**340-032-05900610**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart Q**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart Q** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart Q** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution (Stage 1) from Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)**

**340-032-06000620**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart R**.

- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart R** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart R** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants: from Halogenated Solvent Cleaning**

**340-032-06100630**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart T**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart T** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart T** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutant for Epoxy Resins Production and Non-Nylon Polyamides Production**

**340-032-0640**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart W**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart W** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart W** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelters**

**340-032-0650**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart X**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart X** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart X** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Marine Tank Vessel Loading Operations**

**340-032-0660**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is a new source subject to **40 CFR Part 63 Subpart Y**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart Y** as adopted under **OAR 340-032-0510**.

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart Y under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries**

**340-032-0670**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is a new source subject to 40 CFR Part 63 Subpart CC.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart CC as adopted under OAR 340-032-0510.

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart CC under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Magnetic Tape Manufacturing Operations**

**340-032-06200680**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is a new source subject to 40 CFR Part 63 Subpart EE.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart EE as adopted under OAR 340-032-0510.

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart EE under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Aerospace Manufacturing and Rework Facilities**

**340-032-0690**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is a new source subject to 40 CFR Part 63 Subpart GG.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart GG as adopted under OAR 340-032-0510.

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart GG under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Shipbuilding and Ship Repair (Surface Coating)**

**340-032-0700**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is a new source subject to 40 CFR Part 63 Subpart II.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart II as adopted under OAR 340-032-0510.

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart II under authority retained by EPA]

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**National Emission Standards for Hazardous Air Pollutants from Wood Furniture Manufacturing**

**340-032-0710**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is a new source subject to 40 CFR Part 63 Subpart JJ.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart JJ as adopted under OAR 340-032-0510.

\_\_\_\_\_ [Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart JJ under authority retained by EPA]

**Federal Regulations Adopted by Reference**

**340-032-2600**

- (1) Except as provided in section (2) of this rule, **40 CFR Part 63, Subpart A, F, G, H, I, L, M, N, O, Q, R, T, W, X, Y, CC, -and EE, GG, II and JJ** are by reference adopted and incorporated herein.
- (2) Where "Administrator" or "EPA" appears in **40 CFR Part 63, Subpart A, F, G, H, I, L, M, N, O, Q, R, T, W, X, Y, CC, -and EE, GG, II and JJ**, "Department" shall be substituted, except in any section of **40 CFR Part 63, Subpart A, F, G, H, I, L, M, N, O, Q, R, T, W, X, Y, CC, -and EE, GG, II and JJ** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.

**National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions**

**340-032-2610**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is also subject to 40 CFR Part 63 Subpart A.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart A as adopted under OAR 340-032-2600.

\_\_\_\_\_ [Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart A under authority retained by EPA]

**National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry**

**340-032-2620**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is also subject to 40 CFR Part 63 Subpart F.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart F as adopted under OAR 340-032-2600.

\_\_\_\_\_ [Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart F under authority retained by EPA]



**National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater**

**340-032-2630**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart G**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart G** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart G** under authority retained by EPA]

**National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks**

**340-032-2640**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart H**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart H** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart H** under authority retained by EPA]

**National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulations for Equipment Leaks**

**340-032-2650**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart I**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart I** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart I** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries**

**340-032-2660**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart L**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart L** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart L** under authority retained by EPA]

**National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities**

**340-032-26602670**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart M**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart M** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart M** under authority retained by EPA]

**National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks**

**340-032-2680**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart N**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart N** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart N** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Ethylene Oxide Commercial Sterilization and Fumigation Operations**

**340-032-26702690**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart O**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart O** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart O** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers**

**340-032-26802700**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart Q**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart Q** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart Q** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution (Stage 1) from Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)**

**340-032-26902710**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart R**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart R** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart R** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants: from Halogenated Solvent Cleaning**

**340-032-30002720**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart T**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart T** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart T** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutant for Epoxy Resins Production and Non-Nylon Polyamides Production**

**340-032-2730**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart W**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart W** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart W** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants: Secondary Lead Smelters**

**340-032-2740**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40 CFR Part 63 Subpart X**.
- (2) Requirements. Sources subject to this rule shall comply with **40 CFR Part 63 Subpart X** as adopted under **OAR 340-032-2600**.

[Note: Other sources which are not major sources may be subject to **40 CFR Part 63, Subpart X** under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Marine Tank Vessel Loading Operations**

**340-032-2750**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in **OAR 340-028-110** that is also subject to **40**

**CFR Part 63 Subpart Y.**

- (2) **Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart Y as adopted under OAR 340-032-2600.**

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart Y under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries**

**340-032-2760**

- (1) **Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is also subject to 40 CFR Part 63 Subpart CC.**
- (2) **Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart CC as adopted under OAR 340-032-2600.**

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart CC under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Magnetic Tape Manufacturing Operations**

**340-032-30102770**

- (1) **Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is also subject to 40 CFR Part 63 Subpart EE.**
- (2) **Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart EE as adopted under OAR 340-032-2600.**

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart EE under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Aerospace Manufacturing and Rework Facilities**

**340-032-2780**

- (1) **Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is also subject to 40 CFR Part 63 Subpart GG.**
- (2) **Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart GG as adopted under OAR 340-032-2600.**

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart GG under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Shipbuilding and Ship Repair (Surface Coating)**

**340-032-2790**

- (1) **Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is also subject to 40 CFR Part 63 Subpart II.**
- (2) **Requirements. Sources subject to this rule shall comply with 40 CFR Part 63**

**Subpart II as adopted under OAR 340-032-2600.**

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart II under authority retained by EPA]

**National Emission Standards for Hazardous Air Pollutants from Wood Furniture Manufacturing**

**340-032-2800**

- (1) Applicability. This applies to any federal operating permit source which is a major source as defined in OAR 340-028-110 that is also subject to 40 CFR Part 63 Subpart JJ.
- (2) Requirements. Sources subject to this rule shall comply with 40 CFR Part 63 Subpart JJ as adopted under OAR 340-032-2600.

[Note: Other sources which are not major sources may be subject to 40 CFR Part 63, Subpart JJ under authority retained by EPA]

# NOTICE OF PROPOSED RULEMAKING HEARING

Department of Environmental Quality

OAD Chapter 340-Division 32 and OAD Chapter 340 Division 22

**DATE:**                      **TIME:**                      **LOCATION:**

July 24, 1996                      6:00 PM                      811 SW Sixth Avenue-Room 3A, Portland, OR.  
**HEARINGS OFFICER(s):**                      Josh Weber

**STATUTORY AUTHORITY:**                      ORS 468.020, ORS 468A.310

or **OTHER AUTHORITY:**

**STATUTES IMPLEMENTED:**

**ADOPT:**                      Newly promulgated federal NESHAP standards for the following source categories: chromium electroplating and anodizing, wood furniture coating, ship building and repair, aerospace, marine vessel loading and unloading, polymers and resins production, secondary lead smelters, and coke oven batteries.

**AMEND:**                      OAD Division 22    to eliminate redundancy with newly promulgated NESHAP standards.

**REPEAL:**

**RENUMBER:**                      **AMEND & RENUMBER:**

(prior approval from  
Secretary of State  
REQUIRED)

- This hearing notice is the initial notice given for this rulemaking action.
- This hearing was requested by interested persons after a previous rulemaking notice.
- Auxiliary aids for persons with disabilities are available upon advance request.

**SUMMARY:**

The Department proposes to adopt new rules in Division 32 regarding National Emission Standards for Hazardous Air Pollutants (NESHAPs). These rules propose to adopt EPA's rules for NESHAP by reference; limited to major hazardous air pollutant (HAP) sources as defined at OAR 340-032-0120. The rules will be implemented through the Department's Oregon Title V Operating Permit Program. The Division 22 rules are amendments to the existing Oregon rules applicable to vapor degreasers, perchloroethylene dry cleaning, and bulk gasoline terminals. These amendments will eliminate redundant regulation of these sources across two sets of Oregon air quality regulations; the Division 22 rules for volatile organic compound (VOC) regulation, and the Division 32 rules addressing hazardous air pollutants.

**LAST DATE FOR COMMENT:**                      July 25, 1996

**AGENCY RULES COORDINATOR:**

**AGENCY CONTACT FOR THIS PROPOSAL:**

**ADDRESS:**

Susan M. Greco, (503) 229-5213  
John Kinney, (503) 229-6819  
811 S. W. 6th Avenue  
Portland, Oregon 97204

**TELEPHONE:**

/1-800-452-4011

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Adoption by reference of federal  
National Emission Standards for Hazardous Air Pollutants (NESHAPs)

## Fiscal and Economic Impact Statement

### Introduction

This rulemaking is advanced pursuant to the requirements of Section 112 of the Clean Air Act; specifically Section 112 (d), 'Emission Standards', in which the Administrator of the EPA is required to establish emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants. These standards are listed for promulgation pursuant to EPA's schedule at Section 112(e). This rulemaking is an adoption by reference of emission standards for major sources engaged in the above-referenced manufacturing activities.

The proposed Division 22 rule changes are amendments to the existing Oregon rules applicable to vapor degreasers, perchloroethylene dry cleaning operations, and bulk gasoline terminals. These amendments will eliminate redundant regulation of these sources across two sets of Oregon air quality regulations; the Division 22 rules for volatile organic compound (VOC) regulation, and the Division 32 rules, addressing hazardous air pollutants.

### General Public

The newly adopted (Division 32) and proposed amendments (Division 22) may increase costs for large and small businesses. The increased costs may be passed on to the general public.

### Small Business

As this proposed rulemaking is limited to major sources only, there are no known fiscal or economic impacts affecting Oregon's small business community. A revised fiscal and economic analysis will be performed at such time as the Department considers regulation of area sources in addition to major industrial sources.



### Large Business

Large businesses represented by the source categories listed in the introduction, which are also major sources ( e.g., potential annual emissions greater than or equal to 10 tons of a single 112(b) pollutant ) will be subject to these rules.

Large direct costs may be associated with this rule , for those sources requiring newly purchased pollution control equipment or re-engineered process and production configurations to meet required maximum achievable emissions control . These costs are attributable to DEQ's implementation of these new federal rules, not as a result of an Oregon specific regulatory action.

### Local Governments

As there are no local governments known to engage in any of the industrial activities listed in the introduction, there is assumed to be no impact or associated cost of this rulemaking on local government. Local governments are already required to provide land use compatibility determinations with each Oregon air quality permit, implying there will be no new costs associated with the implementation of these rules.

### State Agencies

The Oregon Department of Environmental Quality and Lane Regional Air Pollution Authority will be most directly impacted by these new NESHAP regulations. These agencies will be required to identify affected major sources in these industrial designations, and place these new NESHAP specific requirements in the source's Oregon air quality permit. There will also be an on-going workload associated with compliance and enforcement associated with these standards. However, these costs, implementing FTE, and sustaining revenue, have previously been forecast and accounted for in the demonstrations associated with the Department's Title V program. In summary, costs associated with these rules represent continuing costs, not newly created costs.

### Assumptions

This analysis assumes that sources are in compliance with existing state and federal rules. Sources which are not in compliance may be subject to additional costs due to an expected increase in compliance assurance activities.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal

for

Adoption by reference of federal national emission standards for hazardous air pollutants  
(NESHAPs)

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

The Department proposes to adopt new rules in Division 32 regarding National Emission Standards for Hazardous Air Pollutants (NESHAPs). These rules propose to adopt EPA's rules for NESHAP by reference limited to only major hazardous air pollutant (HAP) sources as defined at OAR 340-032-0120. The rules will be implemented through the Department's Oregon Title V Operating Permit Program.

The Division 22 rules are amendments to the existing Oregon rules applicable to vapor degreasers, Perchloroethylene dry cleaning, and bulk gasoline terminals. These amendments will eliminate redundant regulation of these sources across two sets of Oregon air quality regulations; the Division 22 rules for volatile organic compound (VOC) regulation, and the Division 32 rules, addressing hazardous air pollutants.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

Yes  No

a. If yes, identify existing program/rule/activity:

The issuance of air permits has been determined a DEQ Land Use program. The proposed standards will be implemented through the Oregon Title V Operating Permit , and the Air Contaminant Permit programs.

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes X No \_\_\_\_\_ (if no, explain):

Current procedures require local government to provide a land use compatibility determination before an air permit is issued or before approval of a Notice of Construction.

c. If no, apply the following criteria to the proposed rules.

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

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

\_\_\_\_\_  
Division

Robert Young  
Intergovernmental Coord.

6/3/96  
Date

**Questions to be Answered to Reveal  
Potential Justification for Differing from Federal Requirements.**

**1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?**

Yes. These are the federal requirements that the Department proposes to adopt, unaltered, for major sources of hazardous air pollutants. Specifically, these regulations represent emission standards developed pursuant to Section 112(d) of the Clean Air Act.

The Division 22 rules are amendments to the existing Oregon rules applicable to vapor degreasers, Perchloroethylene dry cleaning, and bulk gasoline terminals. These amendments will eliminate redundant regulation of these sources across two sets of Oregon air quality regulations; the Division 22 rules for volatile organic compound (VOC) regulation, and the Division 32 rules, addressing hazardous air pollutants. The Division 22 rules are part of the State Implementation Plan and cannot be relaxed without additional emission reductions. Therefore, a source will only be exempted from a Division 22 requirement where there is an equal or more stringent requirement in a NESHAP.

**2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?**

The NESHAP regulations are technology based. The Division 22 proposed rule changes are with the most stringent controlling, as discussed in 1 above.

**3. Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?**

Yes. These applicable federal requirements specifically address the control of hazardous air pollutants, which are of concern in Oregon. Data and information representative of human health effects of hazardous air pollutants, and available emission control technology was considered in the federal process that established these rules.

**4. Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?**

Yes. These regulations will increase certainty, by expressing directly the obligations of the industrial sources under Section 112 of the Clean Air Act and by making Oregon requirements the same as the federal requirements. Additionally, the Department is proposing to revise the Division 22 rules for sources that are also subject to a recently promulgated NESHAP. The purpose of the revisions is to eliminate redundant regulation.

**5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?**

There is not a timing issue. These new regulations are 'applicable requirements' which must be included in the Oregon Title V Operating Permit issued to all major industrial sources in Oregon.

**6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?**

No.

**7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)**

Yes, as these regulations are national in scope, all industrial sources of a similar source category, will have an identical emission standard, regardless of geographical location.

**8. Would others face increased costs if a more stringent rule is not enacted?**

No.

**9. Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?**

No. As this is a proposed adoption by reference in Division 32, the procedural requirements, including reporting and monitoring requirements are identical to applicable federal requirements.

**10. Is demonstrated technology available to comply with the proposed requirement?**

Yes, these regulations impose Maximum Achievable Control Technology (MACT) on the affected sources in each source category. MACT is either best controlled similar source for new sources, or the average of the top 12 % of existing similar sources for similar sources.

**11. Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?**

Yes, the proposed requirements will contribute to the prevention of pollution by limiting the emission of listed hazardous air pollutants through the installation and operation of Maximum Achievable Control Technology (MACT) emission controls.

These emission controls are not exclusively 'end-of-pipe' control, but rather represent a combination of work practices, raw material formulation and usage, operator training, and control device installation.

**State of Oregon  
Department of Environmental Quality**

**Memorandum**

**Date:** 9/9/96

**To:** Interested and Affected Public

**Subject:** Rulemaking Proposal and Rulemaking Statements

- OAR Division 32 ,adoption by reference of federal National Emission Standards for Hazardous Air Pollutants (NESHAPs)
- OAR Division 22, consistency amendments

This memorandum contains information on a proposal by the Department of Environmental Quality (DEQ) to adopt by reference federal National Emission Standards for Hazardous Air Pollutants (NESHAPs), and revise existing rules to eliminate redundant regulation. Pursuant to ORS 183.335, this memorandum also provides information about the Environmental Quality Commission's intended action to adopt a rule.

This proposal would adopt newly promulgated federal rules for the following industrial source categories:

- Chromium Electroplating and Anodizing
- Wood Furniture Coating
- Ship Building and Repair
- Aerospace
- Marine Vessel loading and unloading
- Polymers and Resins II
- Secondary Lead Smelters
- Coke Oven Batteries

The Department has the statutory authority to address this issue under ORS 468.020, ORS 468A.310.

**What's in this Package?**

Attachments to this memorandum provide details on the proposal as follows:

- Attachment A - The official statement describing the fiscal and economic impact of the proposed rule. (required by ORS 183.335)
- Attachment B - A statement providing assurance that the proposed rules are consistent with statewide land use goals and compatible with local land use

Attachment B-5

Memo To: Interested and Affected Public

Page 2

plans.

Attachment C - Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.

Attachment D - The actual language of the proposed rule adoption.

### **Hearing Process Details**

You are invited to review these materials and present written or oral comment in accordance with the following:

**Date:** 07/24/96

**Time:** 6:00 PM

**Place:** 811 SW Sixth Avenue, Rm. 3A

**Deadline for submittal of Written Comments:** 07/26/96

In accordance with ORS 183.335(13), no comments from any party can be accepted after the deadline for submission of comments has passed. Thus if you wish for your comments to be considered by the Department in the development of these rules, your comments must be received prior to the close of the comment period. The Department recommends that comments are submitted as early as possible to allow adequate review and evaluation of the comments submitted.

Josh Weber will be the Presiding Officer at the hearing. Following close of the public comment period, the Presiding Officer will prepare a report summarizing the oral testimony presented and written comments submitted. The Environmental Quality Commission (EQC) will receive a copy of the Presiding Officer's report and all written comments submitted. The public hearing will be tape recorded, but the tape will not be transcribed.

If you wish to be kept advised of this proceeding and receive a copy of the recommendation that is presented to the EQC for adoption, you should request that your name be placed on the mailing list for this rulemaking proposal.

### **What Happens After the Public Comment Period Closes**

The EQC will consider the Department's recommendation for rule adoption during one of their regularly scheduled public meetings. The targeted meeting date for consideration of this rulemaking proposal is October 11, 1996. This date may be delayed if needed to provide additional time for evaluation and response to testimony received in the hearing process. You will be notified of the time and place for final EQC action if you present oral testimony at the hearing or submit written comment during the comment period or ask to be notified of the proposed final action on this rulemaking proposal.

Attachment B-5



The EQC expects testimony and comment on proposed rules to be presented **during** the hearing process so that full consideration by the Department may occur before a final recommendation is made. In accordance with ORS 183.335(13), no comments can be accepted after the public comment period has closed by either the EQC or the Department. Thus the EQC strongly encourages people with concerns regarding the proposed rule to communicate those concerns to the Department prior to the close of the public comment period so that an effort may be made to understand the issues and develop options for resolution where possible.

### **Background on Development of the Rulemaking Proposal**

#### **Why is there a need for the rule?**

This proposal is part of a continuing series of adoptions the Department will undertake to parallel federal progress in emission standard development. These federal regulations are "applicable requirements" for affected sources and must be placed in the source's Oregon Title V Operating Permit. The Division 22 rule changes are necessary for conformity and efficiency.

#### **How was the rule developed**

The new Division 32 rules are an adoption by reference of federal NESHAP standards. The Division 22 rules are amendments to the existing Oregon rules applicable to vapor degreasers, Perchloroethylene dry cleaning, and bulk gasoline terminals. These amendments will eliminate redundant regulation of these sources across two sets of Oregon air quality regulations; the Division 22 rules for volatile organic compound (VOC) regulation, and the Division 32 rules, addressing hazardous air pollutants.

#### **Whom does this rule affect including the public, regulated community or other agencies, and how does it affect these groups?**

This rule directly affects major stationary sources of hazardous air pollutants, and every chrome plating and anodizing operation in Oregon, regardless of size. The following outline summarizes the scale and scope of the affect of these regulations on Oregon's regulated community:

#### **NESHAP Adoption - May 1995**

##### Wood Furniture Coating

##### 40 CFR Part 63 Subpart JJ

|                  |   |                      |
|------------------|---|----------------------|
| Applicability    | - | Major sources of HAP |
| OR major sources | - | 7 major, 371 area    |

Memo To: Interested and Affected Public

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Substantive requirements of rule -Emission limits for finishing material and contact adhesives .  
Prescribed work practices, operator training plan, implementation plan.  
New testing procedure for compliance (EPA Method 311)

Compliance dates f (size) - 11/96 for those existing sources emitting < 50 t/yr.  
11/21/97 for those existing sources > 50 t/y  
new sources within 1 yr. of operation

Comment - Most sources will comply with rule through recordkeeping (compliant coatings and VHAP limits)

Chromium Electroplating /Anodizing

40 CFR Part 63 Subpart N

Applicability - **Every** chromium electroplating and anodizing tank.  
Rule differentiates between:  
Hard Chrome  
Decorative Chrome  
Anodizing

OR sources - 1 major, 20-180 area

Substantive requirements eliminators, weighted emission control consisting of mist fume suppressants, and mesh collectors.

Compliance Date(s) Hard - **January 25, 1997**  
Dec- **January 25, 1996**  
Anodizing- **January 26, 1997**

Comment Proposed Title 5 area source deferral rule is still not final. While relieving the requirement for a Title V permit, the obligation to comply will remain. This is scheduled for July 1996 ISAC consideration.

Ship Building and Repair

40 CFR Part 63 Subpart II

Applicability Major sources

Attachment B-5



Memo To: Interested and Affected Public

Page 6

The following rules, all with major source applicability, have no known major OR sources.

|                                |                           |
|--------------------------------|---------------------------|
| <u>Polymers and Resins II</u>  | 40 CFR Part 63 Subpart W  |
| <u>Secondary Lead Smelters</u> | 40 CFR Part 63 Subpart X  |
| <u>Coke Oven Batteries</u>     | 40 CFR Part 63 Subpart L  |
| <u>Petroleum Refineries</u>    | 40 CFR Part 63 Subpart CC |

**How will the rule be implemented**

These adopted regulations will be implemented through the Oregon Operating Permit Program. In addition, the Division will conduct educational outreach efforts including mailings, and training sessions for the regulated community and the Departments field offices.

**Are there time constraints**

No. The newly proposed Division 32 regulations will be implemented either directly by USEPA or through delegated authority by ODEQ.

**Contact for more information**

If you would like more information on this rulemaking proposal, or would like to be added to the mailing list, please contact:

John Kinney (503)-229-6819  
Jerry Ebersole, ( 503)- 229- 6974

State of Oregon  
Department of Environmental Quality

Memorandum

Date: September 5, 1996

**To:** Environmental Quality Commission  
**From:** Joshua Weber  
**Subject:** Presiding Officer's report for rulemaking hearing for:

Adoption of newly promulgated federal NESHAP standards for OAR Division 32 for the following source categories: chromium electroplating and anodizing, wood furniture coating, ship building and repair, aerospace, marine vessel loading and unloading, polymers and resins production, secondary lead smelters, and coke oven batteries. OAR 340-032-0510 - 340-032-0710, 340-032-2600 - 340-032-2800.

Amendment of OAR Division 22 to eliminate redundancy with newly promulgated NESHAP standards. OAR 340-022-0130, 340-022-0160, 340-022-0180, 340-022-0183, 340-022-0186, 340-022-0220.

**Hearing Date and Time:** July 24, 1996, 6:00 P.M.  
**Hearing Location:** DEQ Headquarters  
811 SW Sixth Ave. Room 3A  
Portland, Oregon

The hearing was convened at 6:32 P.M., July 24, 1996.

No persons wishing to submit testimony were present.

The hearing was adjourned at 6:33 P.M.

DEPARTMENT'S EVALUATION OF PUBLIC COMMENT

**WRITTEN TESTIMONY**

**Comment**

Mr. Morrison's letter pointed out that the Department already had the citation for the chrome plating/anodizing NESHAP (40 CFR Part 63 Subpart N) listed in OAR 340-032-0510) Additionally, Mr. Morrison suggested that the Department adopt all of the provisions for the NESHAP, including those emission and compliance standards for area sources.

**Department Response**

The citation at 340-032-0510 is a clerical error resulting from the last NESHAP adoption by reference on May 18, 1996. However, as the Department is now adopting Subpart N, this notation is correct, and will remain unaltered.

The Department agrees that all NESHAP standards, including area-source standards, should be adopted. The Department will initiate a rulemaking in October, 1996 to adopt all federal NESHAP standards and modify those NESHAP previously adopted.

**Comment**

The Department received comments from the United States Environmental Protection Agency, Region 10, which emphasized the relationship between the Department's VOC emission limitation rules in OAR 340 Division 22 and Oregon's State Implementation Plan, or SIP. In summary, EPA assessed the Department's proposed changes to Division 22, designed to eliminate redundancy and duplicate regulation, as proposed SIP changes. All SIP changes require an extensive administrative and procedural process.

**Department Response**

The Department has determined that a SIP modification is beyond the timeframe and scope of this adoption by reference. Therefore, the Department will not modify OAR 340-Division 22, but will work with affected industrial sources to optimize compliance, and minimize redundancy. The Department will again consider rulemaking changes to Division 22 when EPA guidance specific to the relationship between the hazardous air pollutant and the volatile organic compound programs becomes available.

**DETAILED CHANGES TO ORIGINAL RULEMAKING PROPOSAL**

**VOLATILE ORGANIC COMPOUND RULES - OAR 340 DIVISION 22**

In response to EPA's comments, all proposed changes to OAR 340 Division 22 have been struck, and the rules will remain unmodified.

**Oregon Department of Environmental Quality  
Air Quality Industrial Source Advisory Committee IV Members**

Chair

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**Air Quality Industrial Source Advisory Committee IV Members**  
**Page 2**

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State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

RULEMAKING PROPOSAL  
for  
NESHAP Adoption by Reference

**Rule Implementation Plan**

**Summary of the Proposed Rule**

This rulemaking proposes to adopt new rules in Division 32 regarding National Emission Standards for Hazardous Air Pollutants. (NESHAPs). These rules propose an adoption of EPA's rules for NESHAP by reference; limited to only major hazardous air pollutant (HAP) sources as defined at OAR 340-032-0120. The rules will be implemented through the Department's Title V permit program. The attached timeline details the training and implementation steps the Department will undertake to support this rulemaking.

**Training**

The Department will emphasize training of regional and Headquarters staff on the correct interpretation and implementation of the new NESHAP rules. In outline form below are the major milestones which will guide this effort. The training effort is also subject to modification with input and suggested modification from DEQ's regional offices.

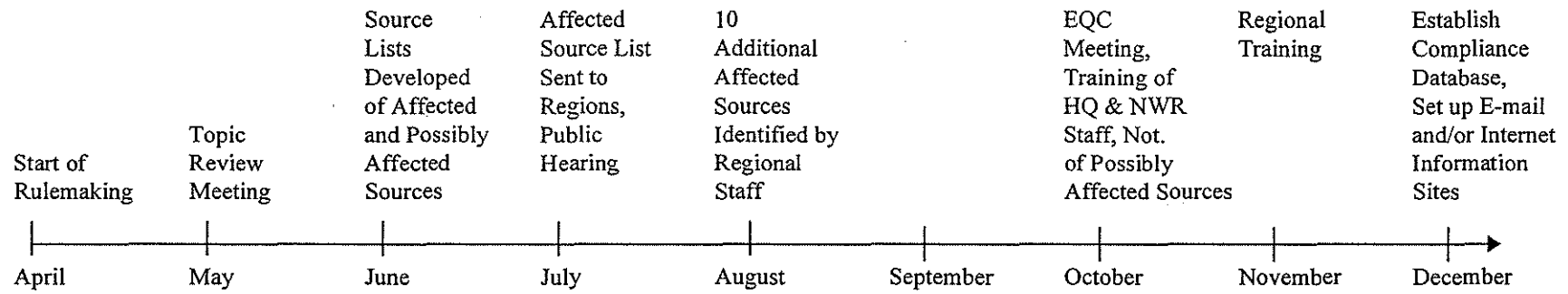
- Training of DEQ staff
  - Audience
    - Headquarters Title V permit writers
    - Regional AQ permit writers and inspectors
    - Other AQ staff (i.e., Tech Services, Planning, ect.)
    - Non-AQ staff (i.e., Hazardous Waste, Water Quality, ect.)
  - Content
    - Varying content depending on audience
      - Rough summary of rules
      - Applicability, notification requirements and important dates

**Proposal for Notification of Affected Persons**

The Department has undertaken, or planned, the following steps to assure notification of all affected persons:

- Initial list of known affected sources given to AQ Regional Managers on July 2, 1996 along with brief rule summaries. Requested regional staff to review list and notify the HAP group of any sources that were missed. Ten additional sources were identified through this process.
- Initial training of Headquarters and Northwest Region staff at Headquarters. October, 1996
- Training of regional staff using the most effective and cost efficient approach. Possible approaches include a road trip by the HAP group to regional offices, video tape of the training session to Headquarters and Northwest Region staff, training of regional staff at a single location, etc. November, 1996
- Ongoing communication mechanism between HAP group and regional staff
  - E-mail
  - Direct contact (phone)
  - Set up an area on shared mail and/or Internet for questions, comments, suggestions.
  - Set up an area on shared mail and/or to elicit input/information on Federal/State rulemaking.
  - Set up an area on shared mail and/or to keep staff informed on rule/program status.
  - Set up an area on shared mail and/or of answers to previously asked questions to eliminate redundant use of resources.
- Ongoing supplying of rules, guidance documents, fact sheets to staff
  - Place source lists and compliance information on shared e-mail and place most up to date rule language, guidance documents and fact sheets over shared mail and Internet. December, 1996, updated regularly.

### Implementation Timeline



**On going implementation:**

- Incorporation into Title V permits
- Compliance determinations and tracking
- Maintaining up to date rule language and source lists

**State of Oregon**  
**Department of Environmental Quality**

**Memorandum**

**Date:** September 25, 1996  
**To:** Environmental Quality Commission  
**From:** Langdon Marsh  
**Subject:** Agenda Item F, Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping) , EQC Meeting October 11, 1996

**REVISED Recommendation for Commission Action**

The Department recommends that the Commission adopt the rule amendments regarding typically achievable control technology, grain loading, specific emission standards, and housekeeping revisions as presented in pages 3 to 27 of Attachment A of the Department Staff Report. The Department recommends that the Commission *not* adopt the odor rule revisions previously proposed and presented in pages 1 and 2 of Attachment A of the Department Staff Report.

The Department originally proposed to revise two regional odor rules, replacing a "Scentometer" measuring device. Because odors are hard to identify and quantify, the proposed rule language was based on the concept of "nuisance." In attempting to prepare draft guidance for the new rule, Department staff have come to believe that the language as written may not be sufficiently specific. Accordingly, the Department proposes to spend more time considering how the language of the proposed rule may be improved.

Any substantive changes in the proposed odor rule language will go through standard public notice and comment procedures again.

The *remainder* of the rule package (rules on typically achievable control technology, grain loading, specific emission standards, and housekeeping revisions) is still proposed for adoption as noted above.

## Environmental Quality Commission

- Rule Adoption Item  
 Action Item  
 Information Item

Agenda Item F  
Meeting October 11, 1996

**Title:**

Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping)

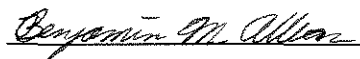
**Summary:**

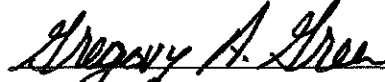
The revisions would:


- clarify and update the Department's region-specific odor rules by deleting obsolete measurement requirements and replacing them with nuisance-based restrictions;
- revise the Typically Achievable Control Technology rule so that it applies even if some region-specific rules in Division 30 apply;
- repeal superseded grain-loading rules;
- modify the applicability of general rules in Division 21; and
- make a number of housekeeping revisions.

**Department Recommendation:**

The Department recommends that the Commission adopt the rule revisions summarized above.

  
Report Author

  
Division Administrator

  
Director

**State of Oregon**  
**Department of Environmental Quality**

**Memorandum**

**Date:** September 25, 1996  
**To:** Environmental Quality Commission  
**From:** Langdon Marsh  
**Subject:** Agenda Item F, Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping) , EQC Meeting October 11, 1996

**Background**

On June 15, 1996, the Director authorized the Air Quality Division to proceed with a public notice of rulemaking on proposed rules which would:

- clarify and update the Department's region-specific odor rules by deleting obsolete measurement requirements and replacing them with nuisance-based restrictions;
- revise the Typically Achievable Control Technology rule so that it applies even if some region-specific rules in Division 30 apply;
- add a significant figure to grain loading emission limits and repeal superseded grain-loading rules;
- modify the applicability of general rules in Division 21; and
- make a number of housekeeping revisions.

Pursuant to the authorization, the notice was published in the Secretary of State's Bulletin on July 1, 1996. The Public Notice and informational materials were mailed to the mailing list of those persons who have asked to be notified of rulemaking actions, and to a mailing list of persons known by the Department to be potentially affected by or interested in the proposed rulemaking action on June 17, 1996.

No Public Hearing was held.<sup>1</sup> Written comment was received through July 24, 1996. Department staff have listed and evaluated the comments received (Attachment C). Based upon that evaluation, modifications to the initial rulemaking proposal are being recommended by the Department. These modifications are summarized below and detailed in Attachment D.

The following sections summarize the issue that this proposed rulemaking action is intended to address, the authority to address the issue, the process for development of the rulemaking proposal including alternatives considered, a summary of the rulemaking proposal presented for public hearing, a summary of the significant public comments and the changes proposed in

---

<sup>1</sup> A public hearing **must** be held if requested by ten individuals, or an organization representing ten or more individuals.

Memo To: Environmental Quality Commission  
Agenda Item F, Air Quality Industrial Rules (Odor, Typically Achievable Control Technology,  
Grain Loading, Specific Emission Standards, and Housekeeping) ,  
EQC meeting **October 11, 1996**  
Page 2

response to those comments, a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

### **Issue this Proposed Rulemaking Action is Intended to Address**

#### **Odor, OAR 340-030-0540 and 0610**

Two of the Department's odor rules (0540 and 0610) refer to an obsolete measurement device called a Scentometer. This has caused a problem in writing Oregon Title V Operating Permits, which require monitoring for every applicable requirement (including Scentometer standards).

#### **Typically Achievable Control Technology (TACT), OAR 340-028-0630**

The TACT rule requires sources to install Typically Achievable Control Technology for sources not covered by specific emission standards. As written, the rule exempts sources covered by any emission standard in Division 30. The Department believes that area specific rules containing general emission standards, such as odor and nuisance particulate controls, should not preclude application of a general requirement (TACT) that may identify control technology for specific types of emissions, such as Volatile Organic Compounds, Particulate Matter, Hazardous Air Pollutants, etc., in addition to the general emission standards of Division 30.

#### **Grain loading, OAR 340-021-0025 and 0027**

OAR 340-021-0025 and 0027 have been superseded by more specific incinerator rules in Division 25.

#### **Specific emission standards, OAR 340-021-0007**

This rule was recently adopted to exempt sources from general emission limits in Division 21 when more specific rules apply. The language of the rule allows exemption only when rules with identical emission units and averaging times apply, and has been found to be too limiting.

#### **Housekeeping**

The Department has found a variety of ambiguities, and grammatical and typographic errors.

### **Relationship to Federal and Adjacent State Rules**

Not applicable.

### **Authority to Address the Issue**

ORS 468.020, 468A.025.



Memo To: Environmental Quality Commission  
Agenda Item F, Air Quality Industrial Rules (Odor, Typically Achievable Control Technology,  
Grain Loading, Specific Emission Standards, and Housekeeping) ,  
EQC meeting **October 11, 1996**  
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**Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)**

The proposed rule revisions are intended to address various unrelated issues or problems discovered during the Title V permit application and issuance process. After each issue was identified, staff discussed problems with the current rules, and suggested revisions. Staff then reviewed potential revisions, and drafted proposed language.

The Air Quality Industrial Source Advisory Committee was advised of the proposed revisions at their meeting on June 12, 1996.

**Summary of Rulemaking Proposal Presented for Public Notice and Discussion of Significant Issues Involved.**

**Odor, OAR 340-030-0540 and 0610**

Two of the Department's odor rules (0540 and 0610) refer to an obsolete measurement device called a Scentometer. This has caused a problem in writing Oregon Title V Operating Permits, which require monitoring for every applicable requirement (including Scentometer standards).

The revision would replace the Scentometer requirement with a nuisance-based rule (modeled on OAR 340-021-0060). The new odor rules would prohibit sources from allowing odorous emissions to cause a nuisance, and would allow the Department to prescribe management practices in case of a problem. Management practices might include: full or partial enclosure of the odor source; installation of control equipment that removes odorous components from an exhaust stream; substitution of a non-odorous substance or odorless process; and housekeeping measures that remove and dispose of potentially odorous materials.

**Typically Achievable Control Technology (TACT), OAR 340-028-0630**

The TACT rule requires sources to install Typically Achievable Control Technology for sources not covered by specific emission standards. As written, the rule exempts sources covered by any emission standard in Division 30. The Department believes that area specific rules containing general emission standards, such as odor and nuisance particulate controls, should not preclude application of a general requirement (TACT) that may identify control technology for specific types of emissions, such as Volatile Organic Compounds, Particulate Matter, Hazardous Air Pollutants, etc., in addition to the general emission standards of Division 30. The revision would exempt sources from TACT only when specific design or performance standards in Division 30 apply.

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**Grain loading, OAR 340-021-0020 and 0030**

The Department considered adding a significant digit to grain loading emission limit rules (e.g., changing from .1 to .10 grain per dry standard cubic foot), to better reflect the original intent of the rules. In internal discussions, staff expressed concern about the effect of the change on existing sources. As a result, this part of the rule package has been withdrawn from the proposal. The previously proposed emission limit rules will be modified, and a new public comment period will be set.

**Grain loading, OAR 340-021-0025 and 0027**

OAR 340-021-0025 and 0027 have been superseded by more specific incinerator rules in Division 25, and would be repealed.

**Specific emission standards, OAR 340-021-0007**

This rule was recently adopted to exempt sources from general emission limits in Division 21 when more specific rules apply. The language of the rule allows exemption only when rules with identical emission units and averaging times apply, and has been found to be too limiting. The Department believes that when a rule has been developed specifically for an industry or pollutant, it should apply in place of a general rule, even if the units or averaging times differ.

**Housekeeping**

◆ **Auto refinishers, OAR 340-012-0050**

The Department categorizes rule violations in three Classes of seriousness, with Class I being the most serious. Unless otherwise specified, violations fall in Class II. This revision would create a Class III category for auto refinishers who refinish less than 10 cars per year, moving them from Class II to Class III. The revision will make the rule more equitable: those who paint a small number of cars produce far less pollution than those (e.g. regular body shops) who paint hundreds of vehicles per year. It is more fair to have penalties proportioned as well.

◆ **Surface coating, OAR 340-022-0170**

(4) - The rule refers to "used in the surface coating of the metal parts and products" in subparagraphs 5(a) through (j), yet 5(a) through (j) refer to fabric coating, vinyl coating, and paper coating, as well as metal parts. The revision would delete the reference to metal parts.

(5)(j) - The rule says "Miscellaneous Products and Metal Parts," rather than "Miscellaneous Metal Parts and Products." The rule is not meant to cover miscellaneous products (i.e. non-metal). The revision would change the rule to say "Miscellaneous Metal Parts and Products."

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- ◆ Cross-reference and Grammatical
  - 022-0840(6) rule mistakenly refers to (7) of the same rule, instead of (8). The revision would correct the reference.
  - 022-0930(2)(a) is missing the word "that" after "spray paints."
  - 028-0400(2) mistakenly refers to ORS 192.410(5) instead of (6). The revision would simply refer to ORS 192.410.
- ◆ Permit names, OAR 340-014-0050, 028-1720(7)
  - These permits have similar and confusing names: 'special permit' - a 60 day permit often in the form of a letter, and 'special letter permit' - for insignificant discharges. The revision would give them more accurate and distinct names: 'short-term permit' and 'insignificant discharge permit.'
- ◆ Heat input, various
  - Many Department rules use the term "heat input," in some cases referring to actual heat input, in others to design capacity. The revision would replace the ambiguous phrase with more precise language.
- ◆ Throughout, some of the rules use "shall," in place of "may." When required, this revision corrects those errors in rules being revised for other purposes. The purpose of the changes is merely to clarify the language. The intent and applicability of the rules would not change.

All rules proposed for revision are included in the State of Oregon Clean Air Act Implementation Plan except the odor rules (OAR 340-030-540 and 610), the Specific Emission Standards rule (OAR 340-021-0007) and some of the housekeeping rules.

### **Summary of Significant Public Comment and Changes Proposed**

Details of changes to the proposal are discussed in Attachment E.

#### **Odor**

Only one comment was submitted. The commenter noted that "nuisance" was not defined, and suggested that the Department define nuisance in terms of the number of complaints received during a certain period of time. No changes are proposed (see Evaluation of Comment in Attachment C) in response to the comment. Nuisance is a well-established concept, generally defined as "unreasonable interference with use and enjoyment of property." A rigid numerical limit is subject to abuse by complainants. Nuisance limits have been used in other Department rules, and the Department believes they will be effective in this case.

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### **Specific Emission Standards**

Department staff pointed out that the proposed language might have caused confusion by suggesting replacement of a federally enforceable rule with a state enforceable rule, (e.g. OAR 340-021-0015, the general opacity rule, and OAR 340-030-0500, a region-specific opacity rule). This might have caused problems with Title V permits. The proposed language has been rewritten to focus on rules that are part of the State Implementation Plan.

Most of the rules proposed for revision are part of the State Implementation Plan (SIP). Whenever such rules are revised, the SIP rule (OAR 340-020-0047) must be readopted. While the public notice for this package of rules, and for some other recent packages, stated that the rules were part of the SIP, it did not discuss re-adoption of the SIP rule, nor was the rule included in the package mailed to those who requested the proposed rule language. The rule is proposed for re-adoption in order to reflect proposed and recently adopted changes to rules that are part of the SIP. The language of the rule will not change.

### **Summary of How the Proposed Rule Will Work and How it Will be Implemented**

The Department's regional offices and permit writers would be informed of the changes. Source permits would be revised at the time of renewal or modification, in most cases.

### **Odor**

Air quality managers would develop tools for how to enforce and implement the odor regulations. The tools would include written guidance to help field staff determine when a nuisance exists.

### **Recommendation for Commission Action**

It is recommended that the Commission adopt the rule amendments regarding odor, typically achievable control technology, grain loading, specific emission standards, and housekeeping revisions as presented in Attachment A of the Department Staff Report.

### **Attachments**

- A. Rule Amendments Proposed for Adoption
- B. Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Fiscal and Economic Impact Statement
  - 3. Land Use Evaluation Statement
  - 4. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
  - 5. Cover Memorandum from Public Notice

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- C. Public Comments Received and Department's Evaluation
- D. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- E. Advisory Committee Membership and Report
- F. Rule Implementation Plan

**Reference Documents (available upon request)**

Written Comments Received (listed in Attachment C)

Approved:

Section: Greg E. Faudt

Division: Gregory A. Green

Report Prepared By: Benjamin M. Allen

Phone: (503) 229-6828

Date Prepared: September 25, 1996

BMA

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September 19, 1996

# Proposed Rule Amendments

## Odors

### Odors (Clackamas, Columbia, Multnomah, and Washington counties)

340-030-0540

- (1) If an industry-specific rule regulating odor applies, the remainder of this rule does not apply.
- (2) No person may shall cause or permit the emission of odorous matter in such manner as to contribute to cause a nuisance, a condition of air pollution, or exceed:
- (a) A scentometer No. 0 odor strength or equivalent dilution in residential and commercial areas.
- (b) A scentometer No. 2 odor strength or equivalent dilution in all other land use areas.
- Scentometer Readings: Scentometer No. and Concentration Range No. of Thresholds, respectively:
- |   |           |
|---|-----------|
| 0 | 1 to 2    |
| 1 | 2 to 8    |
| 2 | 8 to 32   |
| 3 | 32 to 128 |
- (2) A violation of this rule shall have occurred when two measurements made within a period of one hour, separated by at least 15 minutes, off the property surrounding the air contaminant source exceeds the limitations of section (1).
- (3) No person may cause or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent odorous emissions. Such reasonable precautions include, but are not limited to, the following:
- (a) Full or partial enclosure of the odor source;
- (b) Substitution of a non-odorous material or an odorless process;
- (c) Installation of control equipment that removes odorous components from an exhaust stream; and
- (d) Housekeeping measures that remove and dispose of potentially odorous materials.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-028-0090; AQ 1-1993, f. & ef. 3-9-93

### Odors (Benton, Linn, Marion, Polk, and Yamhill counties)

340-030-0610

- (1) If an industry-specific rule regulating odor applies, the remainder of this rule does not apply.
- (2) Unless otherwise regulated by specific odor regulation or standard, no No person may shall cause or permit the emission of odorous matter:
- (a) in such a manner as to cause a public nuisance, or
- (b) that occurs for sufficient duration or frequency so that two measurements made within a period of one (1) hour, separated by at least 15 minutes, off the property surrounding the emission point, that is equal to or greater than a Scentometer No. 0 or equivalent dilutions in areas used for residential, recreational, educational, institutional, hotel, retail sales or other similar purposes.

- ~~(2) In all land use areas other than those specified in subsection (1)(b) of this rule, release of odorous matter shall be prohibited if equal to or greater than a Scentometer No. 2 odor strength, or equivalent dilutions.~~
- ~~(3) No person may cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent odorous emissions. Such reasonable precautions include, but are not limited to, the following:~~
- ~~(a) Full or partial enclosure of the odor source;~~
  - ~~(b) Substitution of a non-odorous material or an odorless process;~~
  - ~~(c) Installation of control equipment that removes odorous components from an exhaust stream; and~~
  - ~~(d) Housekeeping measures that remove and dispose of potentially odorous materials.~~

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 11-1982, f. & ef. 6-18-82, Renumbered from 340-029-0011; AQ 1-1993, f. & ef. 3-9-93

## TACT

### Typically Achievable Control Technology

#### 340-028-0630

- (1) Existing Sources. The Department shall require an existing emissions unit to meet TACT for existing sources if:
  - (a) The emissions unit, for the pollutants emitted, is not subject to emission standards under OAR 340-021-0200 through 340-021-0245, 340-022-0100 through 340-022-0220, Division 25 ~~or 30~~ of this Chapter, OAR 340-030-0015 through 340-030-0043, 340-030-205(1), OAR 340-030-0210 through 340-030-0330, 340-030-0310, or this Division at the time TACT is required;
  - (b) The source is required to have a permit;
  - (c) The emissions unit has emissions of criteria pollutants equal to or greater than 5 tons per year of particulate or 10 tons per year of any gaseous pollutant; and
  - (d) The Department determines that air pollution control equipment and emission reduction processes in use for the emissions unit do not represent TACT and that further emission control is necessary to address documented nuisance conditions, address an increase in emissions, ensure that the source is in compliance with other applicable requirements, or to protect public health or welfare or the environment.
- (2) New and Modified Sources. The Department shall require a new or modified emissions unit to meet TACT for new or modified sources if:
  - (a) The new or modified emissions unit, for the pollutants to be emitted, is not subject to New Source Review requirements in OAR 340-028-1900 through 340-028-2000, an applicable Standard of Performance for New Stationary Sources in OAR 340-025-0505 through 340-025-0805, OAR 340-030-0015 through 340-030-0043, 340-030-205(1), OAR 340-030-0210 through 340-030-0330, 340-030-0310, or any other standard applicable only to new or modified sources in Division 25 ~~or 30~~ of this Chapter at the time TACT is required;
  - (b) The source is required to have a permit;
  - (c) The emissions unit:
    - (A) If new, would have emissions of any criteria pollutant equal to or greater than 1 ton per year or of PM<sub>10</sub> equal to or greater than 500 pounds per year in a PM<sub>10</sub> nonattainment area; or
    - (B) If modified, would have an increase in emissions from the permitted level for the emissions unit of any criteria pollutant equal to or greater than 1 ton per year or of PM<sub>10</sub> equal to or greater than 500 pounds per year in a PM<sub>10</sub> nonattainment area; and
  - (d) The Department determines that the proposed air pollution control equipment and emission reduction processes do not represent TACT.
- (3) Prior to making a TACT determination, the Department shall notify the owner or operator of a source of its intent to make such determination utilizing information known to the Department. The owner or operator of the source may supply the Department with additional information by a reasonable date set by the Department for use in making the TACT determination.
- (4) The owner or operator of a source subject to TACT shall submit compliance plans and specifications by a reasonable date established by the Department for approval by the



Department. The owner or operator of the source shall demonstrate compliance in accordance with a method and compliance schedule approved by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 22-1993, f. 11-26-93 & ef. 1-1-94

## Grain Loading

### **Refuse Burning Equipment Limitations**

**340-021-0025** No person shall cause, suffer, allow, or permit the emission of particulate matter from any refuse burning equipment in excess of:

- (1) ~~For equipment designed to burn 200 pounds of refuse per hour or less, 0.3 grains per standard cubic foot; or~~
- (2) ~~For equipment designed to burn more than 200 pounds of refuse per hour:
  - (a) 0.2 grains per standard cubic foot for existing sources; or
  - (b) 0.1 grains per standard cubic foot for new sources, except that small to medium size municipal waste incinerators located in coastal areas as defined in OAR 340-021-0005(1) shall be subject to OAR 340-021-0027 and larger municipal incinerators shall be subject to provisions of OAR 340-025-0850 through 340-025-0885.~~

[NOTE: Sources subject to this rule may also be subject to OAR 340-025-0850 through 340-025-0905.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Stats Implemented: ORS 468.020 and 468A.025

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84; AQ 1-1993, f. & ef. 3-9-93; DEQ 10-1995, f. & ef. 5-1-95; DEQ x-1996, f. & ef. 1-xx-96

### **Municipal Waste Incinerator in Coastal Areas**

#### **340-021-0027**

- (1) ~~No person shall cause, suffer, allow, or permit the operation of any municipal waste incinerator in coastal areas which violates the following emission limits and requirements:
    - (a) ~~Particulate Emissions:
      - (A) For municipal waste incinerators capable of processing not more than 50 tons/day of wastes, 0.2 grains per standard cubic foot of exhaust gases;
      - (B) For municipal waste incinerators capable of processing greater than 50 tons/day of wastes, 0.08 grains per standard cubic foot of exhaust gases.~~
    - (b) ~~Minimum Exhaust Gas Temperatures:
      - (A) Prior to the initial charge of wastes and for the first 30 minutes of incineration of the initial charge, 1600°F for one second;
      - (B) For the period beginning 30 minutes after the initial charge of wastes to the time of the final charge, 1800°F for one second or 1700°F for two seconds or a temperature and corresponding residence time linearly interpolated between the aforementioned two points;
      - (C) For a two hour period after the final charge of waste, 1600°F for one second.~~
    - (c) ~~Visible Emissions and Particle Fallout Limitations of OAR 340-021-0015 and 340-031-0045, respectively.~~~~
- (2) ~~Each operator of a municipal waste incinerator in a coastal area shall monitor the exhaust gas temperatures of each of its incinerators with a continuous recording pyrometer. The pyrometer shall be located at a point within the incinerator exhaust system which has been judged by the~~

~~Department through plan review to represent a place that can demonstrate compliance or non-compliance with minimum exhaust gas temperature requirements in subsection (1)(b) of this rule. The operator shall retain pyrometer records for one year unless at the expiration of the year an enforcement matter is pending against the operator, in which case the operator shall retain the records until the enforcement matter is finally terminated by an Order. The operator shall make pyrometer records available to the Department of Environmental Quality upon request.~~

- ~~(3) In cases of multiple incinerators at one site, the 0.2 grain per standard cubic foot particulate emission standard in subsection (1)(a)(A) of this rule for individual municipal waste incinerators up to 50 tons/day capacity, shall apply only up to a combined capacity of 150 tons/day.~~
- ~~(4) Municipal waste incinerators in coastal areas, installed between 1970 and 1982, of 13 tons/day capacity and less, are exempt from subsection (1)(a) and (b) of this rule, but shall emit particulate at a concentration less than 0.30 gr/scf.~~

~~[NOTE: Sources subject to this rule may also be subject to OAR 340-025-0850 through OAR 340-025-0905.]~~

~~[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]~~

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 1 1984, f. & ef. 1 16 84; AQ 1 1993, f. & ef. 3 9 93

## Specific Emission Standards

### Application

**340-021-0007**

A standard in OAR 340-021-0005 through 340-021-0060 does not apply

(1) ~~when any other rule adopted by the Commission as part of the State Implementation Plan contains an applicable emissions standard specifically applicable to the affected source, industry, or pollutant that~~

~~(a) uses identical units and averaging times, and~~

~~(b) is more stringent; or~~

(2) ~~when OAR 340-25-165(2)(a)(C) applies.~~

Stat. Auth.: ORS Ch. 468 & 468A

Stats Implemented: ORS 468.020 and 468A.025.

Hist.: DEQ x-1996, f. & ef. 1-xx-96

## SIP

### **"State of Oregon Clean Air Act Implementation Plan"**

**340-020-0047**

- (1) This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by the Department of Environmental Quality and is adopted as the state implementation plan (SIP) of the State of Oregon pursuant to the federal Clean Air Act, Public Law 88-206 as last amended by Public Law 101-549.
- (2) Except as provided in section (3) of this rule, revisions to the SIP shall be made pursuant to the Commission's rule-making procedures in Division 11 of this Chapter and any other requirements contained in the SIP and shall be submitted to the United States Environmental Protection Agency for approval.
- (3) Notwithstanding any other requirement contained in the SIP, the Department is authorized to submit to the Environmental Protection Agency any permit condition implementing a rule that is part of the federally- approved SIP as a source-specific SIP revision after the Department has complied with the public hearings provisions of 40 CFR 51.102 (July 1, 1992).

[NOTE: Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the United States Environmental Protection Agency. If any provision of the federally approved Implementation Plan conflicts with any provision adopted by the Commission, the Department shall enforce the more stringent provision.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 35, f. 2-3-72, ef. 2-15-72; DEQ 54, f. 6-21-73, ef. 7-1-73; DEQ 19-1979, f. & ef. 6-25-79; DEQ 21-1979, f. & ef. 7-2-79; DEQ 22-1980, f. & ef. 9-26-80; DEQ 11-1981, f. & ef. 3-26-81; DEQ 14-1982, f. & ef. 7-21-82; DEQ 21-1982, f. & ef. 10-27-82; DEQ 1-1983, f. & ef. 1-21-83; DEQ 6-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 25-1984, f. & ef. 11-27-84; DEQ 3-1985, f. & ef. 2-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 10-1986, f. & ef. 5-9-86; DEQ 20-1986, f. & ef. 11-7-86; DEQ 21-1986, f. & ef. 11-7-86; DEQ 4-1987, f. & ef. 3-2-87; DEQ 5-1987, f. & ef. 3-2-87; DEQ 8-1987, f. & ef. 4-23-87; DEQ 21-1987, f. & ef. 12-16-87; DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88; DEQ 2-1991, f. & cert. ef. 2-14-91; DEQ 19-1991, f. & cert. ef. 11-13-91; DEQ 20-1991, f. & cert. ef. 11-13-91; DEQ 21-1991, f. & cert. ef. 11-13-91; DEQ 22-1991, f. & cert. ef. 11-13-91; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 24-1991, f. & cert. ef. 11-13-91; DEQ 25-1991, f. & cert. ef. 11-13-91; DEQ 1-1992, f. & cert. ef. 2-4-92; DEQ 3-1992, f. & cert. ef. 2-4-92; DEQ 7-1992, f. & cert. ef. 3-30-92; DEQ 19-1992, f. & cert. ef. 8-11-92; DEQ 20-1992, f. & cert. ef. 8-11-92; DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 26-1992, f. & cert. ef. 11-2-92; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 8-1993, f. & cert. ef. 5-11-93; DEQ 12-1993, f. & ef. 9-24-93; DEQ 13-1993, f. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 1-1994, f. & cert. ef. 1-3-94; DEQ 5-1994, f. & ef. 3-21-94; DEQ 14-1994, f. & ef. 5-31-94; DEQ 15-1994, f. 6-8-94 & ef. 7-1-94; DEQ 22-1994, f. & ef. 10-14-94; DEQ 24-1994, f. & ef. 10-28-94; DEQ 25-1994, f. & ef. 11-2-94; DEQ 32-1994, f. & ef. 12-22-94; DEQ 1-1995, f. 1-10-95 & ef. 5-1-95; DEQ 4-1995, f. & ef. 2-17-95; DEQ 7-1995, f. & ef. 3-19-95; DEQ 9-1995, f. & ef. 5-1-95; DEQ 10-1995, f. & ef. 5-1-95; DEQ 12-1995, f. & ef. 5-25-95; DEQ 13-1995, f. & ef. 5-25-95; DEQ 14-1995, f. & ef. 5-25-95; DEQ 17-1995, f. & ef. 7-12-95

## Housekeeping

### Auto refinishers

#### **Air Quality Classification of Violations**

**340-012-0050** Violations pertaining to air quality shall be classified as follows:

- (1) Class One:
  - (a) Violation of a Commission or Department Order, or variance;
  - (b) Constructing or operating a source without the appropriate permit;
  - (c) Modifying a source with an Air Permit without first notifying and receiving approval from the Department;
  - (d) Violation of a compliance schedule in a permit;
  - (e) 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 ten kilometers of either a Non-Attainment Area or a Class I Area for that criteria pollutant;
  - (g) Exceeding the annual emission limitations of a permit, rule or order;
  - (h) Failure to perform testing, or monitoring, required by a permit, rule or order;
  - (i) Systematic failure to keep records required by a permit, rule or order;
  - (j) Failure to submit semi-annual Compliance Certifications;
  - (k) Failure to file a timely application for an Oregon Title V ~~Federal~~ Operating Permit pursuant to OAR 340-28-2120;
  - (l) Exceedances of operating limitations that limit the potential to emit of a synthetic minor source and that result in emissions above the Oregon Title V ~~Federal~~ Operating Permit permitting thresholds pursuant to OAR 340-28-110(~~57~~);
  - (m) Causing emissions that are a hazard to public safety;
  - (n) Failure to comply with Emergency Action Plans or allowing excessive emissions during emergency episodes;
  - (o) Violation of a work practice requirement for asbestos abatement projects which causes a potential for public exposure to asbestos or release of asbestos into the environment;
  - (p) Storage or accumulation of friable asbestos material or asbestos-containing waste material from an asbestos abatement project which causes a potential for public exposure to asbestos or release of asbestos into the environment;
  - (q) Visible emissions of asbestos during an asbestos abatement project or during collection, processing, packaging, transportation, or disposal of asbestos-containing waste material;
  - (r) Conduct of an asbestos abatement project by a person not licensed as an asbestos abatement contractor;
  - (s) Violation of a disposal requirement for asbestos-containing waste material which causes a potential for public exposure to asbestos or release of asbestos into the environment;
  - (t) Advertising to sell, offering to sell or selling a non-certified woodstove;
  - (u) Illegal open burning in violation of OAR 340-23-042(2);
  - (v) Causing or allowing open field burning without first obtaining a valid open field burning permit;

- (w) Causing or allowing open field burning or stack burning where prohibited by OAR 340-26-010(7) or 340-26-055(4);
  - (x) Causing or allowing any propane flaming which results in visibility impairment on any Interstate Highway or Roadway specified in OAR 837-110-080(1) and (2);
  - (y) Failing 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);
  - (z) Causing or allowing propane flaming of grass seed or cereal grain crops, stubble, or residue without first obtaining a valid propane flaming burning permit;
  - (aa) Stack or pile burning grass seed or cereal grain crop residue without first obtaining valid stack or pile burning permit;
  - (bb) Open field burning, propane flaming, stack or pile burning when State Fire Marshal restrictions are in effect;
  - (cc) Causing or allowing propane flaming which results in sustained open flame in a fire safety buffer zone along any Interstate Highway or Roadway specified in OAR 837-110-080(1) or (2);
  - (dd) Failure to install vapor recovery piping in accordance with standards set forth in OAR Chapter 340, Division 150;
  - (ee) Installing vapor recovery piping without first obtaining a service provider license in accordance with requirements set forth in OAR Chapter 340, Division 160;
  - (ff) Submitting falsified actual or calculated emission fee data;
  - (gg) Failure to provide access to premises or records when required by law, rule, permit or order;
  - (hh) Any 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) Exceeding emission limitations other than an annual emission limitation or opacity limitations by more than five percent opacity in permits or rules;
  - (b) Violating standards in permits or rules for fugitive emissions, particulate deposition, or odors;
  - (c) Failure to submit a complete Air Contaminant Discharge Permit application 60 days prior to permit expiration or prior to modifying a source;
  - (d) Failure to maintain on site records when required by a permit to be maintained on site;
  - (e) Exceedances of operating limitations that limit the potential to emit of a synthetic minor source that do not result in emissions above the Oregon Title V Federal-Operating Permit permitting thresholds pursuant to OAR 340-28-110(57);
  - (f) Illegal open burning of commercial, construction and/or demolition, and/or agricultural waste;
  - (g) Failing to comply with notification and reporting requirements in a permit;
  - (h) Failure to comply with asbestos abatement licensing, certification, or accreditation requirements;
  - (i) Failure to provide notification of an asbestos abatement project;
  - (j) Failure to display permanent labels on a certified woodstove;
  - (k) Alteration of a permanent label for a certified woodstove;
  - (l) Failure to use Department-approved vapor control equipment when transferring fuel;

- (m) 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;
  - (n) 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 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 employee of the Department;
  - (p) Causing or allowing a propane flaming operation to be conducted in a manner which causes or allows an open flame to be sustained;
  - (q) Installing, servicing, repairing, disposing of or otherwise treating automobile air conditioners without recovering and recycling chlorofluoro-carbons using approved recovery and recycling equipment;
  - (r) 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 468A.655;
  - (s) Selling any chlorofluorocarbon or halon containing product prohibited under ORS 468A.635;
  - (t) Failure to pay an emission fee;
  - (u) Substantial underpayment of an emission fee;
  - (v) Submitting inaccurate emission fee data;
  - (w) Violation of OAR 340-22-740 or 340-22-750(1), by a person who has performed motor vehicle refinishing on 10 or more on-road motor vehicles in the previous 12 months.
  - (xw) Any violation related to air quality which is not otherwise classified in these rules.
- (3) Class Three:
- (a) Illegal residential open burning;
  - (b) Improper notification of an asbestos abatement project;
  - (c) Failure to display a temporary label on a certified woodstove;
  - (d) Exceeding opacity limitation in permits or rules by five percent opacity or less.
  - (e) Violation of OAR 340-22-740 or 340-22-750(1), by a person who has performed motor vehicle refinishing on fewer than 10 on-road motor vehicles in the previous 12 months.

Stat. Auth.: ORS Ch. 468A

Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 5-1980, f. & ef. 1-28-80; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ31-1990, f. & cert. ef. 8-15-90; DEQ 2-1992, f. & cert. ef. 1-30-92; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 13-1994, f. & cert. ef. 5-19-94

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



## Surface Coating

### **Surface Coating in Manufacturing**

**340-022-0170**

- (1) No person shall operate a coating line which emits into the atmosphere volatile organic compounds in excess of the limits in section (5) of this rule, expressed as pounds VOC per gallon of coating applied, excluding water, unless an alternative emission limit is approved by the Department pursuant to section (3) of this rule or emissions are controlled to an equivalent level pursuant to section (7) of this rule.
- (2) Exemptions:
  - (a) This rule does not apply to airplanes painted out of doors in open air; automobile and truck refinishing; customized top coating of automobiles and trucks, if production is less than 35 vehicles per day; marine vessels and vessel parts painted out in the open air; flat wood coating; wood furniture and wood cabinets; wooden doors, mouldings, and window frames; machine staining of exterior wood siding; high temperature coatings (for service above 500° F.); lumber marking coatings; potable water tank inside coatings; high performance inorganic zinc coatings, air dried, applied to fabricated steel; and markings by stencil for railroad cars;
  - (b) This rule does not apply to:
    - (A) Sources whose potential to emit from activities identified in section (5) of this rule of volatile organic compounds are less than 10 tons per year (or 3 lb. VOC/hr or 15 lb. VOC/day actual); or
    - (B) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance (such as research facilities, pilot plant operations, and laboratories) unless:
      - (i) The operation of the source is an integral part of the production process; or
      - (ii) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.
- (3) Exceptions:
  - (a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in section (5) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT);
  - (b) Included in this documentation must be a complete analysis of technical and economic factors which:
    - (A) Prevent the source from using both compliance coatings and pollution control equipment; and
    - (B) Justify the alternative emission limit sought by the source.
  - (c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source specific SIP revision.
- (4) Applicability: This rule applies to each coating line, which includes the application area(s), flashoff area(s), air and forced air drier(s), and oven(s) used in the surface coating of the metal parts and products in subsections (5)(a) through (j) of this rule.

- (5) **Process and Limitation:** These emission limitations shall be based on a daily average except subsection (5)(e) of this rule shall be based on a monthly average. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation shall be applied:
- (a) **Can Coating:**
    - (A) Sheet basecoat (exterior and interior) and over-varnish; two-piece can exterior (basecoat and over-varnish) 2.8 lb/gal.
    - (B) Two- and three-piece can interior and exterior body spray, two-piece can exterior end (spray or roll coat) 4.2 lb/gal.
    - (C) Three-piece can side-seam spray 5.5 lb/gal.
    - (D) End sealing compound 3.7 lb/gal.
    - (E) End Sealing Compound for fatty foods 3.7 lb/gal.
  - (b) Fabric Coating 2.9 lb/gal.
  - (c) Vinyl Coating 3.8 lb/gal.
  - (d) Paper Coating 2.9 lb/gal.
  - (e) Existing Coating of Paper and Film in the Medford-Ashland AQMA 55 lb.\*  
\*55 lb VOC per 1000 sq. yds. of material per pass.
  - (f) **Auto and Light Duty Truck Coating:**
    - (A) Prime 1.9 lb/gal.
    - (B) Topcoat 2.8 lb/gal.
    - (C) Repair 4.8 lb/gal.
  - (g) Metal Furniture Coating 3.0 lb/gal.
  - (h) Magnet Wire Coating 1.7 lb/gal.
  - (i) Large Appliance Coating 2.8 lb/gal.
  - (j) **Miscellaneous Products and Metal Parts and Products:**
    - (A) Clear Coatings 4.3 lb/gal.
    - (B) Force Air Dried or Air Dried 3.5 lb/gal.
    - (C) Extreme Performance Coatings 3.5 lb/gal.
    - (D) Other Coatings (i.e., Powder, oven dried) 3.0 lb/gal.
    - (E) High Performance Architectural Coatings 3.5 lb/gal.
- (6) **Compliance Determination:** Compliance with this rule shall be determined by testing in accordance with **40 CFR Part 60 EPA Method 18, 24, 25**, a material balance method, or an equivalent plant specific method approved by and on file with the Department. The limit in section (1) of this rule of VOC in the coating is based upon an assumed solvent density, and other assumptions unique to a coating line; where conditions differ, such as a different solvent density, a plant specific limit developed pursuant to the applicable Control Technology Guideline document may be submitted to the Department for approval.
- (7) **Reduction Method:** The emission limits of sections (3) and (5) of this rule shall be achieved by:
- (a) The application of low solvent content coating technology;
  - (b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or
  - (c) An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source-specific SIP revision.

Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.

**(8) Recordkeeping Requirements:**

- (a) A current list of coatings shall be maintained which provides all the coating data necessary to evaluate compliance, including the following information, where applicable:
  - (A) Coating catalyst and reducer used;
  - (B) Mix ratio of components used;
  - (C) VOC content of coating as applied; and
  - (D) Oven temperature.
- (b) Where applicable, a monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation;
- (c) Such records shall be retained and available for inspection by the Department for a period of two years.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 13-1995, f. & cert. ef. 5-25-95

Cross reference and grammatical

**Innovative Products**

**OAR 340-022-0840**

- ...
- (6) The Department shall within 90 days after an application has been deemed complete, determine whether, under what conditions, and to what extent, an exemption from the requirements of 340-022-0820(1) shall be approved. The applicant and the Department may mutually agree to extend the period for making a determination, and additional supporting documentation may be submitted by the applicant before the determination is reached. The Department shall notify the applicant in writing of the determination and the terms and conditions established under section (78) of this rule.
  - (7) In approving an innovative product exemption, the Department shall establish terms and conditions which allow the emission limitations established under section (1) of this rule to be enforced. Such terms and conditions may include, but are not limited to, the VOC content of the innovative product, dispensing rates, application rates, and any other parameters determined by the Department to be necessary. The Department shall also specify the test methods for determining conformance to the conditions established. The test methods shall include criteria for reproducibility, accuracy, sampling, and laboratory procedures.
  - (8) Notwithstanding section (6) of this rule, if a product has been granted an Innovative Product exemption by the California Air Resources Board (CARB), that product shall be granted an exemption under this rule provided:
    - (a) The CARB Innovative Product exemption is valid as of February 20, 1995;
    - (b) The manufacturer submits to the Department an Executive Order relating to Innovative Products granted by CARB under Section 94511, Title 17, California Code of Regulations, together with information required by section (4) of this rule prior to the applicable compliance date;
    - (c) The manufacturer complies with the terms and conditions established in the CARB Innovative Product exemption; and
    - (d) The manufacturer notifies the Department in writing within 30 days of any changes in the terms and conditions of the exemption.
- ...

Stat. Auth.: ORS Ch. 468A  
Hist: DEQ 13-1995, f. & cert. ef. 5-25-95

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

**Requirements for Manufacture, Sale and Use of Spray Paint**

**OAR 340-022-0930**

- ...
- (2) Distributors. Except as provided in section (6) of this rule, any distributor of spray paint manufactured after July 1, 1996 which is sold, offered for sale, supplied or distributed to a retail outlet within the Portland AQMA shall:

- (a) Distribute to the Portland AQMA only spray paints that are labeled as required under subsection (1)(b) of this rule;
- (b) Distribute to the Portland AQMA only spray paints labeled with VOC contents that meet the VOC limits specified in OAR 340-022-0920; and
- (c) Notify direct purchasers of products distributed for sale within the Portland AQMA upon determining that any noncomplying spray paint has been supplied in violation of this rule.

Stat. Auth.: ORS Ch. 468A  
 Hist: DEQ 13-1995, f. & cert. ef. 5-25-95

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

### Information Exempt From Disclosure

#### 340-028-0400

- (1) Pursuant to the provisions of ORS 192.410 to 192.505, all information submitted to the Department under OAR 340-028-0100 through 340-028-2550 shall be presumed to be subject to inspection upon request by any person unless such information is determined to be exempt from disclosure pursuant to OAR 340-028-0400(2) or (3) of this rule.
- (2) If an owner or operator claims that any writing, as that term is defined in ORS 192.410(5), is confidential or otherwise exempt from disclosure, in whole or in part, the owner or operator shall comply with the following procedures:
  - (a) The writing shall be clearly marked with a request for exemption from disclosure. For a multi-page writing, each page shall be so marked.
  - (b) The owner or operator shall state the specific statutory provision under which it claims exemption from disclosure and explain why the writing meets the requirements of that provision.
  - (c) For writings that contain both exempt and non-exempt material, the proposed exempt material shall be clearly distinguishable from the non-exempt material. If possible, the exempt material shall be arranged so that it is placed on separate pages from the non-exempt material.
- (3) For a writing to be considered exempt from disclosure as a "trade secret," it shall meet all of the following criteria:
  - (a) The information shall not be patented;
  - (b) It shall be known only to a limited number of individuals within a commercial concern who have made efforts to maintain the secrecy of the information;
  - (c) It shall be information which derives actual or potential economic value from not being disclosed to other persons; and
  - (d) It shall give its users the chance to obtain a business advantage over competitors not having the information.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A  
 Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93

## Permit names

### Short-term Special Permits

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

Stat. Auth.: ORS Ch. 459, 468, 468A & 468B

Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 4-1993, f. & cert. ef. 3-10-93

### Definitions

**340-028-0110** As used in this Division:

- ...
- (107) "Small Source" means any stationary source with a regular ACDP (not an insignificant discharge ~~a letter permit~~ or a minimal source permit) or an Oregon Title V Operating Permit which is not classified as a large source.
- ...

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from OAR 340-020-0033.04; DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 14-1989, f. & cert. ef. 6-26-89; DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91; DEQ 2-1992, f. & ef. 1-30-92; DEQ 27-1992, f. & ef. 11-12-92; Renumbered from OAR 340-020-0145; Renumbered from OAR 340-020-0225; Renumbered from OAR 340-020-0305; Renumbered from OAR 340-020-0355; Renumbered from OAR 340-020-0460; Renumbered from OAR 340-020-0520, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 20-1993(T), f. & ef. 11-4-93; DEQ 13-1994, f. & ef. 5-19-94; DEQ -1994, f. & ef. 10-28-94; DEQ 12-1995, f. & ef. 5-1-95; DEQ 22-1995, f. & ef. 10-6-95

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

### Requirement for Plant Site Emission Limits

#### **340-028-1010**

- (1) PSELs shall be incorporated in all ACDPs and Oregon Title V Operating Permits, except minimal source permits and insignificant discharge special letter permits, as a means of managing airshed capacity. Except as provided in OAR 340-028-1050 or 340-028-1060, all sources subject to regular permit requirements shall be subject to PSELs for all regulated pollutants. PSELs will be incorporated in permits when permits are renewed, modified, or newly issued.
- (2) The emissions limits established by PSELs shall provide the basis for:
- Assuring reasonable further progress toward attaining compliance with ambient air standards;
  - Assuring that compliance with ambient air standards and Prevention of Significant Deterioration increments are being maintained;

- (c) Administering offset, banking and bubble programs;
- (d) Establishing the baseline for tracking consumption of Prevention of Significant Deterioration Increments.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from OAR 340-020-0301, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 22-1995, f. & ef. 10-6-95

### **Permit Required 340-028-1720**

- (7) Any owner or operator may apply to the Department or Regional Authority for an insignificant discharge ~~a special letter permit~~ if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this insignificant discharge special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued an insignificant discharge a special permit, the application processing fee and/or annual compliance determination fee, provided by OAR 340-028-1750, may be waived by the Department or Regional Authority.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-020-0033.08; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 13-1981, f. 5-6-81, ef. 7-1-81; DEQ 11-1983, f. & ef. 5-31-83; DEQ 3-1986, f. & ef. 2-12-86; DEQ 12-1987, f. & ef. 6-15-87; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from OAR 340-020-0155, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 22-1995, f. & ef. 10-6-95

### **Requirement for Operation and Maintenance Plans (Medford-Ashland AQMA Only) 340-030-0044**

- (1) Operation and Maintenance Plans shall be prepared by all holders of Air Contaminant Discharge Permits except minimal source permits and insignificant discharge special letter permits. All sources subject to regular permit requirements shall be subject to operation and maintenance requirements.
- (2) The purposes of the operation and maintenance plans are to:
  - (a) Reduce the number of upsets and breakdowns in particulate control equipment;
  - (b) Reduce the duration of upsets and downtimes; and
  - (c) Improve the efficiency of control equipment during normal operations.
- (3) The operation and maintenance plans should consider, but not be limited to, the following:
  - (a) Personnel training in operation and maintenance;
  - (b) Preventative maintenance procedures, schedule and records;
  - (c) Logging of the occurrence and duration of all upsets, breakdowns and malfunctions which result in excessive emissions;
  - (d) Routine follow-up evaluation of upsets to identify the cause of the problem and changes needed to prevent a recurrence;

- (e) Periodic source testing of pollution control units as required by air contaminant discharge permits;
- (f) Inspection of internal wear points of pollution control equipment during scheduled shutdowns; and
- (g) Inventory of key spare parts.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 1-1993, f. & ef. 3-9-93

### **Requirement for Operation and Maintenance Plans**

#### **340-030-0320**

- (1) Operation and Maintenance Plans shall be prepared by all holders of Air Contaminant Discharge Permits except minimal source permits and insignificant discharge special letter permits. All sources subject to regular permit requirements shall be subject to operation and maintenance requirements.
- (2) The purposes of the operation and maintenance plans are to:
  - (a) Reduce the number of upsets and breakdowns in particulate control equipment;
  - (b) Reduce the duration of upsets and downtimes; and
  - (c) Improve the efficiency of control equipment during normal operations.
- (3) The operation and maintenance plans should consider, but not be limited to, the following:
  - (a) Personnel training in operation and maintenance;
  - (b) Preventative maintenance procedures, schedule and records;
  - (c) Logging of the occurrence and duration of all upsets, breakdowns and malfunctions which result in excessive emissions;
  - (d) Routine follow-up evaluation of upsets to identify the cause of the problem and changes needed to prevent a recurrence;
  - (e) Periodic source testing of pollution control units as required by air contaminant discharge permits;
  - (f) Inspection of internal wear points of pollution control equipment during scheduled shutdowns; and
  - (g) Inventory of key spare parts.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ-10-1995, f. & ef. 5-1-95



## Heat Input

### **Fuel Burning Equipment**

**340-022-0055** The following emission standards are applicable to new sources only:

- (1) For fuel burning equipment having a heat input capacity between more than 150 million BTU per hour and heat input, but not more than 250 million BTU per hour heat input, no person may shall cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:
  - (a) 1.4 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned;
  - (b) 1.6 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.
- (2) For fuel burning equipment having a heat input capacity of more than 250 million BTU per hour heat input, no person may shall cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:
  - (a) 0.8 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned;
  - (b) 1.2 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & ef. 3-10-93

### **Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units**

#### **340-025-0553**

- (1) **Applicability**
  - (a) Except as provided in subsection (b) of this section and section (3) of this rule, this rule applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 million Btu/hour.
  - (b) A steam generating unit subject to OAR 340-025-0610, Standards of Performance for Electric Steam Generating Units, is not subject to this rule.
- (2) **Requirements.**
  - (a) Steam generating units subject to this rule for which construction, modification, or reconstruction commenced on or before June 19, 1986 shall comply with **40 CFR 60.40b(b)**.
  - (b) Steam generating units subject to this rule for which construction, modification, or reconstruction commenced after June 19, 1986 shall comply with **40 CFR Part 60, Subpart Db**, as adopted under OAR 340-025-0535.
- (3) **Special provisions.**
  - (a) A steam generating unit subject to this rule and to OAR 340-025-0580, Standards of Performance for Petroleum Refineries, shall comply with particulate matter and nitrogen oxide standards under **40 CFR Part 60, Subpart Db** and the sulfur dioxide standard under **40 CFR Part 60, Subpart J**.

- (b) A steam generating unit subject to this rule and to OAR 340-025-0555, Standards of Performance for Incinerators, shall comply with nitrogen oxide and particulate matter standards under **40 CFR Part 60, Subpart Db**.
- (c) Any change to an existing steam generating unit for the sole purpose of combusting gases containing TRS as defined in OAR 340-025-0630 is not considered a modification and the steam generating unit is not subject to this rule.
- (4) Definitions. As used in this rule:
  - (a) "Heat input" means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).
  - (b) "Heat input capacity" means the manufacturer's rated design capacity of the fuel burning equipment at maximum load. This may be reduced through the use of enforceable permit conditions that limit the allowable fuel consumption rate (synthetic minor).
  - (cb) "Heat transfer medium" means any material that is used to transfer heat from one point to another point.
  - (de) "Process heater" means the device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.
  - (ed) "Steam generating unit" means a device that combusts any fuel or by-product/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89; DEQ 17-1993, f. & ef. 11-4-93

**Fees and Permit Duration**  
**340-028-1750**

**TABLE 4**  
**AIR CONTAMINANT SOURCES AND**  
**ASSOCIATED FEE SCHEDULE**  
**(340-028-1750)**

**PART II.**

Note: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable source categories.

| No. | Air Contaminant Source | Standard Industrial Classification Number (Reference Only) | Application Processing Fee | Annual Compliance Determination Fee |
|-----|------------------------|--|----------------------------|-------------------------------------|
| ... |                        |  |                            |                                     |

**TABLE 4  
AIR CONTAMINANT SOURCES AND  
ASSOCIATED FEE SCHEDULE  
(340-028-1750)**

**PART II.**

Note: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable source categories.

| No. | Air Contaminant Source  | Standard Industrial Classification Number (Reference Only) | Application Processing Fee | Annual Compliance Determination Fee |
|-----|---|--|----------------------------|-------------------------------------|
| 56. | Fuel burning equipment for gas production and/or distribution, 10 million or more Btu/hr. heat input <u>capacity</u><br>a) Natural gas transmission<br>b) Natural gas production &/or mfg   | 4922, 4925   | 2926<br>2926               | 1848<br>1848                        |
| 57. | Terminal elevators primarily engaged in buying and/or marketing grain, in special control areas<br>a) 20,000 or more tons/year grain processed<br>b) Less than 20,000 tons/year grain processed   | 5153   | 3850<br>1078               | 3180<br>1209                        |
| 58. | Fuel burning equipment within the boundaries of the Portland and Medford-Ashland Air Quality Maintenance Areas, Salem Area Transportation Study Boundary, and Grants Pass, Klamath Falls, and LaGrande Urban Growth Areas<br>**, ***, ****<br>a) Residual or distillate oil fired, 250 million or more Btu/hr. heat input <u>capacity</u><br>b) Residual or distillate oil fired, 10 or more but less than 250 million Btu/hr. heat input <u>capacity</u> | 4961   | 2464<br>1540               | 2418<br>1332                        |

**TABLE 4  
AIR CONTAMINANT SOURCES AND  
ASSOCIATED FEE SCHEDULE  
(340-028-1750)**

**PART II.**

Note: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable source categories.

| No. | Air Contaminant Source   | Standard Industrial Classification Number (Reference Only) | Application Processing Fee | Annual Compliance Determination Fee |
|-----|--|--|----------------------------|-------------------------------------|
| 59. | Fuel burning equipment within the boundaries of the Portland and Medford-Ashland Air Quality Maintenance Areas, Salem Area Transportation Study Boundary, and Grants Pass, Klamath Falls, and LaGrande Urban Growth Areas<br>**, ***, ****<br>a) Wood or coal fired, 35 million or more Btu/hr. heat input capacity<br>b) Wood or coal fired, less than 35 million Btu/hr. heat input capacity | 4961   | 2464<br><br>616            | 2418<br><br>1332                    |
| 60. | Fuel burning equipment outside the boundaries of the Portland and Medford-Ashland Air Quality Maintenance Areas, Salem Area Transportation Study Boundary, and Grants Pass, Klamath Falls, and LaGrande Urban Growth Areas<br>**, ***, ****<br>All oil fired 30 million or more Btu/hr. heat input capacity, and all wood and coal fired 10 million or more Btu/hr. heat input capacity        | 4961   | 1540                       | 1332                                |

- Excluding hydro-electric and nuclear generating projects.

\*\* Including co-generation facilities of less than 25 megawatts.

- \*\*\* Legal descriptions and maps of these areas are on file in the Department.
- \*\*\*\* Fees will be based on the total aggregate heat input capacity of all fuel burning equipment at the site.
- \*\*\*\*\* Permits for sources in categories 64 through 71 are required only if the source is located in the Portland AQMA, Medford-Ashland AQMA, or Salem SATS.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-020-0033.12; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 11-1983, f. & ef. 5-31-83; DEQ 6-1986, f. & ef. 3-26-86; DEQ 12-1987, f. & ef. 6-15-87; DEQ 17-1990, f. & cert. ef. 5-25-90; AQ 4-1992, f. & ef. 12-2-91; AQ 1-1993, f. & ef. 3-9-93; Renumbered from OAR 340-020-0165; AQ 9-1993, f & ef. 9-24-93; AQ 11-1993 Temp., f. & ef. 11-2-93; DEQ 13-1994, f. & ef. 5-19-94; DEQ 21-1994, f. & ef. 10-14-94; DEQ 22-1994, f. & ef. 10-14-94; DEQ 22-1995, f. & ef. 10-6-95

## Wood Waste Boilers

### 340-030-0015

- (1) No person may shall cause or permit the emission of particulate matter from any wood waste boiler with a heat input capacity greater than 35 million BTU/hr in excess of 0.050 grain per dry standard cubic foot of exhaust gas, corrected to 12 percent carbon dioxide.
- (2) No person owning or controlling any wood waste boiler with a heat input capacity greater than 35 million BTU/hour may shall cause or permit the emission of any air contaminant into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour equal to or greater than 10 percent opacity, unless the permittee demonstrates by source test that the emission limit in paragraph (1) of this section can be achieved at higher visible emissions, but in no case may shall emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.
- (3) In accordance with the compliance schedule in 340-030-0046(2), no person may shall cause or permit the emission of particulate matter from any boiler with a heat input capacity greater than 35 million Btu/hour unless the boiler has been equipped with emission control equipment which:
  - (a) Limits emissions of particulate matter to LAER as defined by the Department at the time the Department approves the control device; and
  - (b) Limits visible emissions such that their opacity does not exceed 5% for more than an aggregate of 3 minutes in any one hour, unless the permittee demonstrates by source test that emissions can be limited to LAER at higher visible emissions, but in no case may shall emissions equal or exceed 10% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.
  - (c) For purposes of OAR 340-028-1020 and 340-028-1980, the boiler mass emission limits shall be based on particulate matter emissions of 0.030 grains per standard dry cubic foot, corrected to 12% CO<sub>2</sub>.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

## **Continuous Monitoring**

### **340-030-0050**

- (1) The Department will require the installation and operation of instrumentation for measuring and recording emissions and/or the parameters which affect the emission of air contaminants from wood-waste fired boilers, veneer dryers, fiber dryers, and particle dryers 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 instrumentation shall be periodically calibrated. The method and frequency of calibration shall be approved in writing by the Department. Continuous monitoring equipment and operation shall be in accordance with continuous emission monitoring systems guidance provided by the Department and shall be consistent, where applicable, with the EPA performance specifications and quality assurance procedures outlined in **40 CFR 60, Appendices B and F, and the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III**. The recorded information shall be kept for a period of at least one year and shall be made available to the Department upon request. The selection, installation, and use of the instrumentation shall be done according to the following schedule:
  - (a) By March 27, 1990, the persons responsible for the affected facilities shall submit to the Department a plan for process and or emission monitoring. The Department's primary criterion for review and approval of the plans will be the ability of proposed instrumentation to demonstrate continuous compliance with OAR 340-030-0012 through 340-030-0115;
  - (b) Within one year from the Department's approval of the plan(s), but no later than July 1, 1992, the persons responsible for the affected facilities shall purchase, install, place in operation the instrumentation as approved, verify that it is capable of demonstrating continuously the compliance status of the affected facilities, and commence continuous monitoring and reporting results to the Department, at a frequency and in a form agreed upon by the Department and the responsible persons;
  - (c) The implementation date in subsection (1)(b) of this section can be extended up to one year, subject to Department approval, if justified by the persons responsible for the affected facilities based on unavailability of suitable equipment or other problems.
- (2) At a minimum, the monitoring plan submitted under paragraph (1)(a) of this section shall include:
  - (a) Continuous monitoring and monthly reporting of carbon monoxide concentration and oxygen concentration for any wood-waste fired boiler with a heat input capacity greater than 35 million BTU/hr or for any wood-waste boiler using a wet scrubber as pollution control equipment and steam production rate for any wood-waste fired boiler;
  - (b) Continuous monitoring and monthly reporting of pressure drop, scrubber water pressure, and scrubber water flow for any wood-waste fired boiler, veneer dryer, particle dryer, or fiber dryer using a wet scrubber as pollution control equipment;
  - (c) Continuous monitoring and monthly reporting of opacity for any wood-waste fired boiler not controlled by a wet scrubber; and

- (d) Continuous availability by electronic means to the Department of the emission and performance data specified in subsection (2)(a) through (c) of this section for any wood-waste fired boiler subject to the emission requirements of OAR 340-030-0015.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8-1992, f. & ef. 11/13/91; AQ 1-1993, f. & ef. 3-9-93

### Source Testing

#### 340-030-0055

- (1) The person responsible for the following sources of particulate emissions shall make or have made tests to determine the type, quantity, quality, and duration of emissions, and/or process parameters affecting emissions, in conformance with test methods on file with the Department at the following frequencies:
- (a) Wood Waste Boilers with heat input capacity greater than 35 million Btu/hr. - Once every year;
  - (b) Veneer Dryers - Once every year during 1991, 1992, and 1993 and once every 3 years thereafter;
  - (c) Wood Particle Dryers at Hardboard and Particleboard Plants - Once every year;
  - (d) Charcoal Producing Plants - Once every year.
  - (e) Wood Waste Boilers with heat input capacity equal to or less than 35 million BTU/hr with dry emission control equipment - Once in 1992 and once every 3 years thereafter.
- (2) Source testing shall begin at these frequencies within 90 days of the date by which compliance is to be achieved for each individual emission source.
- (3) These source testing requirements shall remain in effect unless waived in writing by the Department because of adequate demonstration that the source is consistently operating at lowest practicable levels, or that continuous emission monitoring systems are producing equivalent information.
- (4) Source tests on wood waste boilers shall not be performed during periods of soot blowing, grate cleaning, or other abnormal operating conditions. The steam production rate during the source test shall be considered the maximum permittee's steaming rate for the boiler.
- (5) Source tests shall be performed within 90 days of the startup of air pollution control systems.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1988, f. & cert. ef. 9-26-89; AQ 8-1992, f. & ef. 11/13/91; AQ 1-1993, f. & ef. 3-9-93

### Source Testing

**340-030-0330** The person responsible for the following sources of particulate emissions shall make or have made tests to determine the type, quantity, quality, and duration of emissions, and/or process parameters affecting emissions, in conformance with test methods on file with the

Department at the following frequency: Wood Waste Boilers with total heat input capacity equal to or greater than 35 million Btu/hr. - Once every three years;

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ-10-1995, f. & ef. 5-1-95



# NOTICE OF PROPOSED RULEMAKING

(Statement of Need and Fiscal Impact must accompany this form.)

Department of Environmental Quality

AQ

**OAR Chapter 340**

**STATUTORY AUTHORITY:** ORS 468.020, 468A.025

**AMEND:** 340-012-0050  
340-014-0050  
340-021-0007, 0020, 0030  
340-022-0170, 0055, 0840  
340-025-0553  
340-028-0110, 0400, 0630, 1010, 1720, 1750  
340-030-0015, 0044, 0050, 0055, 0320, 0330, 0540, 0610

**REPEAL:** 340-021-0025, 0027

## SUMMARY:

- clarify and update the Department's region-specific odor rules by deleting obsolete requirements, and replacing them with nuisance-based restrictions;
- revise the Typically Achievable Control Technology rule so that it applies even if some region-specific rules in Division 30 apply;
- add a significant figure to grain loading emission limits and repeal superseded grain-loading rules;
- modify the applicability of general rules in Division 21; and
- make a number of housekeeping revisions.

**LAST DATE FOR COMMENT:** July 24, 1996

**AGENCY RULES COORDINATOR:**

Susan M. Greco, (503) 229-5213

**AGENCY CONTACT FOR THIS PROPOSAL:**

Ben Allen

**ADDRESS:**

Air Quality

811 S. W. 6th Avenue

Portland, Oregon 97204

**TELEPHONE:**

(503) 229-6828

or Toll Free 1-800-452-4011

If any interested person wishes to express data, views and arguments orally or in writing at a public hearing, the person must make written request for a public hearing and submit this request along with any written comments to the above address. Request for public hearing must be received before the earliest date that the rule could become effective after the giving of notice in the Bulletin of the Secretary of State from 10 or more persons in association having not less than 10 members. If sufficient requests are received to hold a public hearing, notice of the hearing shall be published in the Bulletin of the Secretary of State at least 14 days before the hearing.

Benjamin M. Allen  
Signature

June 14, 1996  
Date

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for

Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading,  
Specific Emission Standards, and Housekeeping)

## Fiscal and Economic Impact Statement

### Introduction

Odor, OAR 340-030-0540 and 0610

Affected sources will continue to have to control odorous emissions. The revised rule would provide greater certainty on how to achieve compliance, but should not have any impact on costs.

Typically Achievable Control Technology (TACT), OAR 340-028-0630

The current TACT rule does not apply when any rule in Division 30 applies. The revision would modify the TACT rule so that an exemption from TACT is available only when specific Division 30 rules apply. Therefore, businesses may experience greater costs, because TACT will be required more often.

Grain loading, OAR 340-021-0020, 0025, 0027, and 0030

The revision would add a significant figure to the default grain loading limits. While this conforms to the original intent of the rule, the language of the rule would be more stringent. Many Air Contaminant Discharge Permits (ACDPs) previously contained limits based on the intent of the rule; for these sources, the revision would not increase costs. For sources that have had limits based directly on the language of the rule, without regard for the rule's intent, the more stringent language might require adjustment or addition of control equipment.

Specific emission standards, OAR 340-021-0007

The revision exempts sources from the less specific of two applicable standards, rather than requiring compliance with both. The change would probably have no effect on costs, but might lead to some cost savings for sources and for the Department.

Housekeeping

No impact, except:

◆ Auto refinishers, OAR 340-012-0050

The change in classification for rule violations by auto refinishers will cause affected persons to pay smaller fines.

**General Public**

Revisions to the TACT and grain loading rules may increase costs for large and small businesses. The increased costs may be passed on to the general public.

**Small Business**

Typically Achievable Control Technology (TACT), OAR 340-028-0630

The current TACT rule does not apply when any rule in Division 30 applies. The revision would modify the TACT rule so that an exemption from TACT is available only when specific Division 30 rules apply. Therefore, businesses may experience greater costs, because TACT will be required more often.

Grain loading, OAR 340-021-0020, 0025, 0027, and 0030

The revision would add a significant figure to the default grain loading limits. While this conforms to the original intent of the rule, the language of the rule would be more stringent. Many Air Contaminant Discharge Permits (ACDPs) previously contained limits based on the intent of the rule; for these sources, the revision would not increase costs. For sources that have had limits based directly on the language of the rule, without regard for the rule's intent, the more stringent language might require adjustment or addition of control equipment. The Department expects that a small percentage of sources would spend \$2-10,000 to adjust current emission controls to the new standard. A very small percentage of sources currently without any controls might have to add controls, at a cost of \$50-100,000.

**Housekeeping**

◆ Auto refinishers, OAR 340-012-0050

Small auto refinishing businesses may benefit from the reclassification of rule violations by paying lower fines than they do currently. The amount of the change would depend on a number of factors considered in setting fines, such as gravity of the violation, willfulness, etc..

**Large Business**

Typically Achievable Control Technology (TACT), OAR 340-028-0630

The current TACT rule does not apply when any rule in Division 30 applies. The revision would modify the TACT rule so that an exemption from TACT is available only when specific Division 30 rules apply. Therefore, businesses may experience greater costs, because TACT will be required more often.

#### **Grain loading, OAR 340-021-0020, 0025, 0027, and 0030**

The revision would add a significant figure to the default grain loading limits. While this conforms to the original intent of the rule, the language of the rule would be more stringent. Many Air Contaminant Discharge Permits (ACDPs) previously contained limits based on the intent of the rule; for these sources, the revision would not increase costs. For sources that have had limits based directly on the language of the rule, without regard for the rule's intent, the more stringent language might require adjustment or addition of control equipment. The Department expects that a small percentage of sources would spend \$2-10,000 to adjust current emission controls to the new standard. A very small percentage of sources currently without any controls might have to add controls, at a cost of \$50-100,000.

#### **Local Governments**

No impact expected.

#### **State Agencies**

The Department does not expect a notable fiscal impact on state agencies. Because the revisions mostly consist of clarifications of the Department's rules, Department staff would be able to perform their work more effectively and efficiently.

#### **Specific emission standards, OAR 340-021-0007**

The revision exempts sources from the less specific of two applicable standards, rather than requiring compliance with both. The change would make it easier for the Department to determine which standard to apply.

#### **Assumptions**

##### **Grain loading, OAR 340-021-0020, 0025, 0027, and 0030**

Most sources will not need to adjust or add controls.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for

Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading,  
Specific Emission Standards, and Housekeeping)

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

Odor, OAR 340-030-0540 and 0610

Two of the Department's odor rules (0540 and 0610) refer to an obsolete device called a Scentometer. This has caused a problem in writing Oregon Title V Operating Permits, which require monitoring for every applicable requirement (including Scentometer standards).

The revision would replace the Scentometer requirement with a rule based on the structure of the current Division 21 particulate nuisance rule (OAR 340-021-0060). That rule specifies management practices the Department can require when particulate nuisance problems exist. The new odor rules would similarly prohibit sources from allowing odorous emissions to cause a nuisance, and would allow the Department to prescribe management practices in case of a problem. Management practices might include: full or partial enclosure of the odor source; installation of control equipment that removes odorous components from an exhaust stream; substitution of a non-odorous substance or odorless process; and housekeeping measures that remove and dispose of potentially odorous materials.

Typically Achievable Control Technology (TACT), OAR 340-028-0630

The TACT rule requires sources to install Typically Achievable Control Technology for sources not covered by specific emission standards. As written, the rule exempts sources covered by any emission standard in Division 30. The Department believes that area specific rules containing general emission standards, such as odor and nuisance particulate controls, should not preclude application of a general requirement (TACT) that may identify control technology for specific types of emissions, such as Volatile Organic Compounds, Particulate Matter, Hazardous Air Pollutants, etc., in addition to the general emission standards of Division 30. The revision would exempt sources from TACT only when specific design or performance standards in Division 30 apply.

### Grain loading, OAR 340-021-0020, 0025, 0027, and 0030

The current rules limit emissions to 0.1, 0.2, 0.3, or 0.6 grains per dry standard cubic foot (gr/dscf). The intent of the Commission on adopting the rule was that the limits be absolute, i.e. 0.1 equivalent to 0.1000000 ad infinitum. However, in practice, rounding leads to anything less than 0.15 being considered equal to 0.1. For example, 0.149 would be rounded down to 0.1. Therefore, emissions rounded to the 0.1 limit could in fact be almost 50% higher than intended by the Commission.

The revision would add one significant digit to the limits. In the above example, 0.1 gr/dscf would become 0.10 gr/dscf. Rounding would still apply, but only numbers less than 0.105 would be rounded down to 0.10. Emissions could be no more than 5% higher than the intended limit.

OAR 340-021-0025 and 0027 have been superseded by more specific incinerator rules in Division 25, and would be repealed.

### Specific emission standards, OAR 340-021-0007

This rule was recently adopted to exempt sources from general emission limits in Division 21 when more specific rules apply. The language of the rule allows exemption only when rules with identical emission units and averaging times apply, and has been found to be too limiting. The Department believes that when a rule has been developed specifically for an industry or pollutant, it should apply in place of a general rule, even if the units or averaging times differ.

### Housekeeping

#### ◆ Auto refinishers, OAR 340-012-0050

The Department categorizes rule violations in three Classes of seriousness, with Class I being the most serious. Unless otherwise specified, violations fall in Class II. This revision would create a Class III category for auto refinishers who refinish less than 10 cars per year, moving them from Class II to Class III. The revision will make the rule more equitable: those who paint a small number of cars produce far less pollution than those (e.g. regular body shops) who paint hundreds of vehicles per year. It is more fair to have penalties proportioned as well.

#### ◆ Surface coating, OAR 340-022-0170

(4) - The rule refers to "used in the surface coating of the metal parts and products" in subparagraphs 5(a) through (j), yet 5(a) through (j) refer to fabric coating, vinyl coating, and paper coating, as well as metal parts. The revision would delete the reference to metal parts.

(5)(j) - The rule says "Miscellaneous Products and Metal Parts," rather than "Miscellaneous Metal Parts and Products." The rule is not meant to cover

miscellaneous products (i.e. non-metal). The revision would change the rule to say "Miscellaneous Metal Parts and Products."

◆ Cross-reference and Grammatical

022-0840(6) rule mistakenly refers to (7) of the same rule, instead of (8). The revision would correct the reference.

022-0930(2)(a) is missing the word "that" after "spray paints."

028-0400(2) mistakenly refers to ORS 192.410(5) instead of (6). The revision would simply refer to ORS 192.410.

◆ Permit names, OAR 340-014-0050, 028-1720(7)

These permits have similar and confusing names: 'special permit' - a 60 day permit often in the form of a letter, and 'special letter permit' - for insignificant discharges. The revision would give them more accurate and distinct names: 'short-term permit' and 'insignificant discharge permit.'

◆ Heat input, various

Many Department rules use the term "heat input," in some cases referring to actual heat input, in others to design capacity. The revision would replace the ambiguous phrase with more precise language.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

Yes  No

a. If yes, identify existing program/rule/activity:

Oregon's Title V Operating Permit and Air Contaminant Discharge Permit programs, which regulate air emissions from industrial sources.

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes  No  (if no, explain):

Current procedures require local governments to determine land use compatibility before a Notice of Construction is approved or an air permit is issued.

c. If no, apply specified criteria to the proposed rules.

In the space below, state, if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

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

Gregory A. Gre  
Division Representative

Lydia Taylor  
Intergovernmental Coord.

5/18/96  
Date



**Questions to be Answered to Reveal  
Potential Justification for Differing from Federal Requirements.**

**1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?**

No. The rules being revised are state standards without federal counterparts.

**2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?**

Not applicable.

**3. Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?**

No.

**4. Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?**

The purpose of the revisions is to increase certainty and eliminate ambiguities in the current rules.

**5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?**

Not applicable.

**6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?**

Not applicable.

**7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)**

Odor, OAR 340-030-0540 and 0610

The revision would maintain equity by ensuring that the Department can require sources that cause odor problems to apply reasonable controls.

Typically Achievable Control Technology (TACT), OAR 340-028-0630

Yes. Generally, the TACT rule is inapplicable when more specific rules apply. The current language exempts sources from TACT when any Division 30 rule applies,

regardless of its specificity. The revision would exempt them only from specific Division 30 rules.

#### Grain loading, OAR 340-021-0020, 0025, 0027, and 0030

Many Air Contaminant Discharge Permits (ACDPs) previously contained limits based on the intent of the rule; for these sources, the revision would not increase costs. For sources that have had limits based directly on the language of the rule, without regard for its intent, the more stringent language might require adjustment or addition of control equipment.

#### Specific emission standards, OAR 340-021-0007

Yes. Current rules may require a source to comply with general rules and with industry or pollutant-specific rules. The revision would exempt sources from general rules if a more specific rule applies.

#### Housekeeping

Not applicable, except:

◆ Auto refinishers, OAR 340-012-0050

The revision will make the classification of violations more equitable: those who paint a small number of cars produce far less pollution than those (e.g. regular body shops) who paint hundreds of vehicles per year. It is more fair to have penalties proportioned as well

#### 8. **Would others face increased costs if more stringent rules are not enacted?**

No, except:

#### Odor, OAR 340-030-0540 and 0610

Yes. The current measure of odor (the Scentometer) is obsolete. By replacing it with a nuisance standard, the Department would be better able to require control measures from sources that cause odor problems. If the rule is not adopted, neighbors may be affected by odors, and may experience increased costs, or reductions in property value.

#### 9. **Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?**

Not applicable. Federal requirements do not address these issues or are not as specific.

**10. Is demonstrated technology available to comply with the proposed requirements?**

Yes.

**11. Will the proposed requirements contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?**

Yes. All of the rule changes are intended to clarify the meaning or applicability of current rules. More easily understood rules are more cost effective.

**State of Oregon  
Department of Environmental Quality**

**Memorandum**

**Date:** June 15, 1996  
**To:** Interested and Affected Public  
**Subject:** Rulemaking Proposal and Rulemaking Statements - Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping)

This memorandum contains information on a proposal by the Department of Environmental Quality (DEQ) to amend rules regarding odor, typically achievable control technology, grain loading, specific emission standards, and housekeeping. Pursuant to ORS 183.335, this memorandum also provides information about the Environmental Quality Commission's intended action to amend and repeal rules.

This proposal would:

- clarify and update the Department's region-specific odor rules by deleting obsolete requirements, and replacing them with nuisance-based restrictions;
- revise the Typically Achievable Control Technology rule so that it applies even if some region-specific rules in Division 30 apply;
- add a significant figure to grain loading emission limits and repeal superseded grain-loading rules;
- modify the applicability of general rules in Division 21; and
- make a number of housekeeping revisions.

The Department has the statutory authority to address these issues under ORS 468.020 and 468A.025.

**What's in this Package?**

Attachments to this memorandum provide details on the proposal as follows:

- |              |  |
|--------------|--|
| Attachment A | The official statement describing the fiscal and economic impact of the proposed rule. (required by ORS 183.335)                               |
| Attachment B | A statement providing assurance that the proposed rules are consistent with statewide land use goals and compatible with local land use plans. |
| Attachment C | Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.  |

**Public Comment Period**

You are invited to review these materials and present written comment on the proposed rule

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changes. Written comments must be presented to the Department by 5:00 p.m., July 24, 1996 . In accordance with ORS 183.335(13), no comments can be accepted after this date, by either the EQC or the Department. Thus if you wish for your comments to be considered by the Department in the development of these rules, your comments **must** be received prior to the close of the comment period. Interested parties are encouraged to present their comments as early as possible prior to the close of the comment period to ensure adequate review and evaluation of the comments presented. Please forward all comments to Department of Environmental Quality, Attn: Benjamin M. Allen, 811 S.W. 6th Avenue, Portland, Oregon, 97204 or can be hand delivered to the Department of Environmental Quality, 811 S.W. 6th, 11<sup>th</sup> Floor between 8:00 a.m. and 5:00 p.m.

Following close of the public comment period, the Department will prepare a report which summarizes the comments received. The Environmental Quality Commission (EQC) will receive a copy of this report and all written comments submitted.

If written comments indicating significant public interest or written requests from 10 persons, or an organization representing at least 10 persons, are received regarding this proposed rule, the Department will provide a public hearing. Requests for a hearing must be in writing and received by the Department by 5:00 p.m., July 24, 1996 .

If you wish to be kept advised of this proceeding and receive a copy of the recommendation that is presented to the EQC for adoption, you should request that your name be placed on the mailing list for this rulemaking proposal.

#### **What Happens After the Public Comment Period Closes?**

The EQC will consider the Department's recommendation for rule adoption during one of their regularly scheduled public meetings. The targeted meeting date for consideration of this rulemaking proposal is October 11, 1996 . This date may be delayed if needed to provide additional time for evaluation and response to testimony received. You will be notified of the time and place for final EQC action if you present submit written comment during the comment period or ask to be notified of the proposed final action on this rulemaking proposal.

In accordance with ORS 183.335(13), no comments can be accepted by either the Department or the EQC after the comment period has closed. Thus the EQC strongly encourages people with concerns regarding the proposed rule to communicate those concerns to the Department at the earliest possible date prior to the close of the comment period so that an effort may be made to understand the issues and develop options for resolution where possible.

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## **Background on Development of the Rulemaking Proposal**

### **Why is there a need for the rules?**

#### **Odor, OAR 340-030-0540 and 0610**

Two of the Department's odor rules (0540 and 0610) refer to an obsolete device called a Scentometer. This has caused a problem in writing Oregon Title V Operating Permits, which require monitoring for every applicable requirement (including Scentometer standards).

The revision would replace the Scentometer requirement with a rule based on the structure of the current Division 21 particulate nuisance rule (OAR 340-021-0060). That rule specifies management practices the Department can require when particulate nuisance problems exist. The new odor rules would similarly prohibit sources from allowing odorous emissions to cause a nuisance, and would allow the Department to prescribe management practices in case of a problem. Management practices might include: full or partial enclosure of the odor source; installation of control equipment that removes odorous components from an exhaust stream; substitution of a non-odorous substance or odorless process; and housekeeping measures that remove and dispose of potentially odorous materials.

#### **Typically Achievable Control Technology (TACT), OAR 340-028-0630**

The TACT rule requires sources to install Typically Achievable Control Technology for sources not covered by specific emission standards. As written, the rule exempts sources covered by any emission standard in Division 30. The Department believes that area specific rules containing general emission standards, such as odor and nuisance particulate controls, should not preclude application of a general requirement (TACT) that may identify control technology for specific types of emissions, such as Volatile Organic Compounds, Particulate Matter, Hazardous Air Pollutants, etc., in addition to the general emission standards of Division 30. The revision would exempt sources from TACT only when specific design or performance standards in Division 30 apply.

#### **Grain loading, OAR 340-021-0020, 0025, 0027, and 0030**

The current rules limit emissions to 0.1, 0.2, 0.3, or 0.6 grains per dry standard cubic foot (gr/dscf). The intent of the Commission on adopting the rule was that the limits be absolute, i.e. 0.1 equivalent to 0.1000000 ad infinitum. However, in practice, rounding leads to anything less than 0.15 being considered equal to 0.1. For example, 0.149 would be rounded down to 0.1. Therefore, emissions rounded to the 0.1 limit could in fact be almost 50% higher than intended by the Commission.

The revision would add one significant digit to the limits. In the above example, 0.1 gr/dscf would become 0.10 gr/dscf. Rounding would still apply, but only numbers

less than 0.105 would be rounded down to 0.10. Emissions could be no more than 5% higher than the intended limit.

OAR 340-021-0025 and 0027 have been superseded by more specific incinerator rules in Division 25, and would be repealed.

#### Specific emission standards, OAR 340-021-0007

This rule was recently adopted to exempt sources from general emission limits in Division 21 when more specific rules apply. The language of the rule allows exemption only when rules with identical emission units and averaging times apply, and has been found to be too limiting. The Department believes that when a rule has been developed specifically for an industry or pollutant, it should apply in place of a general rule, even if the units or averaging times differ.

#### Housekeeping

##### ◆ Auto refinishers, OAR 340-012-0050

The Department categorizes rule violations in three Classes of seriousness, with Class I being the most serious. Unless otherwise specified, violations fall in Class II. This revision would create a Class III category for auto refinishers who refinish less than 10 cars per year, moving them from Class II to Class III. The revision will make the rule more equitable: those who paint a small number of cars produce far less pollution than those (e.g. regular body shops) who paint hundreds of vehicles per year. It is more fair to have penalties proportioned as well.

##### ◆ Surface coating, OAR 340-022-0170

(4) - The rule refers to "used in the surface coating of the metal parts and products" in subparagraphs 5(a) through (j), yet 5(a) through (j) refer to fabric coating, vinyl coating, and paper coating, as well as metal parts. The revision would delete the reference to metal parts.

(5)(j) - The rule says "Miscellaneous Products and Metal Parts," rather than "Miscellaneous Metal Parts and Products." The rule is not meant to cover miscellaneous products (i.e. non-metal). The revision would change the rule to say "Miscellaneous Metal Parts and Products."

##### ◆ Cross-reference and Grammatical

022-0840(6) rule mistakenly refers to (7) of the same rule, instead of (8). The revision would correct the reference.

022-0930(2)(a) is missing the word "that" after "spray paints."

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028-0400(2) mistakenly refers to ORS 192.410(5) instead of (6). The revision would simply refer to ORS 192.410.

- ◆ Permit names, OAR 340-014-0050, 028-1720(7)  
These permits have similar and confusing names: 'special permit' - a 60 day permit often in the form of a letter, and 'special letter permit' - for insignificant discharges. The revision would give them more accurate and distinct names: 'short-term permit' and 'insignificant discharge permit.'
- ◆ Heat input, various  
Many Department rules use the term "heat input," in some cases referring to actual heat input, in others to design capacity. The revision would replace the ambiguous phrase with more precise language.

All rules proposed for revision are included in the State of Oregon Clean Air Act Implementation Plan except the odor rules (OAR 340-030-540 and 610), the Specific Emission Standards rule (OAR 340-021-0007) and some of the housekeeping rules.

### **How were the rules developed?**

These 'problem rules' were discovered during implementation of the Title V permitting program. After each issue was identified, staff discussed problems with the current rules, and suggested revisions. Staff then reviewed potential revisions, and drafted proposed language.

The Air Quality Industrial Source Advisory Committee was advised of the proposed revisions at their meeting on June 12, 1996.

The Department relied on documents used in the original adoption of the grainloading rules.

### **Whom do these rules affect (including the public, the regulated community, and other agencies), and how do they affect these groups?**

Odor, OAR 340-030-0540 and 0610

These rules would affect emission sources in Clackamas, Columbia, Multnomah, Washington, Benton, Linn, Marion, Polk, and Yamhill counties. The rules would provide an emission standard to replace the obsolete Scentometer standard.



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**Typically Achievable Control Technology (TACT), OAR 340-028-0630**

The revision would affect sources subject to some Division 30 rules. The sources might be subject to TACT.

**Grain loading, OAR 340-021-0020, 0025, 0027, and 0030**

The revision would affect sources subject to the Division 21 general grain-loading standard. The revision would ensure a consistent Departmental interpretation, and conform to the rules' original intent by limiting the effects of rounding on emission data.

**Specific emission standards, OAR 340-021-0007**

The revision would affect sources subject to industry or emission specific emission limits. The revision would exempt such sources from generally applicable rules, even when the general and specific rules are not directly comparable.

**Housekeeping**

The housekeeping revisions would affect, among others, auto refinishers, operators of coating lines that emit volatile organic compounds, and sources subject to rules that regulate "heat input."

**How will the rules be implemented?**

Staff of the Department and the Lane Regional Air Pollution Authority would be notified of the changes. Sources subject to rules with substantive changes would be notified during permit renewal or modification procedures. Revised rule requirements or standards would be incorporated into new permits.

**Are there time constraints?**

No.

**Contact for more information:**

If you would like more information on this rulemaking proposal, **would like to obtain a copy of the proposed rules**, or would like to be added to the mailing list, please contact:

Benjamin M. Allen  
Air Quality Division  
811 SW 6th Ave., Portland, OR 97204-1390  
(503) 229-6828

# Department's Evaluation of Public Comment

on

Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping)

## Comments Received

No Public Hearing was held. Comments were received through July 24, 1996. A comment was received from:

1. Jerome B. Soehnlein  
Simpson Timber Company

## Evaluation of Comment

**Comment:** The Department is right to eliminate the Scentometer. It makes sense to model new odor regulations on the existing rule OAR 340-021-0060.

**Comment:** Air quality requirements should not be imposed on the basis of odor alone. There is no scientifically supportable link between odor and public health or the environment.

Response: The Department believes that while odors may not necessarily constitute a health hazard, malodorous emissions can degrade the quality of the human environment, and that regulation is appropriate.

**Comment:** The rule does not define "odorous" or "nuisance." The Department should define "nuisance" as a condition that produces "Department or source-verified odor complaints from five or more individuals within any continuous 6-month period."

Response: The Department believes the rule is adequate as written. "Nuisance" is a well-established concept, generally defined as "unreasonable interference with use and enjoyment of property." A rigid numerical limit is subject to abuse by complainants, while it may not be possible for Department inspectors to verify all legitimate complaints. "Nuisance" limits have been used in other Department rules, and the Department believes they will be effective in this case.

**Comment:** The language of the rule would allow the Department to require "reasonable precautions" simply to prevent any odorous emission, even if there have been no complaints, or if the odor does not leave the property. "Reasonable precautions" should be required only if there is a "nuisance condition" as defined in the rule. [See above.]

Response: The Department feels that the term “reasonable” offers the source sufficient assurance. Precautions would not be reasonable if there were no current or foreseeable odor problem off the site.

**Comment:** The commenter said that the paragraph (3) requirement of “reasonable precautions” to “prevent” odorous emissions is a standard that is unclear and impossible to attain, since most manufacturing processes will always have odors. The commenter suggested replacing “prevent” with “reduce.”

Response: The Department understands that it may be impossible to prevent all odors, but feels that in such a case “reasonable precautions” would not require complete odor prevention. The Department feels that the term “reasonable” is a sufficient safeguard.

**Comment:** The old Scentometer standard required that measurements be taken off the source property. The new rule could apply to odors on the source property. The words “from being detected on adjacent property” should be added.

Response: The concept of “nuisance” necessarily implies that the effect is felt off the property.

# Detailed Changes to the Original Rulemaking Proposal

for

Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping)

## Grain Loading

Most proposed changes to the grain loading rules were withdrawn. They will be modified, and another public comment period will be set.

## SIP

As discussed in the staff report, some of the rules proposed for revision are part of the State Implementation Plan (SIP). When they are revised, the SIP rule below needs to be readopted. The SIP rule itself was not included in the original rulemaking proposal, though the documents noted that some rules were part of the SIP.

### **“State of Oregon Clean Air Act Implementation Plan”**

**340-020-0047**

- (1) This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by the Department of Environmental Quality and is adopted as the state implementation plan (SIP) of the State of Oregon pursuant to the federal Clean Air Act, Public Law 88-206 as last amended by Public Law 101-549.
- (2) Except as provided in section (3) of this rule, revisions to the SIP shall be made pursuant to the Commission's rule-making procedures in Division 11 of this Chapter and any other requirements contained in the SIP and shall be submitted to the United States Environmental Protection Agency for approval.
- (3) Notwithstanding any other requirement contained in the SIP, the Department is authorized to submit to the Environmental Protection Agency any permit condition implementing a rule that is part of the federally- approved SIP as a source-specific SIP revision after the Department has complied with the public hearings provisions of 40 CFR 51.102 (July 1, 1992).

[NOTE: Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the United States Environmental Protection Agency. If any provision of the federally approved Implementation Plan conflicts with any provision adopted by the Commission, the Department shall enforce the more stringent provision.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 35, f. 2-3-72, ef. 2-15-72; DEQ 54, f. 6-21-73, ef. 7-1-73; DEQ 19-1979, f. & ef. 6-25-79; DEQ 21-1979, f. & ef. 7-2-79; DEQ 22-1980, f. & ef. 9-26-80; DEQ 11-1981, f. & ef. 3-26-81; DEQ 14-1982, f. & ef. 7-21-82; DEQ 21-1982, f. & ef. 10-27-82; DEQ 1-1983, f. & ef. 1-21-83; DEQ 6-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 25-1984, f. & ef. 11-27-84; DEQ 3-1985, f. & ef. 2-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 10-1986, f. & ef. 5-9-86; DEQ 20-1986, f. & ef. 11-7-86; DEQ 21-1986, f. & ef. 11-7-86; DEQ 4-1987, f. & ef. 3-2-87; DEQ 5-1987, f. & ef. 3-2-87; DEQ 8-1987, f. & ef. 4-23-87; DEQ 21-1987, f. & ef. 12-16-87; DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88; DEQ 2-1991, f. & cert. ef. 2-14-91; DEQ 19-1991, f. & cert. ef. 11-13-91; DEQ 20-1991, f. & cert. ef. 11-13-91; DEQ 21-1991, f. & cert. ef. 11-13-91; DEQ 22-1991, f. & cert. ef. 11-13-1991; DEQ 23-1991, f. & cert. ef. 11-

13-91; DEQ 24-1991, f. & cert. ef. 11-13-91; DEQ 25-1991, f. & cert. ef. 11-13-91; DEQ 1-1992, f. & cert. ef. 2-4-92; DEQ 3-1992, f. & cert. ef. 2-4-92; DEQ 7-1992, f. & cert. ef. 3-30-92; DEQ 19-1992, f. & cert. ef. 8-11-92; DEQ 20-1992, f. & cert. ef. 8-11-92; DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 26-1992, f. & cert. ef. 11-2-92; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 8-1993, f. & cert. ef. 5-11-93; DEQ 12-1993, f. & ef. 9-24-93; DEQ 13-1993, f. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 1-1994, f. & cert. ef. 1-3-94; DEQ 5-1994, f. & ef. 3-21-94; DEQ 14-1994, f. & ef. 5-31-94; DEQ 15-1994, f. 6-8-94 & ef. 7-1-94; DEQ 22-1994, f. & ef. 10-14-94; DEQ 24-1994, f. & ef. 10-28-94; DEQ 25-1994, f. & ef. 11-2-94; DEQ 32-1994, f. & ef. 12-22-94; DEQ 1-1995, f. 1-10-95 & ef. 5-1-95; DEQ 4-1995, f. & ef. 2-17-95; DEQ 7-1995, f. & ef. 3-19-95; DEQ 9-1995, f. & ef. 5-1-95; DEQ 10-1995, f. & ef. 5-1-95; DEQ 12-1995, f. & ef. 5-25-95; DEQ 13-1995, f. & ef. 5-25-95; DEQ 14-1995, f. & ef. 5-25-95; DEQ 17-1995, f. & ef. 7-12-95

## Specific Emission Standards

A staff member pointed out that the proposed language might have caused confusion by replacing a federally enforceable rule with a state enforceable rule, (e.g. OAR 340-021-0015, the general opacity rule, and OAR 340-030-0500, a region-specific opacity rule). This might have caused problems with Title V permits. Accordingly, the proposed language has been rewritten.

### Application

#### 340-021-0007

A standard in OAR 340-021-0005 through 340-021-0060 does not apply when any other rule adopted by the Commission as part of the State Implementation Plan contains an emissions standard specifically applicable to the affected source, industry, or pollutant.

Stat. Auth.: ORS Ch. 468 & 468A

Stats Implemented: ORS 468.020 and 468A.025.

Hist.: DEQ x-1996, f. & ef. 1-xx-96

# **Advisory Committee**

for

Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping)

The Air Quality Industrial Source Advisory Committee was advised of the proposed revisions at their meeting on June 12, 1996.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for

Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading,  
Specific Emission Standards, and Housekeeping)

Rule Implementation Plan

**Summary of the Proposed Rule**

The proposed revisions would:

- clarify and update the Department's region-specific odor rules by deleting obsolete measurement requirements and replacing them with nuisance-based restrictions;
- revise the Typically Achievable Control Technology rule so that it applies even if some region-specific rules in Division 30 apply;
- repeal superseded grain-loading rules;
- modify the applicability of general rules in Division 21; and
- make a number of housekeeping revisions.

**Proposed Effective Date of the Rule**

Upon filing.

**Proposal for Notification of Affected Persons**

Staff of the Department and the Lane Regional Air Pollution Authority would be notified of the changes. Sources subject to rules with substantive changes would be notified during permit renewal or modification procedures. Revised rule requirements or standards would be incorporated into new permits.

**Proposed Implementing Actions**

Source permits would be revised at the time of renewal or modification.

**Odor**

Air quality managers would develop tools for how to enforce and implement the odor regulations. The tools would include written guidance to help field staff determine when a nuisance exists (i.e. when there is "unreasonable interference with use and enjoyment of property.").

**Proposed Training/Assistance Actions**

Staff of the Department and the Lane Regional Air Pollution Authority would be notified of the changes.

**Odor**

After guidance is developed, field staff will be trained in how to determine whether a nuisance exists.



# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item G  
Meeting

**Title:**

**New Source Performance Standards and Emission Guidelines  
Municipal Waste Combustors**

**Summary:**

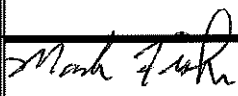
This rulemaking proposal would adopt federal New Source Performance Standards (NSPS) by reference and incorporate Emission Guidelines into existing regulations for Municipal Waste Combustors. The Federal Clean Air Act requires states to either adopt federal requirements by reference or to develop equivalent regulations that are federally enforceable. These rules affect new and existing Municipal Waste Combustors with capacities greater than 35 Mg/day, of which there are two in the state: Ogden Martin Systems, Inc. in Brooks and one operated by Coos County.

Two hearings were held with one person attending the hearing in Coos Bay, and nineteen attending the Salem hearing. Nine people testified at the Salem hearing, with a total of 33 people submitting written testimony. While many expressed appreciation for continuing measures, such as this proposed rulemaking to address toxic air pollution, most felt the standards proposed were not sufficient to protect public health and the environment. The major comments that were raised were: recommend standards that are more protective of public health and the environment, reliable monitoring of emissions and more aggressive enforcement. Some commenters felt the Department should not be asking "how much" toxic pollution do we allow, rather, it should be asking "why" are we exposing Oregonians to pollutants as toxic as dioxin and urged the Department to consider pollution prevention and other measures to eventually eliminate such pollutants.

The Department has incorporated a change to the proposed rules in response to a comment from one of the affected sources having to do with over-restrictive continuous monitoring reporting requirements.

**Department Recommendation:**

The Department recommends that the Commission adopt the rules regarding Municipal Waste Combustors as presented in Attachment A of the Department Staff Report.

  
Report Author

  
Division Administrator

Director 

Date: 9-5-96

To: Environmental Quality Commission  
From: Langdon Marsh, Director  
Subject: Agenda Item G, October 11, 1996, EQC Meeting

**New Source Performance Standards (NSPS) and Emission Guidelines  
Municipal Waste Combustors**

**Background**

On July 12, 1996, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on proposed rules which apply to new and existing municipal waste combustors with capacities greater than 35 Mg/day. The proposed rules will reduce hazardous air pollutants, in addition to reducing criteria pollutants. The proposed rules include operating requirements that limit carbon monoxide emissions, pollution control device inlet temperatures, unit load levels and require continuous monitoring of each of these, in addition to more frequent testing of dioxins and furans.

Pursuant to the authorization, a Hearing Notice was published in the Secretary of State's Bulletin on August 1, 1996. The Hearing Notice and informational materials were mailed to the mailing list of those persons who have asked to be notified of rulemaking actions, and to a mailing list of persons known by the Department to be potentially affected by or interested in the proposed rulemaking action for Municipal Waste combustors.

Public hearings were held on August 15 and 16, 1996 with Jeffrey Armstrong serving as Presiding Officer. Written comments were received through August 23, 1996 at 5:00 p.m. The Presiding Officer's Report (Attachment C) summarizes oral testimony presented at the hearing and lists all the written comments received. A copy of the written comments is available upon request.

Department staff have evaluated the comments received (Attachment D). Based upon comments from one of the affected sources, modifications to the initial rulemaking proposal are being recommended by the Department. These modifications are summarized below and in Attachment E. In addition, (this action does not affect the proposed rulemaking) the Department recommends that it acts as a facilitator between Marion County and one of the affected sources, Ogden Martin Systems, to initiate discussions of the possibility of a waste separation plan to

segregate chlorinated plastics from Ogden's wastestream to minimize dioxin formation from this facility.

### **Report Contents**

This report contains the following sections:

1. The issue this proposed rulemaking action is intended to address;
2. The authority to address the issue;
3. The process for development of the rulemaking proposal including alternatives considered;
4. A summary of the rulemaking proposal presented for public hearing;
5. A summary of the significant public comments;
6. Changes proposed in response to comments
7. A summary of how the rule will work and proposed implementation;
8. A recommendation for Commission action.

### **Issue this Proposed Rulemaking Addresses**

This proposed rulemaking addresses adoption of New Source Performance Standards and Emission Guidelines for Municipal Waste Combustors greater than 35 Mg/day capacity. These proposed rules will affect two sources in the state: one is a large facility located in Brooks, and the other is a small facility located in Coos County. The NSPS adopt by reference regulations that were promulgated by EPA as required by Section 129 of the federal Clean Air Act, which Congress enacted in response to public concern for hazardous air pollutant emissions.

### **Authority of the Commission to address Issue**

The Environmental Quality Commission has the authority to address this issue under ORS468A.015, 468A.025, 468A.050(2), 468A.055(1) and (2), 468A.070, 468.090-190.

### **Process for Development of Rulemaking Proposal including Alternatives**

EPA promulgated regulations for new and existing municipal waste combustors with capacities greater than 35 Mg/day, on December 19, 1995 in response to the 1990 Clean Air Act Amendments. States must either adopt federal requirements, or develop equivalent regulations that are federally enforceable. In addition, States must develop a State Plan pursuant to Section 111(d) of the Act to make the Emission Guidelines federally enforceable. States must meet these requirements by December, 1996.

This proposed rulemaking was discussed with affected sources on May 15 and 16, 1996, was presented to the Industrial Source Advisory Committee at its June meeting, and was discussed with interested parties August 14, 1996. The Department developed the State Plan through discussions with EPA, Region X. A draft State Plan, proposed draft rules, and draft hearings staff report was submitted to EPA for review before the public notice period.

### **Summary of Rulemaking Proposal Presented for Public Hearing**

See Attachment F

### **Summary of Significant Public Comments**

Nine people gave oral testimony at the August 16, 1996 Salem hearing, three of which submitted written testimony in addition to their oral testimony. In addition, 27 written testimonies were received, two of which were too late to be considered. The significant comments and recurring issues raised, are summarized below:

1. **Comment:** Six commenters who gave oral testimony expressed concerns that the proposed rules provide inadequate protection for public health.

**Department's Response:** This proposed rule is a federal Clean Air Act Section 129 technology-based standard. Congress abandoned the risk-based approach because it was found to be ineffective. In the 1970's and 1980's, numerous technology-based standards were implemented under section 111 of the federal Clean Air Act as compared to only a few risk-based standards under section 112 of the federal Clean Air Act. It is recognized that there are health concerns associated with hazardous air pollutants (primarily dioxin/furans and mercury). The proposed emission standards and guidelines will reduce hazardous air pollutant emissions. Within 5 years of implementation of these rules, the EPA will conduct a risk based analysis.

2. **Comment:** Two commenters expressed concern about higher garbage fees as a result of the proposed rule.

**Department's Response:** The federal Clean Air Act requires states to adopt the proposed rules, or rules that are equivalent. The fiscal impact of the regulations was evaluated at the national level and determined to be reasonable relative to the environmental benefit of reduced pollutant emissions. The Department recommends that any concern over potential increases in garbage handling fees be addressed to the county commission.

3. **Comment:** Twenty one commenters expressed concerns about the following issues:
- a. Proposed rule is good step, but still allows releases of dioxin and other hazardous air pollutants resulting in serious public health/environmental impact.
  - b. Department needs to respond to scientific information and set protective dioxin limits based on synergistic effects of compounds.
  - c. Department can eliminate dioxin formation from combustors through pollution prevention and adoption of European emission standards and control technology requirements.

**Department's Response:** The response to comments 3.a and 3.b are the same as that provided for comment 1.

The Department acknowledges that the removal of some types of materials from the waste stream before incineration would reduce some hazardous air pollutants. This is especially true for metals such as mercury, lead, and cadmium. As a result, the Department has restricted the type of materials that can be accepted. For example, the current Solid Waste Disposal Permit prohibits Ogden Martin Systems from accepting certain types of materials such as lead-acid batteries.

For other types of hazardous air pollutants, the cause and effect relationship between the type of material burned and the pollutant emissions is not as well defined. This is especially true for dioxin/furan emissions. While it is acknowledged that some form of chlorine is a necessary factor in dioxin/furan formation, the chemical reactions are also influenced by the presence of organic compounds remaining as the result of incomplete combustion and temperatures within certain areas of the exhaust stream. If all organic material were completely oxidized to carbon dioxide and water, there would be no possibility of forming dioxin/furans. In addition, the formation of dioxin/furans only occurs within certain temperature zones downstream of the combustion process. Therefore, since it is virtually impossible to remove all sources of chlorine/chloride from the waste stream, the best approach for minimizing dioxin/furan emissions is to ensure as complete of combustion as possible and regulate the exhaust gas temperature in the particulate emissions control device where dioxin/furans form.

The proposed rules include operating practice requirements that limit the carbon monoxide emissions, pollution control device inlet temperature, and the unit load level. Carbon monoxide is a surrogate for combustion efficiency since it generally is more difficult to completely burn as compared to other organic compounds. The pollution control device inlet temperature is limited to prevent formation of dioxin/furans in the pollution control device. The unit load level is limited to prevent excessive particulate matter from being carried out of the furnace, which would then be captured in the pollution control device. Both the pollution control device inlet temperature and the unit load limit are established during each dioxin/furan source test. The

proposed rules include requirements for continuously monitoring the carbon monoxide emissions, pollution control device inlet temperature, and unit load level.

In addition to the operating practices identified above, the hydrochloric acid (HCl) limits require the removal of most (95 percent) of the acid gas from the exhaust gas. This is accomplished by a semi-dry lime spray scrubber and baghouse. The effectiveness of the scrubber/baghouse is continuously monitored by monitoring the removal of sulfur dioxide which is also an acid gas and is generally more difficult to remove than HCl.

One other feature of the proposed rule is that the control of mercury emissions requires the use of carbon injection. This control technique is also credited for reducing dioxin/furan emissions. EPA estimates a 50 percent reduction of dioxins/furans as a result of carbon injection.

While the Department believes that the control mechanisms described above are reasonable and effective, it is also acknowledged that if some types of wastes could be removed before incineration and recycled, there would be a net environmental gain. Although waste separation is outside the scope of this rulemaking for existing sources, the Department is investigating the possibility of facilitating a discussion of this issue with all interested parties (regulated source, municipalities, and concerned citizens). This activity would involve a concerted effort by both the Solid Waste and Air Quality Divisions within the Department. It should be noted that the New Source Performance Standards that are included in the proposed rulemaking for new sources do include provisions for developing and evaluating materials separation plans.

4. **Comment:** Commenters made the following points:
- a. Oppose proposed regulation. Suggest alternative: International Joint Commission between US and Canada (approach to regulating persistent toxic chemicals).  
Favors democratic decision making between state and communities.
  - b. Cannot continuously monitor facility.
  - c. Co-mingling of power and money between corporations and government leads to coverup of hazards to public health and environment.

**Department's Response:**

4.a These regulations are required by Congress, so Oregon cannot postpone the implementation to wait for a better approach. In addition, a postponement would result in not realizing the emissions reductions for existing sources provided by the proposed requirements.

4.b. While it is true that particulate matter, metals, hydrogen chloride, and dioxin/furan emissions cannot be continuously monitored, the rules include surrogate monitoring for all of

these pollutants. As discussed above, operating practices are monitored to assure compliance with the dioxin/furan emissions limits; sulfur dioxide is monitored to assure compliance with the hydrogen chloride emissions limits; and, visible emissions (opacity) are continuously monitored to assure compliance with the particulate matter and metals emissions limits. Combined with continuous monitoring of nitrogen oxides and excess air, and extensive operator training requirements, Municipal Waste Combustors are the most thoroughly monitored source of any in Oregon.

In addition to the continuous monitoring, some of which is surrogate monitoring, the proposed rules include an aggressive source testing schedule for particulate matter (annual), metals (annual), hydrogen chloride (annual), and dioxin/furans (annual). In some cases, the testing frequency may be reduced based on a proven record of continued compliance.

Some commentors were concerned that source testing is not a good indication of continuous compliance because the test conditions may be manipulated by the source owner or operator to achieve atypical results. While it is true that source testing is not necessarily spontaneous, random, or unbiased, the Department does observe each test to ensure that the process is operating within "normal" operating conditions as especially related to the type of material being burned and ensures that the proper test methods and procedures are being followed. This, in conjunction with the surrogate monitoring described above, provides a basis for evaluating continuous compliance.

4.c. The federal regulations were developed by the regulatory negotiation process that involves all interested parties (federal government, local governments, industry, environmental groups, and the public).

5. **Comment:** One of the affected sources had the following comments:
- a. Question the rationale for owners/operators to submit a statement identifying the date continuous monitoring systems were initially certified. Feel this requirement is not found in Federal Register, and feels the requirement exceeds the minimum standards required by EPA.
  - b. Concerned above requirement is imposed on combustors and not on other sources in state. Believe combustors should not be held to standards that are more stringent than necessary to get EPA approval, and is more stringent than other industries in the state.

Recommendation to delete requirement, or insert alternative language provided.

**Department's Response:** The Department has reviewed the continuous monitoring requirements included in the Department's Continuous Monitoring Manual and agrees that it is not necessary to impose additional requirements beyond those included in the Emission Guidelines. Existing continuous emissions monitoring systems must meet on-going quality assurance requirements (accuracy audits) that will ensure that the systems are providing reliable data.

6. **Comment:** The Department should consider the European emission standards and control technology requirements.

**Department Response:** It is difficult to compare European performance data to U.S. performance data due to differences in test methods, quality assurance standards, and reporting methods. In addition, there are differences between European and EPA guidelines regarding regulatory flexibility, compliance, and test methods used to measure emissions. These factors must be considered when comparing the respective emission requirements. Also, there are differences in national policy towards combustion of municipal solid waste and funding of projects. Although not precluded from using foreign data, the EPA chose to rely on the reasonably large pool of performance and permit data from domestic plants. For this reason, the data from European plants were not used in selecting the MACT floor emission levels, NSPS emission limits, or emission guidelines emission limits.

**Changes Proposed in Response to Comments:**

The second sentence of OAR 340-025-0835(2)(c) was deleted:

(c) Unless previously submitted, the performance evaluation of the continuous emission monitoring systems using the applicable performance specifications in the Department's Continuous Monitoring Manual. ~~If previously submitted, the initial performance test report must include the date of the continuous monitoring system performance evaluation and the date that the report was submitted to the Department.~~

OAR 340-025-0840(4)(a)(A) and (B) were deleted:

(4) Continuous monitoring.

(a) For small and large municipal waste combustor plants, the owner or operator of an affected municipal waste combustor unit must have installed and certified continuous monitoring systems for opacity, diluent gas (oxygen or carbon dioxide), sulfur dioxide, nitrogen oxides (large municipal waste combustors only), carbon monoxide, municipal waste combustor unit load level (if applicable), and particulate matter control device inlet temperature in accordance with OAR 340-025-0815 and 340-025-0825 by December 31, 1997.



~~(A) For existing continuous monitoring systems that have been certified, the owner or operator must submit to the Department by December 31, 1997 a statement identifying the date that the system(s) was initially certified and whether any significant modifications have been made to the system. For the purposes of this rule, a significant modification of a continuous monitoring system is any of the following:~~

~~(i) a pollutant analyzer change, including internal electronics and sensor detection components other than those specified by the manufacturer as routine maintenance;~~

~~(ii) a data acquisition system replacement; or~~

~~(iii) a change in any other component (e.g., sample probe, sample line, sample conditioner) that involves a change in technology (e.g., a wet basis dilution probe is replaced with a dry basis dilution probe).~~

~~(iv) Like for like changes of components other than pollutant analyzers are not considered significant modifications.~~

~~(B) If a significant modification has been made to the existing continuous monitoring system, the owner or operator must conduct a performance specification test for recertifying the system and submit the results to the Department by December 31, 1997.~~

(b) The owner or operator of a municipal combustor unit that installs carbon injection for control of mercury or dioxin/furan emissions must submit documentation that the carbon injection monitoring system is installed and operational with the first mercury or dioxin/furans performance test report.

### Summary of Proposed Rule Implementation

The proposed rules will be implemented through the Department's permitting program. Once the proposed rules are adopted and the State Plan is approved by EPA, no later than June 19, 1997 the Department will issue Oregon Title V Operating Permits to the affected sources that will replace their existing Air Contaminant Discharge Permits to incorporate the new standards contained in this rule. The Title V permits must be issued by January 3, 1998.

### Recommendation for Commission Action

The Department recommends that the Commission adopt the rules regarding Municipal Waste Combustors as presented in Attachment A of the Department Staff Report.

**Attachments**

- A Rules Proposed for Adoption
  - Municipal Waste Combustors
- B Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Fiscal and Economic Impact Statement
  - 3. Land Use Evaluation Statement
  - 4. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
  - 5. Cover Memorandum from Public Notice
- C Presiding Officer's Report on Public Hearing
- C1 Index of Public Comments Received
- D Department's Evaluation of Public Comment
- E Changes to Initial Rulemaking Proposal made in response to Public Comment
- F Summary of Rulemaking Proposal Presented for Public Hearing
- G Advisory Committee Membership
- H Rule Implementation Plan


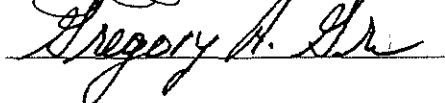
**Reference Documents (available upon request)**

Written comments received (listed in Attachment C1)

Approved:

Section:

Division:

Report Prepared By: Mark Fisher

Phone: (503) 229-5069

Date Prepared: 9-5-96

OREGON ADMINISTRATIVE RULES  
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DIVISION 025

SPECIFIC INDUSTRIAL STANDARDS

Standards of Performance for  
New Stationary Sources

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|              |                      |
|--------------|----------------------|
| 340-025-0505 | Statement of Purpose |
| 340-025-0510 | Definitions          |
| 340-025-0515 | Statement of Policy  |
| 340-025-0520 | Delegation           |
| 340-025-0525 | Applicability        |
| 340-025-0530 | General Provisions   |

Performance Standards

|              |   |
|--------------|---|
| 340-025-0535 | Federal Regulations Adopted by Reference  |
| 340-025-0550 | Standards of Performance for Fossil Fuel-Fired Steam Generators   |
| 340-025-0553 | Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units   |
| 340-025-0554 | Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units   |
| 340-025-0555 | Standards of Performance for Incinerators   |
| 340-025-0556 | Standards of Performance for Municipal Waste Combustors <u>units greater than 225 megagrams per day that commenced construction after 12/20/89 and on or before 9/20/94</u> |
| 340-025-0557 | <u>Standards of Performance for Municipal Waste Combustors greater than 35 megagrams per day that commenced construction after 9/20/94</u>                                  |

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-----Municipal Waste Combustors at Municipal  
-----Waste Combustor Plants greater than  
-----35 megagrams per day that commenced  
-----construction before September 20, 1994

|                     |  |
|---------------------|--|
| <u>340-025-0810</u> | <u>Applicability and definitions</u>       |
| <u>340-025-0815</u> | <u>Emission limitations</u>                |
| <u>340-025-0820</u> | <u>Operating practices</u>                 |
| <u>340-025-0825</u> | <u>Operator training and certification</u> |
| <u>340-025-0830</u> | <u>Monitoring and testing</u>              |
| <u>340-025-0835</u> | <u>Recordkeeping and Reporting</u>         |
| <u>340-025-0840</u> | <u>Compliance schedule</u>                 |

Incinerators Regulations

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 25 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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|              |                                       |
|--------------|---------------------------------------|
| 340-025-0850 | Purposes <del>{and Application}</del> |
| 340-025-0852 | Applicability                         |
| 340-025-0855 | Definitions                           |

**DIVISION 25**

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**Definitions**

**340-025-0510** As used in OAR 340-025-0505 through 340-025-0805:

- (1) "Administrator" means the Administrator of the EPA or authorized representative.
- (2) "CFR" means Code of Federal Regulations as revised as of July 1, 1996.
- (3) "Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Department's satisfaction to, in specific cases, produce results adequate for determination of compliance.
- (4) "Capital expenditures" means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.
- (5) "Commenced" means, with respect to the definition of "new source" in section 111(a)(2) of the federal Clean Air Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.
- (6) "Construction" means fabrication, erection, or installation of an facility.
- (7) "Department" means the Department of Environmental Quality or, in the case of Lane County, the Lane Regional Air Pollution Authority.
- (8) "Environmental Protection Agency" or "EPA" means the United States Environmental Protection Agency.
- (9) "Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Department's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
- (10) "Existing facility" means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in **40 CFR Part 60**, and the construction or modification of which commenced before the date of proposal by EPA of that standard; or any apparatus which could be altered in such a way as to be of that type.
- (11) "Facility" means all or part of any public or private building, structure, installation, equipment, vehicle or vessel, including, but not limited to, ships.
- (12) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (13) "Modification" means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.
- (14) "Particulate matter" means any finely divided solid or liquid material, other than uncombined water, as measured by an applicable reference method, or an equivalent or alternative method.
- (15) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
  - (a) the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
  - (b) it is technologically and economically feasible to meet the applicable standards set forth in **40 CFR Part 60**.
- (16) "Reference method" means any method of sampling and analyzing for an air pollutant as specified in **40 CFR Part 60** ~~(July 1, 19936)~~.
- (17) "Standard" means a standard of performance proposed or promulgated under **40 CFR Part 60**.

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- (18) "Stationary source" means any building, structure, facility, or installation that emits or may emit any air pollutant subject to regulation under the federal Clean Air Act.
- (19) "Volatile organic compounds" or "VOC" means any organic compounds that participate in atmospheric photochemical reactions; or that are measured by a reference method, an equivalent method, an alternative method, or that are determined by procedures specified under any applicable rule.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 17-1993, f. & ef. 11-4-93; DEQ 22-1995, f. & ef. 10-6-95

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### Applicability

~~340-025-0525~~ OAR 340-025-0505 through 340-025-0805 ~~shall be applicable~~ apply to stationary sources identified in OAR 340-025-0550 through 340-025-07235 for which construction, reconstruction, or modification has commenced.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 17-1993, f. & ef. 11-4-93

### General Provisions

#### 340-025-0530

- (1) Except as provided in section (2) of this rule, **40 CFR Part 60, Subpart A** (July 1, 1993~~6~~) is by this reference adopted and incorporated herein.
- (2) Where "Administrator" or "EPA" appears in **40 CFR Part 60, Subpart A**, "Department" shall be substituted, except in any section of **40 CFR Part 60** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89; DEQ 17-1993, f. & ef. 11-4-93

## Performance Standards

### Federal Regulations Adopted by Reference

#### 340-025-0535

- (1) Except as provided in section (2) of this rule, **40 CFR Part 60 Subparts D through XX and BBB through NNN and PPP through VVV (July 1, 1993)** are by this reference adopted and incorporated herein, and **40 CFR Part 60 Subpart OOO (July 1, 1993)** is by this reference adopted and incorporated herein for major sources only.
- (2) Where "Administrator" or "EPA" appears in **40 CFR Part 60**, "Department" shall be substituted, except in any section of **40 CFR Part 60** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.
- (3) Where a discrepancy is determined to exist between OAR 340-025-0505 through 340-025-0800 and **40 CFR Part 60, 40 CFR Part 60** shall apply.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; sections (1) thru (12) of this rule renumbered to 340-025-0550 thru 340-025-0605; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89; DEQ 17-1993, f. & ef. 11-4-93; DEQ 22-1995, f. & ef. 10-6-95

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### Standards of Performance for Municipal Waste Combustors greater than 225 megagrams per day that commenced construction after December 20, 1989 and on or before September 20, 1994

#### 340-025-0556

- (1) Applicability.
  - (a) ~~Except as provided in subsections (b) through (d) of this section and section (3) of this rule, This rule applies to each Municipal Waste Combustor unit with an municipal waste combustor unit capacity greater than 225 megagrams per day (250 tons per day) of MSW or RDF municipal solid waste for which construction, modification, or reconstruction is commenced as specified below:~~
    - (A) ~~Construction is commenced after December 20, 1989 and on or before September 20, 1994.~~
    - (B) ~~Modification or reconstruction is commenced after December 20, 1989 and on or before June 19, 1996.~~
  - (b) ~~Any unit combusting a single-item waste stream of tires is not subject to this rule if the owner or operator of the unit (1) notifies the Department of an exemption claim, and (2) provides data documenting that the unit qualifies for this exemption.~~
  - (c) ~~Any co-fired combustor, as defined under OAR 340-025-0557(3)(i), located at a plant that meets the capacity specifications in paragraph (1) of this rule is not subject to this rule if the owner or operator of the cofired combustor (1) notifies the Department of an exemption claim, (2) provides a copy of the federally enforceable permit (specified in the definition of cofired combustor in OAR 340-025-0557(3)(i)), and (3) keeps a record on a calendar quarter basis of the weight of municipal solid waste combusted at the cofired combustor and the weight of all other fuels combusted at the cofired combustor.~~
  - (bd) ~~Any Cofired combustors that are is subject to a federally- enforceable permit limiting the operation of the combustor to no more than 225 megagrams per day (250 tons per day) of MSW or RDF municipal solid waste are is not subject to this rule.~~
  - (e) ~~MWC units combusting solely medical waste are not subject to this rule.~~
  - (d) ~~Cofired combustors which fire less than 30 percent segregated medical waste and no other municipal solid waste are not subject to this rule.~~
  - (e) ~~Physical or operational changes made to an existing municipal waste combustor unit primarily for the purpose of complying with emission guidelines under subpart Cb (OAR 340-025-0810 through 340-025-0840) are not considered a modification or reconstruction and do not result in an existing municipal waste combustor unit's becoming subject to this rule.~~
  - (f) ~~A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to this rule if the owner or operator of the facility notifies the Department of an exemption claim and provides data documenting that the facility qualifies for this exemption.~~

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- (g) ~~A qualifying cogeneration facility, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is not subject to this rule if the owner or operator of the facility notifies the Department of an exemption claim and provides data documenting that the facility qualifies for this exemption.~~
- (h) ~~Any unit required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to this rule.~~
- (i) ~~Any materials recovery facility (including primary or secondary smelters) that combusts waste for the primary purpose of recovering metals is not subject to this rule.~~
- (j) ~~Pyrolysis/combustion units that are an integrated part of a plastics/rubber recycling unit (as defined in OAR 340-025-0557(3)(ii)) are not subject to this rule if the owner or operator of the plastics/rubber recycling unit keeps records of (1) the weight of plastics, rubber, and/or rubber tires processed on a calendar quarter basis, (2) the weight of chemical plant feedstocks and petroleum refinery feedstocks produced and marketed on a calendar quarter basis, and (3) the name and address of the purchaser of the feedstocks. The combustion of gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feedstocks produced by plastics/rubber recycling units are not subject to this rule.~~
- (2) Requirements. (a) ~~Except as provided in subsections (b) and (c) of this section, MWC Municipal waste combustor units subject to this rule shall comply with 40 CFR Part 60, Subpart Ea, as adopted under OAR 340-025-0535.~~
- (b) ~~An MWC unit combusting tires or fuel derived solely from tires and that combust no other MSW or refuse derived fuel (RDF) is only subject to the initial reporting in 40 CFR 60.59a(a).~~
- (c) ~~Cofired combustors are only subject to the initial reporting in 40 CFR 60.59a(a), and records and reports of the daily weight of MSW or RDF and other fuels fired as required under 40 CFR 60.59a(b)(14) and 40 CFR 60.59a(m).~~
- (3) ~~Special provisions. Physical or operational changes made to an existing MWC unit solely to comply with emission guidelines under 40 CFR Part 60, Subpart Ca, are not considered a modification or reconstruction and do not subject an existing MWC unit to this rule.~~
- (3) Definitions. ~~As used in this rule, the definitions of 40 CFR Part 60, Subpart Ea, sections 60.51a are adopted by reference under OAR 340-025-0535. Terms used but not defined in this rule have the meaning given them in the Clean Air Act and OAR 340-025-0510 and OAR 340-025-0557(3).~~
- (a) ~~"Cofired combustor" means a unit combusting municipal type solid waste or refuse derived fuel with a non-MSW fuel and subject to a Federally enforceable permit limiting the unit to combusting a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of MSW or RDF as measured on a 24 hour daily basis. A unit combusting a fuel feed stream, more than 30 percent of the weight of which is comprised, in aggregate, of MSW or RDF shall be considered an municipal waste combustor unit and not a cofired combustor.~~
- (b) ~~"Medical waste" means any solid waste which is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in production or testing of biologicals. Medical waste does not include any hazardous waste identified under subtitle C of the Resource Conservation and Recovery Act or any household waste as defined in regulations under subtitle C of the Resource Conservation and Recovery Act.~~
- (a) ~~"Maximum demonstrated municipal waste combustor unit load" means the highest 4-hour arithmetic average municipal waste combustor unit load achieved during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified under 40 CFR 60.53a.~~
- (b) ~~"Maximum demonstrated particulate matter control device temperature" means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified under 40 CFR 60.53a.~~
- (c) ~~"Modification or modified municipal waste combustor unit" means a municipal waste combustor unit to which changes have been made if (1) the cumulative cost of the changes, over the life of the unit, exceed 50 percent of the original cost of construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or (2) any physical change in the municipal waste combustor unit or change in the method of operation of the municipal waste combustor unit increases the amount of any air pollutant emitted by the unit for which standards have been established under section 129 or section 111 of the Federal Clean Air Act. Increases in the amount of any air pollutant emitted by the municipal waste combustor unit are determined at 100-percent physical load capability and~~

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downstream of all air pollution control devices, with no consideration given for load restrictions based on permits or other nonphysical operational restrictions.

(ed) "Municipal solid waste" or "Municipal-type solid waste" or "MSW" means household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities and other similar establishments or facilities. Institutional waste includes material discarded by schools, and nonmedical waste discarded by hospitals, and material discarded by nonmanufacturing activities at prisons and government facilities, and material discarded by other similar establishments or facilities. Household, commercial/retail, and institutional waste do not include used oil; sewage; wood pallets; construction, renovation, and demolition wastes (which includes but is not limited to railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff). Municipal-type solid waste does not include yard waste, refuse-derived fuel, and motor vehicle maintenance materials, limited to vehicle batteries, used motor oil, and tires except as specified in 40 CFR 60.50a(c). Municipal-type solid waste does not include wastes that are solely segregated medical wastes. However, any mixture of segregated medical wastes and other wastes which contains more than 30 percent medical waste discards, is considered to be municipal-type solid waste.

(de) "Municipal waste combustor" or "MWC" or "MWC "municipal waste combustor" unit" means any setting or equipment device that combusts, solid, liquid, or gasified MSW including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved air or excess air), boilers (i.e., steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air curtain incinerators, or fluidized bed-fired) and gasification pyrolysis/combustion units. Municipal waste combustors do not include pyrolysis/combustion units located at plastics/rubber recycling units (as specified in 40 CFR 60.50a(k)). This Municipal waste combustor does not include internal combustion units, engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

The boundaries of an MWC are defined as follows. The MWC unit includes, but is not limited to, the MSW fuel feed system, grate system, flue gas system, bottom ash system, and the combustor water system. The MWC boundary starts at the MSW pit or hopper and extends through:

(A) The combustor flue gas system, which ends immediately following the heat recovery equipment or, if there is no heat recovery equipment, immediately following the combustion chamber;

(B) The combustor bottom ash system, which ends at the truck loading station or similar ash handling equipment that transfer the ash to final disposal, including all ash handling systems that are connected to the bottom ash handling system; and

(C) The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater.

The MWC unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine generator set.

(f) "Municipal waste combustor plant" means one or more municipal waste combustor units at the same location for which construction, modification, or reconstruction was commenced after December 20, 1989 and on or before September 20, 1994.

(g) "Municipal waste combustor plant capacity" means the aggregate municipal waste combustor unit capacity of all municipal waste combustor units at a municipal waste combustor plant for which construction, modification or reconstruction was commenced after December 20, 1989 and on or before September 20, 1994. Any municipal waste combustor units for which construction, modification, or reconstruction is commenced on or before December 20, 1989 or after September 20, 1994 are not included for determining applicability under this rule.

(eh) "MWC" "Municipal waste combustor unit capacity" means the maximum design charging rate of an MWC unit expressed in megagrams per day (tons per day) of MSW combusted, calculated according to the procedures under 40 CFR 60.58a(j). Municipal waste combustor unit capacity is calculated using a design heating value of 10,500 kilojoules per kilogram (4,500 British thermal units per pound) for MSW, and 8,500 British thermal units per pound for medical waste. The calculation procedures under 40 CFR 60.58a(j) include procedures for determining MWC unit capacity for continuous and batch feed MWC's, and cofired combustors and combustors firing mixtures of medical waste and other MSW.

(f) "Refuse derived fuel" or "RDF" means a type of MSW produced by processing MSW through shredding and size classification. This includes all classes of RDF including low density fluff RDF through densified RDF and RDF fuel pellets.



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- (i) "Municipal waste combustor unit load" means the steam load of the MWC unit measured as specified in 40 CFR 60.58a(h)(6).
- (j) "Reconstruction" means rebuilding an MWC unit for which the cumulative costs of the construction over the life of the unit exceed 50 percent of the original cost of construction and installation of the unit (not including any cost of land purchased in connection with such construction or installation) updated to current costs (current dollars).

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 17-1993, f. & ef. 11-4-93; DEQ 22-1995, f. & ef. 10-6-95

**Standards of Performance for Municipal Waste Combustors at Municipal Waste Combustor Plants greater than 35 megagrams per day that Commenced Construction after September 20, 1994**

**340-025-0557**

**(1) Applicability.**

- (a) This rule applies to each municipal waste combustor unit located within a municipal waste combustor plant with an aggregate municipal waste combustor plant capacity greater than 35 megagrams per day of municipal solid waste for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996.
- (b) Any waste combustion unit at a medical, industrial, or other type of waste combustor plant that is capable of combusting more than 35 megagrams per day of municipal solid waste and is subject to a federally enforceable permit limiting the plantwide maximum amount of municipal solid waste that may be combusted to less than or equal to 10 megagrams per day is not subject to this rule if the owner or operator (1) notifies the Administrator of an exemption claim, (2) provides a copy of the federally enforceable permit that limits the firing of municipal solid waste to less than 10 megagrams per day, and (3) keeps records of the amount of municipal solid waste fired on a daily basis.
- (c) An affected facility to which this rule applies is not subject to subpart E or Ea of 40 CFR Part 60.
- (d) Physical or operational changes made to an existing municipal waste combustor unit primarily for the purpose of complying with emission guidelines under subpart Cb (OAR 340-025-0810 through 340-025-0840) are not considered a modification or reconstruction and do not result in an existing municipal waste combustor unit's becoming subject to this rule.
- (e) A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to this rule if the owner or operator of the facility notifies the Administrator of this exemption and provides data documenting that the facility qualifies for this exemption.
- (f) A qualifying cogeneration facility, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is not subject to this rule if the owner or operator of the facility notifies the Administrator of this exemption and provides data documenting that the facility qualifies for this exemption.
- (g) Any unit combusting a single-item waste stream of tires is not subject to this rule if the owner or operator of the unit (1) notifies the Administrator of an exemption claim, and (2) provides data documenting that the unit qualifies for this exemption.
- (h) Any unit required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to this rule.
- (i) Any materials recovery facility (including primary or secondary smelters) that combusts waste for the primary purpose of recovering metals is not subject to this rule.
- (j) Any cofired combustor, as defined under 40 CFR 60.51b, located at a plant that meets the capacity specifications in paragraph (a) of this section is not subject to this rule if the owner or operator of the cofired combustor (1) notifies the Administrator of an exemption claim, (2) provides a copy of the federally enforceable permit (specified in the definition of cofired combustor in this section), and (3) keeps a record on a calendar quarter basis of the weight of municipal solid waste combusted at the cofired combustor and the weight of all other fuels combusted at the cofired combustor.
- (k) Air curtain incinerators, as defined under 40 CFR 60.51b, located at a plant that meet the capacity specifications in paragraph (a) of this section and that combust a fuel stream composed of 100 percent yard waste are exempt from all provisions of this rule except the opacity limit under 40 CFR 60.56b, the testing procedures under 40 CFR 60.58b(1), and the reporting and recordkeeping provisions under 40 CFR 60.59b(e) and (i).

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- (l) Air curtain incinerators located at plants that meet the capacity specifications in paragraph (a) of this section combusting municipal solid waste other than yard waste are subject to all provisions of this rule.
- (m) Pyrolysis/combustion units that are an integrated part of a plastics/rubber recycling unit (as defined in 40 CFR 60.51b) are not subject to this rule if the owner or operator of the plastics/rubber recycling unit keeps records of (1) the weight of plastics, rubber, and/or rubber tires processed on a calendar quarter basis, (2) the weight of chemical plant feedstocks and petroleum refinery feedstocks produced and marketed on a calendar quarter basis, and (3) the name and address of the purchaser of the feedstocks. The combustion of gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feedstocks produced by plastics/rubber recycling units are not subject to this rule.
- (2) Requirements. Municipal Waste Combustor units subject to this rule shall comply with 40 CFR Part 60, Subpart Eb, as adopted under OAR 340-025-0535.
- (3) Definitions. Terms used but not defined in this rule have the meaning given them in the Clean Air Act. As used in this rule:
- (a) "Air curtain incinerator" means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which burning occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor.
- (b) "Batch municipal waste combustor" means a municipal waste combustor unit designed so that it cannot combust municipal solid waste continuously 24 hours per day because the design does not allow waste to be fed to the unit or ash to be removed while combustion is occurring.
- (c) "Bubbling fluidized bed combustor" means a fluidized bed combustor in which the majority of the bed material remains in a fluidized state in the primary combustion zone.
- (d) "Calendar quarter" means a consecutive 3-month period (nonoverlapping) beginning on January 1, April 1, July 1, and October 1.
- (e) "Calendar year" means the period including 365 days starting January 1 and ending on December 31.
- (f) "Chief facility operator" means the person in direct charge and control of the operation of a municipal waste combustor and who is responsible for daily onsite supervision, technical direction, management, and overall performance of the facility.
- (g) "Circulating fluidized bed combustor" means a fluidized bed combustor in which the majority of the fluidized bed material is carried out of the primary combustion zone and is transported back to the primary zone through a recirculation loop.
- (h) "Clean wood" means untreated wood or untreated wood products including clean untreated lumber, tree stumps (whole or chipped), and tree limbs (whole or chipped). Clean wood does not include yard waste, which is defined elsewhere in this section, or construction, renovation, and demolition wastes (including but not limited to railroad ties and telephone poles), which are exempt from the definition of municipal solid waste in this section.
- (i) "Cofired combustor" means a unit combusting municipal solid waste with nonmunicipal solid waste fuel (e.g., coal, industrial process waste) and subject to a federally enforceable permit limiting the unit to combusting a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal solid waste as measured on a calendar quarter basis.
- (j) "Continuous emission monitoring system" means a monitoring system for continuously measuring the emissions of a pollutant from an affected facility.
- (k) "Dioxin/furan" means tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.
- (l) "Federally enforceable" means all limitations and conditions that are enforceable by the Administrator including the requirements of 40 CFR parts 60, 61, and 63, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.
- (m) "First calendar half" means the period starting on January 1 and ending on June 30 in any year.
- (n) "Four-hour block average" or "4-hour block average" means the average of all hourly emission concentrations when the affected facility is operating and combusting municipal solid waste measured over 4-hour periods of time from 12:00 midnight to 4 a.m., 4 a.m. to 8 a.m., 8 a.m. to 12:00 noon, 12:00 noon to 4 p.m., 4 p.m. to 8 p.m., and 8 p.m. to 12:00 midnight.
- (o) "Large municipal waste combustor plant" means a municipal waste combustor plant with a municipal waste combustor aggregate plant capacity for affected facilities that is greater than 225 megagrams per day of municipal solid waste.
- (p) "Mass burn refractory municipal waste combustor" means a field-erected combustor that combusts municipal solid waste in a refractory wall furnace. Unless otherwise specified, this includes combustors with a cylindrical rotary refractory wall furnace.

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- (g) "Mass burn rotary waterwall municipal waste combustor" means a field-erected combustor that combusts municipal solid waste in a cylindrical rotary waterwall furnace.
- (r) "Mass burn waterwall municipal waste combustor" means a field-erected combustor that combusts municipal solid waste in a waterwall furnace.
- (s) "Materials separation plan" means a plan that identifies both a goal and an approach to separate certain components of municipal solid waste for a given service area in order to make the separated materials available for recycling. A materials separation plan may include elements such as dropoff facilities, buy-back or deposit-return incentives, curbside pickup programs, or centralized mechanical separation systems. A materials separation plan may include different goals or approaches for different subareas in the service area, and may include no materials separation activities for certain subareas or, if warranted, an entire service area.
- (t) "Maximum demonstrated municipal waste combustor unit load" means the highest 4-hour arithmetic average municipal waste combustor unit load achieved during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified under 40 CFR 60.52b(c).
- (u) "Maximum demonstrated particulate matter control device temperature" means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified under 40 CFR 60.52b(c).
- (v) "Modification" or "modified municipal waste combustor unit" means a municipal waste combustor unit to which changes have been made after June 19, 1996 if (1) the cumulative cost of the changes, over the life of the unit, exceed 50 percent of the original cost of construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or (2) any physical change in the municipal waste combustor unit or change in the method of operation of the municipal waste combustor unit increases the amount of any air pollutant emitted by the unit for which standards have been established under section 129 or section 111 of the Federal Clean Air Act. Increases in the amount of any air pollutant emitted by the municipal waste combustor unit are determined at 100-percent physical load capability and downstream of all air pollution control devices, with no consideration given for load restrictions based on permits or other nonphysical operational restrictions.
- (w) "Modular excess-air municipal waste combustor" means a combustor that combusts municipal solid waste and that is not field-erected and has multiple combustion chambers, all of which are designed to operate at conditions with combustion air amounts in excess of theoretical air requirements.
- (x) "Modular starved-air municipal waste combustor" means a combustor that combusts municipal solid waste and that is not field-erected and has multiple combustion chambers in which the primary combustion chamber is designed to operate at substoichiometric conditions.
- (y) "Municipal solid waste" or "municipal-type solid waste" means household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, nonmedical waste discarded by hospitals, material discarded by nonmanufacturing activities at prisons and government facilities, and material discarded by other similar establishments or facilities. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which includes but is not limited to railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff). Household, commercial/retail, and institutional wastes include (1) yard waste, (2) refuse-derived fuel, and (3) motor vehicle maintenance materials limited to vehicle batteries and tires except as specified in 40 CFR 60.50b(g).
- (z) "Municipal waste combustor" or "municipal waste combustor unit" means any setting or equipment that combusts solid, liquid, or gasified municipal solid waste including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved-air or excess-air), boilers (i.e., steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air curtain incinerators, or fluidized bed-fired), and pyrolysis/combustion units. Municipal waste combustors do not include pyrolysis/combustion units located at a plastics/rubber recycling unit (as specified in 40 CFR 60.50b(m)). Municipal waste combustors do not include internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

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The boundaries of a municipal solid waste combustor are defined as follows. The municipal waste combustor unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustor water system. The municipal waste combustor boundary starts at the municipal solid waste pit or hopper and extends through:

- (A) The combustor flue gas system, which ends immediately following the heat recovery equipment or, if there is no heat recovery equipment, immediately following the combustion chamber.
- (B) The combustor bottom ash system, which ends at the truck loading station or similar ash handling equipment that transfer the ash to final disposal, including all ash handling systems that are connected to the bottom ash handling system; and
- (C) The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater.

The municipal waste combustor unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set.

- (aa) "Municipal waste combustor acid gases" means all acid gases emitted in the exhaust gases from municipal waste combustor units including, but not limited to, sulfur dioxide and hydrogen chloride gases.
- (bb) "Municipal waste combustor metals" means metals and metal compounds emitted in the exhaust gases from municipal waste combustor units.
- (cc) "Municipal waste combustor organics" means organic compounds emitted in the exhaust gases from municipal waste combustor units and includes tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.
- (dd) "Municipal waste combustor plant" means one or more municipal waste combustor units at the same location for which construction, modification, or reconstruction is commenced after September 20, 1994.
- (ee) "Municipal waste combustor plant capacity" means the aggregate municipal waste combustor unit capacity of all municipal waste combustor units at a municipal waste combustor plant for which construction, modification, or reconstruction of the units commenced after September 20, 1994. Any municipal waste combustor units for which construction, modification, or reconstruction is commenced on or before September 20, 1994 are not included for determining applicability under this rule.
- (ff) "Municipal waste combustor unit capacity" means the maximum charging rate of a municipal waste combustor unit expressed in megagrams per day of municipal solid waste combusted, calculated according to the procedures under 40 CFR 60.58b(j). Section 60.58b(j) includes procedures for determining municipal waste combustor unit capacity for continuous and batch feed municipal waste combustors.
- (gg) "Municipal waste combustor unit load" means the steam load of the municipal waste combustor unit measured as specified in 40 CFR 60.58b(i)(6).
- (hh) "Particulate matter" means total particulate matter emitted from municipal waste combustor units as measured by EPA Reference Method 5 (see 40 CFR 60.58b(c)).
- (ii) "Plastics/rubber recycling unit" means an integrated processing unit where plastics, rubber, and/or rubber tires are the only feed materials (incidental contaminants may be included in the feed materials) and they are processed into a chemical plant feedstock or petroleum refinery feedstock, where the feedstock is marketed to and used by a chemical plant or petroleum refinery as input feedstock. The combined weight of the chemical plant feedstock and petroleum refinery feedstock produced by the plastics/rubber recycling unit on a calendar quarter basis shall be more than 70 percent of the combined weight of the plastics, rubber, and rubber tires processed by the plastics/rubber recycling unit on a calendar quarter basis. The plastics, rubber, and/or rubber tire feed materials to the plastics/rubber recycling unit may originate from the separation or diversion of plastics, rubber, or rubber tires from MSW or industrial solid waste, and may include manufacturing scraps, trimmings, and off-specification plastics, rubber, and rubber tire discards. The plastics, rubber, and rubber tire feed materials to the plastics/rubber recycling unit may contain incidental contaminants (e.g., paper labels on plastic bottles, metal rings on plastic bottle caps, etc.).
- (jj) "Potential hydrogen chloride emission concentration" means the hydrogen chloride emission concentration that would occur from combustion of municipal solid waste in the absence of any emission controls for municipal waste combustor acid gases.
- (kk) "Potential mercury emission concentration" means the mercury emission concentration that would occur from combustion of municipal solid waste in the absence of any mercury emissions control.
- (ll) "Potential sulfur dioxide emissions" means the sulfur dioxide emission concentration that would occur from combustion of municipal solid waste in the absence of any emission controls for municipal waste combustor acid gases.

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- (mm) "Pulverized coal/refuse-derived fuel mixed fuel-fired combustor" means a combustor that fires coal and refuse-derived fuel simultaneously, in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the unit where it is fired in suspension. This includes both conventional pulverized coal and micropulverized coal.
- (nn) "Pyrolysis/combustion unit" means a unit that produces gases, liquids, or solids through the heating of municipal solid waste, and the gases, liquids, or solids produced are combusted and emissions vented to the atmosphere.
- (oo) "Reconstruction" means rebuilding a municipal waste combustor unit for which the reconstruction commenced after June 19, 1996 and the cumulative costs of the construction over the life of the unit exceed 50 percent of the original cost of construction and installation of the unit (not including any cost of land purchased in connection with such construction or installation) updated to current costs (current dollars).
- (pp) "Refractory unit" or "refractory wall furnace" means a combustion unit having no energy recovery (e.g., via a waterwall) in the furnace (i.e., radiant heat transfer section) of the combustor.
- (qq) "Refuse-derived fuel" means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including low-density fluff refuse-derived fuel through densified refuse-derived fuel and pelletized refuse-derived fuel.
- (rr) "Refuse-derived fuel stoker" means a steam generating unit that combusts refuse-derived fuel in a semisuspension firing mode using air-fed distributors.
- (ss) "Same location" means the same or contiguous property that is under common ownership or control including properties that are separated only by a street, road, highway, or other public right-of-way. Common ownership or control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, subdivision, or any combination thereof including any municipality or other governmental unit, or any quasi-governmental authority (e.g., a public utility district or regional waste disposal authority).
- (tt) "Second calendar half" means the period starting July 1 and ending on December 31 in any year.
- (uu) Shift supervisor means the person who is in direct charge and control of the operation of a municipal waste combustor and who is responsible for onsite supervision, technical direction, management, and overall performance of the facility during an assigned shift.
- (vv) "Small municipal waste combustor plant" means a municipal waste combustor plant with a municipal waste combustor plant capacity for affected facilities that is greater than 35 megagrams per day but equal to or less than 225 megagrams per day of municipal solid waste.
- (ww) "Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor" means a combustor that fires coal and refuse-derived fuel simultaneously, in which coal is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.
- (xx) "Standard conditions" means a temperature of 20 °C and a pressure of 101.3 kilopascals.
- (yy) "Total mass dioxin/furan" or "total mass" means the total mass of tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans, as determined using EPA Reference Method 23 and the procedures specified under 40 CFR 60.58b(g).
- (zz) "Twenty-four hour daily average" or "24-hour daily average" means either the arithmetic mean or geometric mean (as specified) of all hourly emission concentrations when the affected facility is operating and combusting municipal solid waste measured over a 24-hour period between 12:00 midnight and the following midnight.
- (aaa) "Untreated lumber" means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Untreated lumber does not include wood products that have been painted, pigment-stained, or "pressure-treated." Pressure-treating compounds include, but are not limited to, chromate copper arsenate, pentachlorophenol, and creosote.
- (bbb) "Waterwall furnace" means a combustion unit having energy (heat) recovery in the furnace (i.e., radiant heat transfer section) of the combustor.
- (ccc) "Yard waste" means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs that are generated by residential, commercial/retail, institutional, and/or industrial sources as part of maintenance activities associated with yards or other private or public lands. Yard waste does not include construction, renovation, and demolition wastes, which are exempt from the definition of municipal solid waste in this section. Yard waste does not include clean wood, which is exempt from the definition of municipal solid waste in this section.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

**Municipal Waste Combustors at Municipal Combustor Plants**  
**greater than 35 megagrams per day that commenced**  
**construction on or before September 20, 1994**

**Applicability and definitions**

**340-025-0810**

- (1) Applicability: OAR 340-025-0815 through 340-025-0840 apply to each municipal waste combustor unit located within a municipal waste combustor plant with an aggregate municipal waste combustor plant capacity greater than 35 megagrams per day of municipal solid waste for which construction was commenced on or before September 20, 1994.
- \_\_\_\_\_ (a) MWC greater than 225 megagrams per day that commenced construction after September 20, 1989 and on or before September 20, 1994 are also subject to OAR 340-025-0556.
- \_\_\_\_\_ (b) MWC subject to OAR 340-025-0810 through 340-025-0840 are not subject to the incinerator rules in OAR 340-025-0845 through 340-025-0885.
- \_\_\_\_\_ (2) Exemptions:
- \_\_\_\_\_ (a) Any waste combustion unit at a medical, industrial, or other type of waste combustor plant that is capable of combusting more than 35 megagrams per day of municipal solid waste and is subject to a federally enforceable permit limiting the plantwide maximum amount of municipal solid waste that may be combusted to less than or equal to 10 megagrams per day is not subject to this rule if the owner or operator (1) notifies the Department of an exemption claim, (2) provides a copy of the federally enforceable permit that limits the firing of municipal solid waste to less than 10 megagrams per day, and (3) keeps records of the amount of municipal solid waste fired on a daily basis.
- \_\_\_\_\_ (b) Physical or operational changes made to an existing municipal waste combustor unit primarily for the purpose of complying with emission limits under these rules are not considered in determining whether the unit is a modified or reconstructed facility under 40 CFR Part 60 subpart Ea or subpart Eb.
- \_\_\_\_\_ (c) A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to these rules if the owner or operator of the facility notifies the Department of this exemption and provides data documenting that the facility qualifies for this exemption.
- \_\_\_\_\_ (d) A qualifying cogeneration facility, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is not subject to these rules if the owner or operator of the facility notifies the Department of this exemption and provides data documenting that the facility qualifies for this exemption.
- \_\_\_\_\_ (e) Any unit combusting a single-item waste stream of tires is not subject to this rule if the owner or operator of the unit (1) notifies the Department of an exemption claim, and (2) provides data documenting that the unit qualifies for this exemption.
- \_\_\_\_\_ (f) Any unit required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to these rules.
- \_\_\_\_\_ (g) Any materials recovery facility (including primary or secondary smelters) that combusts waste for the primary purpose of recovering metals is not subject to these rules.
- \_\_\_\_\_ (h) Any cofired combustor, as defined under 40 CFR 60.51b of subpart Eb, that meets the capacity specifications in paragraph (1) of this rule is not subject to these rules if the owner or operator of the cofired combustor (1) notifies the Department of an exemption claim, (2) provides a copy of the federally enforceable permit (specified in the definition of cofired combustor), and (3) keeps a record on a calendar quarter basis of the weight of municipal solid waste combusted at the cofired combustor and the weight of all other fuels combusted at the cofired combustor.
- \_\_\_\_\_ (i) Pyrolysis/combustion units that are an integrated part of a plastics/rubber recycling unit (as defined in 40 CFR 60.51b) are not subject to this rule if the owner or operator of the plastics/rubber recycling unit keeps records of (1) the weight of plastics, rubber, and/or rubber tires processed on a calendar quarter basis, (2) the weight of chemical plant feedstocks and petroleum refinery feedstocks produced and marketed on a calendar quarter

basis, and (3) the name and address of the purchaser of the feedstocks. The combustion of gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feedstocks produced by plastics/rubber recycling units are not subject to these rules.

- (3) Definitions. Terms used in OAR 340-025-0810 through 340-025-0840 but not defined in this rule have the meaning given them in the Clean Air Act, -OAR 340-025-0510, and OAR 340-025-0557(3).
- (a) "Municipal waste combustor plant" means one or more municipal waste combustor units at the same location for which construction was commenced on or before September 20, 1994.
- (b) "Municipal waste combustor plant capacity" means the aggregate municipal waste combustor unit capacity of all municipal waste combustor units at a municipal waste combustor plant for which construction was commenced on or before September 20, 1994.

#### Emissions Limitations

340-025-0815 No person shall cause, suffer, allow, or permit the operation of any affected municipal waste combustor unit in a manner which violates the following emission limits and requirements:

(1) Particulate Matter Emissions:

- (a) For municipal waste combustor units located at large municipal waste combustor plants, particulate emissions from each unit shall not exceed 27 milligrams per dry standard cubic meter (0.012 grains per dry standard cubic foot) corrected to 7 percent oxygen.
- (b) For municipal waste combustor units located at small municipal waste combustor plants, particulate emissions from each unit shall not exceed 70 milligrams per dry standard cubic meter (0.030 grains per dry standard cubic foot) corrected to 7 percent oxygen.

(2) Opacity. For municipal waste combustor units located at large and small municipal waste combustor plants, visible emissions from each unit shall not exceed 10 percent opacity as a 6-minute average.

(3) Municipal Waste Combustor Metals:

(a) Cadmium:

- (A) For municipal waste combustor units located at large municipal waste combustor plants, cadmium emissions from each unit shall not exceed 0.040 milligrams per dry standard cubic meter (0.000018 gr/dscf) corrected to 7 percent oxygen.
- (B) For municipal waste combustor units located at small municipal waste combustor plants, cadmium emissions from each unit shall not exceed 0.10 milligrams per dry standard cubic meter (0.000044 gr/dscf) corrected to 7 percent oxygen.

(b) Lead:

- (A) For municipal waste combustor units located at large municipal waste combustor plants, lead emissions from each unit shall not exceed 0.49 milligrams per dry standard cubic meter (0.00021 gr/dscf) corrected to 7 percent oxygen.
- (B) For municipal waste combustor units located at small municipal waste combustor plants, lead emissions from each unit shall not exceed 1.6 milligrams per dry standard cubic meter (0.00070 gr/dscf) corrected to 7 percent oxygen.

(c) Mercury. For municipal waste combustor units located at large and small municipal waste combustor plants, mercury emissions from each unit shall not exceed 0.080 milligrams per dry standard cubic meter (0.000035 gr/dscf) or 15 percent of the potential mercury emission concentration (an 85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

(4) Sulfur Dioxide (SO<sub>2</sub>):

- (a) For municipal waste combustor units located at large municipal waste combustor plants, sulfur dioxide emissions from each unit shall not exceed 31 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.
- (b) For municipal waste combustor units located at small municipal waste combustor plants, sulfur dioxide emissions from each unit shall not exceed 50 parts per million by volume or 30 percent of the potential sulfur dioxide emission concentration (70-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.

(5) Hydrogen chloride (HCl):

- (a) For municipal waste combustor units located at large municipal waste combustor plants, hydrogen chloride emissions from each unit shall not exceed 31 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.



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- (b) For municipal waste combustor plants located at small municipal waste combustor plants, hydrogen chloride emissions from each unit shall not exceed 50 parts per million by volume or 10 percent of the potential hydrogen chloride emission concentration (90-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.
- (6) Dioxins/furans:
- (a) For municipal waste combustor units located at large municipal waste combustor plants, the dioxin/furan emissions from each unit shall not exceed:
- (A) 60 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen, for municipal waste combustor units that employ an electrostatic precipitator-based emission control system;
- (B) 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen, for municipal waste combustor units that do not employ an electrostatic precipitator-based emission control system;
- (b) For municipal waste combustor units located at small municipal waste combustor plants, the dioxin/furan emissions from each unit shall not exceed 125 nanograms per dry standard cubic meter, corrected to 7 percent oxygen.
- (7) Nitrogen Oxide (NO<sub>x</sub>). For municipal waste combustor units located at large municipal waste combustor plants, emissions of nitrogen oxides from each unit shall not exceed 200 ppm as a 24-hour daily arithmetic average corrected to 7 percent O<sub>2</sub>.
- (8) Fugitive Emissions:
- (a) No owner or operator shall cause or allow visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations, except as provided in paragraphs (b) and (c) of this section.
- (b) The emission limit specified in paragraph (a) of this section does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph (a) of this section does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.
- (c) The provisions specified in paragraph (a) of this section do not apply during maintenance and repair of ash conveying systems.

**Operating Practices**

**340-025-0820**

- (1) Carbon Monoxide:
- (a) For municipal waste combustor units located at large municipal waste combustor plants, emissions of Carbon Monoxide from each unit shall not exceed 100 ppm corrected to 7 percent O<sub>2</sub> as a four hour block arithmetic average.
- (4b) For municipal waste combustor units located at small municipal waste combustor plants, emissions of Carbon Monoxide from each unit shall not exceed 50 ppm corrected to 7 percent O<sub>2</sub> as a four hour block arithmetic average.
- (2) No owner or operator of an affected facility located within a small or large municipal waste combustor plant shall cause such facility to operate at a load level greater than 110 percent of the maximum demonstrated municipal waste combustor unit load as defined in OAR 340-25-0557(3)(gg), except as specified in (a) and (b) of this section. The averaging time shall be a 4-hour block arithmetic average.
- (a) During the annual dioxin/furan performance test and the 2 weeks preceding the annual dioxin/furan performance test, no municipal waste combustor unit load limit is applicable.
- (b) The municipal waste combustor unit load limit may be waived in accordance with permission granted by the Administrator or the Department in writing for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.
- (3) No owner or operator of an affected facility located within a small or large municipal waste combustor plant shall cause such facility to operate at a temperature, measured at the particulate matter control device inlet, exceeding 17 °C above the maximum demonstrated particulate matter control device temperature as defined in OAR 340-025-0557(3)(u), except as specified in (a) and (b) of this section. The averaging time shall be a 4-hour block arithmetic average. The requirements specified in this paragraph apply to each particulate matter control device utilized at the affected facility.
- (a) During the annual dioxin/furan performance test and the 2 weeks preceding the annual dioxin/furan performance test, no particulate matter control device temperature limitations are applicable.
- (b) The particulate matter control device temperature limits may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing,



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or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

**Operator Training and Certification**

**340-025-0825**

- (1) Each chief facility operator and shift supervisor shall have completed full certification with either the American Society of Mechanical Engineers [ORO-1-1994 -- see 40 CFR 40 CFR 60.17] or other State approved certification program.
- (2) If a chief facility operator or shift supervisor is not fully certified in accordance with OAR 340-025-0825(1), the chief facility operator or shift supervisor must obtain and maintain a current provisional operator certification from either the American Society of Mechanical Engineers (ASME) [ORO-1-1994 -- see 40 CFR 60.17] or other State approved certification and must have scheduled a full certification exam with either the ASME [ORO-1-1994] or other State approved certification program.
- (3) No owner or operator of an affected facility located within a small or large municipal waste combustor plant shall allow the facility to be operated at any time unless one of the following persons is on duty and at the affected facility: A fully certified chief facility operator, a provisionally certified chief facility operator who is scheduled to take the full certification exam, a fully certified shift supervisor, or a provisionally certified shift supervisor who is scheduled to take the full certification exam.
- (4) If one of the persons listed in 340-025-0825(3) must leave the affected facility during their operating shift, a provisionally certified control room operator who is onsite at the affected facility may fulfill the requirement in 340-025-0825(3).
- (5) All chief facility operators, shift supervisors, and control room operators at affected facilities located within a small or large municipal waste combustor plant must complete the EPA or State municipal waste combustor operator training course no later than the compliance date specified in OAR 340-025-0840 except as provided in (a) and (b) of this section.
  - (a) The requirement specified in OAR 340-025-0825(5) does not apply to chief facility operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers or other State-approved certification program on or before June 19, 1997.
  - (b) The owner or operator may request that the Department waive the requirement specified in OAR 340-025-0825(5) for chief operators, shift supervisors, and control operators who have obtained provisional certification from the American Society of Mechanical Engineers or other State-approved certification program on or before June 19, 1997.
- (6) The owner or operator of an affected facility located within a small or large municipal waste combustor plant shall develop and update on a yearly basis a site-specific operating manual that, at a minimum, addresses the elements of municipal waste combustor unit operation specified below:
  - (a) A summary of the applicable standards under OAR 340-025-0810 through 340-025-0840;
  - (b) A description of basic combustion theory applicable to a municipal waste combustor unit;
  - (c) Procedures for receiving, handling, and feeding municipal solid waste;
  - (d) Municipal waste combustor unit startup, shutdown, and malfunction procedures;
  - (e) Procedures for maintaining proper combustion air supply levels;
  - (f) Procedures for operating the municipal waste combustor unit within the standards established under OAR 340-025-0810 through 340-025-0840;
  - (g) Procedures for responding to periodic upset or off-specification conditions;
  - (h) Procedures for minimizing particulate matter carryover;
  - (i) Procedures for handling ash;
  - (j) Procedures for monitoring municipal waste combustor unit emissions; and
  - (k) Reporting and recordkeeping procedures.
- (7) The owner or operator of an affected facility located within a small or large municipal waste combustor plant shall establish a training program to review the operating manual according to the schedule specified in (a) and (b) of this section with each person who has responsibilities affecting the operation of an affected facility including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.
  - (a) Each person specified in OAR 340-025-0825(7) shall undergo initial training no later than the date specified in (a)(A) or (B), whichever is later.
    - (A) The date prior to the day the person assumes responsibilities affecting municipal waste combustor unit operation; or
    - (B) June 19, 1998.
  - (b) Annually, following the initial review.
- (8) The operating manual required by OAR 340-025-0825(6) shall be kept in a readily accessible location for all persons required to undergo training under paragraph OAR 340-025-0825(7). The operating manual and records of training shall be available for inspection by the EPA or the Department upon request.

**Monitoring and Testing**

**340-025-0830**

- (1) The standards under OAR 340-025-0815 apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence.
  - (a) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warmup period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.
  - (b) Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.
- (2) The owner or operator of a small or large municipal waste combustor plant shall install, calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and shall comply with test procedures and test methods specified below.
  - (a) The span value of the oxygen (or carbon dioxide) monitor shall be 25 percent oxygen (or carbon dioxide).
  - (b) The monitor shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.
  - (c) The monitor shall conform to Performance Specification 3 in appendix B of 40 CFR Part 60 except for section 2.3 (relative accuracy requirement).
  - (d) The quality assurance procedures of appendix F of this part except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.
  - (e) If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels shall be established during the first performance test after December 31, 1997, but not later than June 8, 1998, according to the following procedures and methods. This relationship may be reestablished during subsequent performance compliance tests.
    - (A) The emission rate correction factor and the integrated bag sampling and analysis procedure of EPA Reference Method 3B shall be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.
    - (B) Samples shall be taken for at least 30 minutes in each hour.
    - (C) Each sample shall represent a 1-hour average.
    - (D) A minimum of three runs shall be performed.
  - (f) The relationship between carbon dioxide and oxygen concentrations that is established in accordance with (e) of this section shall be submitted to the Department as part of the performance test report for the first test conducted after December 31, 1997.
- (3) The procedures and test methods specified below shall be used to determine compliance with the emission limits for particulate matter and opacity.
  - (a) EPA Reference Method 1 shall be used to select sampling site and number of traverse points.
  - (b) EPA Reference Method 3 or 3A shall be used for gas analysis.
  - (c) EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters (60 cubic feet). The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no less than or greater than  $160 \pm 14^{\circ}\text{C}$  ( $320 \pm 25^{\circ}\text{F}$ ). An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.
  - (d) An owner or operator may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).
  - (e) All performance tests shall consist of at least three test runs conducted under representative full load operating conditions and at least two of the test runs must be valid. The average of the particulate matter emission concentrations from all valid test runs is used to determine compliance.
  - (f) EPA Method 9 shall be used for determining compliance with the opacity limit except as provided under 40 CFR 60.11(e).
  - (g) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system for measuring opacity and shall follow the methods and procedures specified by 40 CFR 60.13
    - (A) The output of the continuous opacity monitoring system shall be recorded on a 6-minute average basis.

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- (B) The continuous opacity monitoring system shall conform to Performance Specification 1 in appendix B of 40 CFR Part 60.
- (h) For each affected facility located within a large municipal waste combustor plant, the owner or operator shall conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous performance test).
- (i) For each affected facility located within a small municipal waste combustor plant, the owner or operator shall conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous performance test). If all performance tests over a 3-year period indicate compliance with the particulate matter emission limit, the owner or operator may elect not to conduct a performance test for the subsequent 2 years. At a minimum, a performance test for particulate matter shall be conducted every third year (no more than 36 months following the previous performance test) at a small municipal waste combustor plant. If a performance test conducted every third year indicates compliance with the particulate matter emission limit, the owner or operator may elect not to conduct a performance test for an additional 2 years. If any performance test indicates noncompliance with the particulate matter emission limit, performance tests shall be required annually until all annual performance tests over a 3-year period indicate compliance with the particulate matter emission limit.
- (j) For each affected facility located within a small or large municipal waste combustor plant, the owner or operator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test) using the test method specified in paragraph (3)(f) of this section.
- (4) The procedures and test methods specified below shall be used to determine compliance with the emission limits for cadmium, lead, and mercury.
- (a) The procedures and test methods specified below shall be used to determine compliance with the emission limits for cadmium and lead.
- (A) EPA Reference Method 1 shall be used for determining the location and number of sampling points.
- (B) EPA Reference Method 3 or 3A shall be used for flue gas analysis.
- (C) EPA Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits. The minimum sample volume shall be 1.7 dscm (60 dscf).
- (D) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead.
- (E) An owner or operator may request that compliance with the cadmium or lead emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).
- (F) All performance tests must consist of at least three test runs conducted under representative full load operating conditions and at least two of the test runs must be valid. The average of the cadmium and lead emission concentrations from all valid test runs is used to determine compliance.
- (G) For each affected facility located within a large municipal waste combustor plant, the owner or operator shall conduct a performance test for compliance with the emission limits for cadmium and lead on an annual basis (no more than 12 calendar months following the previous performance test), thereafter.
- (H) For each affected facility located within a small municipal waste combustor plant, the owner or operator shall conduct a performance test for cadmium emissions and on an annual basis (no more than 12 calendar months following the previous performance test). If all performance tests over a 3-year period indicate compliance with the cadmium emission limit, the owner or operator may elect not to conduct a performance test for the subsequent 2 years. At a minimum, a performance test for cadmium shall be conducted every third year (no more than 36 months following the previous performance test) at a small municipal waste combustor plant. If a performance test conducted every third year indicates compliance with the cadmium emission limit, the owner or operator may elect not to conduct a performance test for an additional 2 years. If any performance test indicates noncompliance with the cadmium emission limit, performance tests shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the cadmium emission limit.
- (I) For each affected facility located within a small municipal waste combustor plant, the owner or operator shall conduct a performance test for lead emissions on an annual basis (no more than 12 calendar months following the previous performance test). If all performance tests over a 3-year period indicate compliance with the lead emission limit, the owner or operator may elect not to conduct a performance test for the subsequent

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2 years. At a minimum, a performance test for lead shall be conducted every third year (no more than 36 months following the previous performance test) at a small municipal waste combustor plant. If a performance test conducted every third year indicates compliance with the lead emission limit, the owner or operator may elect not to conduct a performance test for an additional 2 years. If any performance test indicates noncompliance with the lead emission limit, performance tests shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the lead emission limit.

(b) The procedures and test methods specified below shall be used to determine compliance with the mercury emission limit.

(A) EPA Reference Method 1 shall be used for determining the location and number of sampling points.

(B) EPA Reference Method 3 or 3A shall be used for flue gas analysis.

(C) EPA Reference Method 29 shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 for mercury shall be 1.7 cubic meters (60 cubic feet).

(D) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 test run for mercury.

(E) The percent reduction in the potential mercury emissions ( $\%P_{Hg}$ ) is computed using equation 1:

$$\%P_{Hg} = \left( \frac{E_i - E_o}{E_i} \right) \times 100$$

where:

$\%P_{Hg}$  = percent reduction of the potential mercury emissions achieved.

$E_i$  = potential mercury emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

$E_o$  = controlled mercury emission concentration measured at the mercury control device outlet, corrected to 7 percent oxygen (dry basis).

(F) All performance tests must consist of at least three test runs conducted under representative full load operating conditions and at least two of the test runs must be valid. The average of the mercury emission concentrations from all valid test runs is used to determine compliance.

(G) An owner or operator may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).

(H) The owner or operator of an affected facility located within a large municipal waste combustor plant shall conduct a performance test for mercury emissions on an annual basis (no more than 12 calendar months from the previous performance test).

(I) For each affected facility located within a small municipal waste combustor plant, the owner or operator shall conduct a performance test for mercury emissions on an annual basis (no more than 12 calendar months following the previous performance test). If all three performance tests over a 3-year period indicate compliance with the mercury emission limit, the owner or operator may elect not to conduct a performance test for the subsequent 2 years. At a minimum, a performance test for mercury shall be conducted every third year (no more than 36 months following the previous performance test) at a small municipal waste combustor plant. If a performance test conducted every third year indicates compliance with the mercury emission limit, the owner or operator may elect not to conduct a performance test for an additional 2 years. If any performance test indicates noncompliance with the mercury emission limit, performance tests shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the mercury emission limit.

(J) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in OAR 340-025-0830(12) for measuring and calculating carbon usage.

(5) The procedures and test methods specified below shall be used for determining compliance with the sulfur dioxide emission limit.

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- (a) Compliance with the sulfur dioxide emission limit shall be determined based on the 24-hour daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data if compliance is based on an emission concentration, or continuous emission monitoring system inlet and outlet data if compliance is based on a percent reduction.
- (b) EPA Reference Method 19, section 4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.
- (c) EPA Reference Method 19, section 5.4, shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission concentration.
- (d) An owner or operator may request that compliance with the sulfur dioxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).
- (e) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system in accordance with 40 CFR 60.13. If showing compliance with the percent reduction standards, the owner or operator shall also install, calibrate, maintain, and operate a continuous monitoring system for measuring the sulfur dioxide concentration at the inlet to the sulfur dioxide control device and record the output in accordance with 40 CFR 60.13.
- (f) At a minimum, valid continuous monitoring system hourly averages shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
  - (A) At least two data points, separated by at least 15 minutes, per hour shall be used to calculate each 1-hour arithmetic average.
  - (B) Each sulfur dioxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (g) The 1-hour arithmetic averages shall be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 24-hour daily geometric average emission concentrations and daily geometric average emission percent reductions. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).
- (h) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations and percent reductions even if the minimum continuous emission monitoring system data requirements are not met.
- (i) The continuous emission monitoring system shall be operated according to Performance Specification 2 in appendix B of 40 CFR Part 60.
  - (A) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in appendix B of 40 CFR Part 60, sulfur dioxide and oxygen (or carbon dioxide) shall be collected concurrently (or within a 30- to -60 minute period) by both the continuous emission monitors and the test methods specified as follows: For sulfur dioxide, EPA Reference Method 6, 6A, or 6C shall be used; and, for oxygen (or carbon dioxide), EPA Reference Method 3A or 3B shall be used.
  - (B) The span value of the continuous emissions monitoring system at the inlet to the sulfur dioxide control device shall be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit. The span value of the continuous emission monitoring system at the outlet of the sulfur dioxide control device shall be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit.
- (j) Quarterly accuracy determinations and daily calibration tests shall be performed in accordance with procedure 1 in appendix F of 40 CFR Part 60.
- (k) When sulfur dioxide emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Department or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day that the affected facility is operated and combusting municipal solid waste for 90 percent of the days per calendar quarter that the affected facility is operated and combusting municipal solid waste.
- (6) The procedures and test methods specified below shall be used for determining compliance with the hydrogen chloride emission limit.
  - (a) EPA Reference Method 26 or 26A, as applicable, shall be used to determine the hydrogen chloride emission concentration. The minimum sampling time for Method 26 shall be 1 hour.

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- (b) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 26 test run for hydrogen chloride.
- (c) The percent reduction in potential hydrogen chloride emissions (% P<sub>HCl</sub>) is computed using equation 2:

$$\%P_{HCl} = \left( \frac{E_i - E_o}{E_i} \right) \times 100$$

where:

- $\%P_{HCl}$  = percent reduction of the potential hydrogen chloride emissions achieved.
- $E_i$  = potential hydrogen chloride emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).
- $E_o$  = controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

- (d) An owner or operator may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).
- (e) All performance tests must consist of at least three test runs conducted under representative full load operating conditions and at least two of the test runs must be valid. The average of the hydrogen chloride emission concentrations from all valid test runs is used to determine compliance.
- (f) The owner or operator of an affected facility located within a large municipal waste combustor plant shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).
- (g) The owner or operator of an affected facility located within a small municipal waste combustor plant shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test). If all performance tests over a 3-year period indicate compliance with the hydrogen chloride emission limit, the owner or operator may elect not to conduct a performance test for the subsequent 2 years. At a minimum, a performance test for hydrogen chloride shall be conducted every third year (no more than 36 months following the previous performance test) at a small municipal waste combustor plant. If a performance test conducted every third year indicates compliance with the hydrogen chloride emission limit, the owner or operator may elect not to conduct a performance test for an additional 2 years. If any performance test indicates noncompliance with the hydrogen chloride emission limit, performance tests shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the hydrogen chloride emission limit.
- (7) The procedures and test methods specified below shall be used to determine compliance with the limits for dioxin/furan emissions.
- (a) EPA Reference Method 1 shall be used for determining the location and number of sampling points.
- (b) EPA Reference Method 3 or 3A shall be used for flue gas analysis.
- (c) EPA Reference Method 23 shall be used for determining the dioxin/furan emission concentration.
- (A) The minimum sample time shall be 4 hours per test run.
- (B) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 23 test run for dioxins/furans.
- (d) The owner or operator of an affected facility located within small and large municipal waste combustor plants shall conduct performance tests for dioxin/furan emissions according to one of the following schedules:
- (A) For affected facilities located within small and large municipal waste combustor plants, performance tests shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test.)
- (B) For affected facilities located within small municipal waste combustor plants where all performance tests for an affected facility over a 3-year period indicate compliance with the dioxin/furan emission limit, the owner or operator may elect not to conduct a performance test for the subsequent 2 years for that affected facility. At a minimum, a performance

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test for dioxin/furan emissions shall be conducted every third year (no more than 36 months following the previous performance test) for each affected facility. If a performance test conducted every third year indicates compliance with the dioxin/furan emission limit, the owner or operator may elect not to conduct a performance test on the affected facility for an additional 2 years. If any performance test indicates noncompliance with the dioxin/furan emission limit, performance tests shall be conducted annually until all annual performance tests for the affected facility over a 3-year period indicate compliance with the dioxin/furan emission limit.

(C) For affected facilities located within large municipal waste combustor plants where all performance tests for all affected facilities over a 2-year period indicate that dioxin/furan emissions are less than or equal to 15 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., unit 1, unit 2, unit 3, as applicable). If each annual performance test continues to indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass), the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 15 nanograms per dry standard cubic meter (total mass), performance tests thereafter shall be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass).

(D) For affected facilities located within small municipal waste combustor plants where all performance tests for all affected facilities over a 2-year period indicate that dioxin/furan emissions are less than or equal to 30 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., unit 1, unit 2, unit 3, as applicable). If each annual performance test continues to indicate a dioxin/furan emission level less than or equal to 30 nanograms per dry standard cubic meter (total mass), the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 30 nanograms per dry standard cubic meter (total mass), performance tests thereafter shall be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 30 nanograms per dry standard cubic meter (total mass).

(e) The owner or operator of an affected facility where activated carbon is used to comply with the dioxin/furan emission limits or the dioxin/furan emission level specified in OAR 340-025-0830(7)(e)(C) or (D) shall follow the procedures specified in OAR 340-025-0830(12) for measuring and calculating the carbon usage rate.

(f) An owner or operator may request that compliance with the dioxin/furan emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).



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- (g) All performance tests must consist of at least three test runs conducted under representative full load operating conditions and at least two of the test runs must be valid. The average of the dioxin/furan emission concentrations from all valid test runs is used to determine compliance.
- (8) The procedures and test methods specified below shall be used to determine compliance with the nitrogen oxides emission limit for municipal waste combustors located at large municipal waste combustor plants (no nitrogen oxides performance tests are required for affected facilities located within small municipal waste combustor plants).
- (a) Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system specified in OAR 340-025-0830(8)(c) for measuring nitrogen oxides and calculating a 24-hour daily arithmetic average emission concentration using EPA Reference Method 19, section 4.1.
- (b) An owner or operator may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).
- (c) The owner or operator of an affected facility located within a large municipal waste combustor plant shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring nitrogen oxides discharged to the atmosphere, and record the output of the system in accordance with 40 CFR 60.13.
- (d) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
- (A) At least 2 data points, separated by at least 15 minutes, per hour shall be used to calculate each 1-hour arithmetic average.
- (B) Each nitrogen oxides 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (e) The 1-hour arithmetic averages shall be expressed in parts per million by volume corrected to 7 percent oxygen (dry basis) and used to calculate the 24-hour daily arithmetic average concentrations.
- (f) All valid continuous emission monitoring system data must be used in calculating emission averages even if the minimum continuous emission monitoring system data requirements are not met.
- (g) The owner or operator shall operate the continuous emission monitoring system according to Performance Specification 2 in appendix B of 40 CFR Part 60 and shall follow the procedures and methods specified as follows:
- (A) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in appendix B of 40 CFR Part 60, nitrogen oxides and oxygen (or carbon dioxide) shall be collected concurrently (or within a 30- to -60 minute period) by both the continuous emission monitors and the test methods specified as follows: For nitrogen oxides, EPA Reference Methods 7, 7A, 7C, 7D, or 7E shall be used; and, for oxygen (or carbon dioxide), EPA Reference Method 3A or 3B shall be used.
- (B) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of the municipal waste combustor unit.
- (h) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in appendix F of 40 CFR Part 60.
- (i) When nitrogen oxides continuous emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Department or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day for 90 percent of the days per calendar quarter the unit is operated and combusting municipal solid waste.
- (9) The procedures specified below shall be used for determining compliance with the operating requirements under OAR 340-025-0820.



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- (a) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system in accordance with 40 CFR 60.13 and the following:
- (A) Compliance with the carbon monoxide emission limits shall be determined using a 4-hour block arithmetic average for all types of affected facilities.
  - (B) The continuous emission monitoring system shall be operated according to Performance Specification 4A in 40 CFR Part 60 Appendix B.
  - (C) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in appendix B of 40 CFR Part 60, carbon monoxide and oxygen (or carbon dioxide) shall be collected concurrently (or within a 30- to -60 minute period) by both the continuous emission monitors and the test methods specified as follows: For carbon monoxide, EPA Reference Methods 10, 10A, or 10B shall be used; and, for oxygen (or carbon dioxide), EPA Reference Method 3A or 3B shall be used.
  - (D) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.
  - (E) The 4-hour block averages shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous emission monitoring system. At least two data points, separated by at least 15 minutes, per hour shall be used to calculate each 1-hour arithmetic average.
  - (F) An owner or operator may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in OAR 340-025-0830(2)(e).
  - (G) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained for 75 percent of the hours per day ~~for~~ 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
  - (H) All valid continuous emission monitoring system data must be used in calculating carbon monoxide emission even if the minimum data requirements are not met.
  - (I) Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in accordance with procedure 1 in appendix F of 40 CFR Part 60.
- (b) The procedures specified below shall be used to determine compliance with load level requirements under OAR 340-025-0820.
- (A) The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages.
  - (B) The method included in the "American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1 -- 1964 (R1991)" section 4 (incorporated by reference, see 40 CFR 40 CFR 60.17) shall be used for calculating the steam (or feedwater) flow. The recommendations in "American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971)," chapter 4 (incorporated by reference -- see 40 CFR 40 CFR 60.17) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices except as specified below:
    - (i) Measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed.
    - (ii) All signal conversion elements associated with steam (or feedwater flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.
  - (C) The owner or operator of an affected facility without steam generation capability is not required to monitor unit load.

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- (D) The maximum demonstrated municipal waste combustor unit load must be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.
- (c) To determine compliance with the maximum particulate matter control device temperature requirements, the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility.
- (A) Temperature shall be calculated in 4-hour block arithmetic averages.
- (B) For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved.
- (d) At a minimum, valid continuous load level and control device inlet temperature monitoring system hourly averages shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
- (A) At least two data points, separated by at least 15 minutes, per hour shall be used to calculate each 1-hour arithmetic average.
- (B) All valid continuous emission monitoring system data must be used in calculating the parameters specified under OAR 340-025-0830(9) even if the minimum data requirements are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Department or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.
- (10) The procedures specified below shall be used for calculating municipal waste combustor unit capacity as defined under OAR 340-025-0557(3)(ff).
- (a) For municipal waste combustor units capable of combusting municipal solid waste continuously for a 24-hour period, municipal waste combustor unit capacity, in megagrams per day of municipal solid waste combusted, shall be calculated based on 24 hours of operation at the maximum charging rate. The maximum charging rate shall be determined by one of the following procedures, as applicable:
- (A) For combustors that are designed based on heat capacity, the maximum charging rate shall be calculated based on the maximum design heat input capacity of the unit and a heating value of 10,500 kilojoules per kilogram.
- (B) For combustors that are not designed based on heat capacity, the maximum charging rate shall be the maximum design charging rate.
- (b) For batch feed municipal waste combustor units, municipal waste combustor unit capacity, in megagrams per day of municipal solid waste combusted, shall be calculated as the maximum design amount of municipal solid waste that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24-hour period. The maximum number of batches that could be processed in a 24-hour period is calculated as 24 hours divided by the design number of hours required to process one batch of municipal solid waste, and may include fractional batches (e.g., if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24-hour period). For batch combustors that are designed based on heat capacity, the design heating value of 10,500 kilojoules per kilogram for all municipal solid waste shall be used in calculating the municipal waste combustor unit capacity in megagrams per day of municipal solid waste.
- (11) The procedures specified below shall be used for determining compliance with the fugitive ash emission limit.
- (a) EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.
- (b) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance.

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- (c) The owner or operator of an affected facility shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 months following previous performance tests).
- (12) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit, or the dioxin/furan emission limits, or the dioxin/furan emission level specified in OAR 340-025-0830(7)(d)(C) or (D) shall follow the procedures specified below:
  - (a) During any performance test for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as specified below:
    - (A) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during each performance test for mercury emissions.
    - (B) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during each performance test for dioxin/furan emissions.
  - (b) During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) must equal or exceed the level(s) documented during the performance tests specified under (a)(A) or (B) of this section.
  - (c) The owner or operator shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures specified below:
    - (A) The weight of carbon delivered to the plant.
    - (B) Estimate the average carbon mass feed rate in kilograms per hour or pounds per hour for each hour of operation for each affected facility based on the parameters specified under (a) of this section, and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.
- (13) Continuous monitoring for opacity, sulfur dioxide, nitrogen oxides, carbon monoxide, and diluent gases (oxygen or carbon dioxide) shall be conducted in accordance with the Department's Continuous Monitoring Manual and the specific requirements of this rule. If at any time there is a conflict between the Department's Continuous Monitoring Manual and the federal requirements (40 CFR 60.13, Appendix B, and Appendix F), the federal requirements shall govern.

**Recordkeeping and Reporting**

**340-025-0835**

- (1) The owner or operator of an affected facility located within a small or large municipal waste combustor plant and subject to the standards under OAR 340-025-0810 through 340-025-0840 shall maintain records of the information specified below, as applicable, for each affected facility for a period of at least 5 years. The information shall be available for submittal to the Department or for review onsite by an inspector.
  - (a) The calendar date of each record.
  - (b) The following emission concentrations and parameters measured using continuous monitoring systems:
    - (A) All 6-minute average opacity levels.
    - (B) All 1-hour average sulfur dioxide emission concentrations.
    - (C) All 1-hour average nitrogen oxides emission concentrations (large municipal waste combustor plants only).
    - (D) All 1-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements (if applicable), and particulate matter control device inlet temperatures.
    - (E) All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions.
    - (F) All 24-hour daily arithmetic average nitrogen oxides emission concentrations (large municipal waste combustor plants only).
    - (G) All 4-hour block arithmetic average carbon monoxide emission concentrations.
    - (H) All 4-hour block arithmetic average municipal waste combustor unit load levels (if applicable) and particulate matter control device inlet temperatures.
  - (c) Identification of the calendar dates when any of the average opacity levels, emission concentrations, percent reductions, or operating parameters recorded under OAR 340-025-0835(b) are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken.

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- (d) For affected facilities that apply activated carbon for mercury or dioxin/furan control, the records specified below:
  - (A) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated during each mercury emissions performance test, with supporting calculations.
  - (B) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated during each dioxin/furan emissions performance test, with supporting calculations.
  - (C) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated for each hour of operation, with supporting calculations.
  - (D) The total carbon usage for each calendar quarter estimated, with supporting calculations.
  - (E) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed).
- (e) Identification of the calendar dates for which the minimum number of hours of any of the data specified below have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
  - (A) Sulfur dioxide emissions data;
  - (B) Nitrogen oxides emissions data (large municipal waste combustor plants only);
  - (C) Carbon monoxide emissions data;
  - (D) Municipal waste combustor unit load data; and
  - (E) Particulate matter control device temperature data.
  - (F) For affected facilities that apply activated carbon for mercury or dioxin/furan control, carbon usage and carbon injection system operating parameter data.
- (f) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data (large municipal waste combustors only), or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (g) The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen oxides (large municipal waste combustors only), and carbon monoxide continuous emission monitoring systems, as required by 40 CFR 60.13 and Procedure 1 of 40 CFR Appendix F.
- (h) The test reports documenting the results of all performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits, including the oxygen/carbon dioxide relationship (if applicable according to OAR 340-025-0830(2)(e)) be recorded along with supporting calculations and the following information:-
  - (A) For the first dioxin/furan performance test conducted after December 31, 1997 and all subsequent dioxin/furan performance tests, the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device); and
  - (B) For affected facilities that apply carbon for mercury or dioxin/furan control, the average carbon injection rate during the first mercury or dioxin/furan performance test conducted after December 31, 1997 and all subsequent mercury or dioxin/furan performance tests.
- (i) Training records as specified below:
  - (A) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program, including the dates of initial and renewal certifications and documentation of current certification.
  - (B) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been fully certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program, including the dates of initial and renewal certifications and documentation of current certification.
  - (C) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course or a State-approved equivalent course, including documentation of training completion.

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- (D) Records showing the names of persons who have completed a review of the operating manual, including the date of the initial review and subsequent annual reviews.
- (j) For affected facilities that apply activated carbon for mercury or dioxin/furan control:
  - (A) identification of the calendar dates when the average carbon mass feed rates were less than either of the hourly carbon feed rates estimated during performance tests for mercury or dioxin/furan emissions with reasons for such feed rates and a description of corrective actions taken.
  - (B) identification of the calendar dates when the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate (e.g., screw feeder speed) are below the level(s) estimated during the performance tests, with reasons for such occurrences and a description of corrective actions taken.
- (k) For large municipal waste combustor plants installing additional controls in accordance with the compliance schedule in OAR 340-025-0840(2), records of semi-annual progress reports.
- (2) The owner or operator of an affected facility located within a small or large municipal waste combustor plant shall submit the following information in a performance test report within 60 days following the completion of each performance test:-
  - (a) The test report documenting the performance test recorded under paragraph (1)(h) of this rule for particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, fugitive ash emissions;
  - (b) the oxygen/carbon dioxide relationship established in accordance with OAR 340-025-0830(2)(e), if applicable;
  - (c) data as recorded under paragraphs (1)(b)(A) and (1)(b)(E) through (1)(b)(H) of this rule for three consecutive days coinciding with each performance test;
  - (d) unless previously submitted, the performance evaluation of the continuous emission monitoring systems using the applicable performance specifications in 40 CFR Appendix B;
  - (e) the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device inlet temperature(s) established during the dioxin/furan performance test;
  - (f) for affected facilities that apply activated carbon injection for mercury control, the owner or operator shall submit the average carbon mass feed rate recorded during the mercury performance test; and,
  - (g) for affected facilities that apply activated carbon injection for dioxin/furan control, the owner or operator shall submit the average carbon mass feed rate recorded during the dioxin/furan performance test.
- (3) The owner or operator of an affected facility located within a small or large municipal waste combustor plant shall submit semi-annual reports including the following information, as applicable, no later than July 30 for the first six months of each calendar year and February 1 for the second six months of each calendar year.
  - (a) A summary of data collected for all pollutants and parameters regulated under this rule, which includes the following information:
    - (A) A list of the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels achieved during any performance tests conducted during the reporting period.
    - (B) A list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, and particulate matter control device inlet temperature recorded during the reporting period.
    - (C) List the highest opacity level measured and recorded during the reporting period.
    - (D) The total number of days that the minimum number of hours of data for opacity, sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature data were not obtained based on the data recorded during the reporting period.
    - (E) The total number of hours that data for opacity, sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature were excluded from the calculation of average emission concentrations or parameters based on the data recorded during the reporting period.

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- (b) The summary of data reported under OAR 340-025-0835(3)(a) shall also provide the types of data specified in OAR 340-025-0835(3)(a) for the calendar year preceding the year being reported, in order to provide the Department with a summary of the performance of the affected facility over a 2-year period.
- (c) The summary of data including the information specified in OAR 340-025-0835(3)(a) and (b) shall highlight any emission or parameter levels that did not achieve the emission or parameter limits specified by OAR 340-025-0815 through 340-025-0820.
- (d) A notification of intent to begin the reduced dioxin/furan performance testing schedule specified in OAR 340-025-0830(7)(d)(C) or (D) during the following calendar year.
- (4) The owner or operator of an affected facility located within a small or large municipal waste combustor plant shall submit a semiannual report that includes the following information for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit by July 30 for the first six months of each calendar year and February 1 for the second six months of each calendar year.
  - (a) The semiannual report shall include information recorded under (1)(c) of this rule for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, and opacity.
  - (b) For each date recorded and reported, the semiannual report shall include the sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, or opacity data, as applicable and as recorded by (1)(b)(A) and (E) through (H).
  - (c) If the test reports recorded under (1)(h) document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include a copy of the emission levels and the corrective actions taken.
  - (d) The semiannual report shall include the information recorded under (1)(j)(B) for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.
  - (e) For each operating date reported under (4)(d), the semiannual report shall include the carbon feed rate data recorded under (1)(d)(C).
- (5) All reports specified under OAR 340-025-0835(2), (3), and (4) shall be submitted as a paper copy, postmarked on or before the submittal dates specified, and maintained onsite as a paper copy for a period of 5 years.
- (6) All records specified under OAR 340-025-0835(1) shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Department.
- (7) If an owner or operator would prefer to select a different annual or semiannual date for submitting the periodic reports, then the dates may be changed in an Oregon Title V Operating Permit by mutual agreement between the owner or operator and the Department.
- (8) For large municipal waste combustor plants installing additional controls in accordance with OAR 340-025-0840(2), the owner or operator shall submit to the Department semi-annual progress reports on July 30 for the first six months of each calendar year and February 1 for the second six months of each calendar year. The first report shall be submitted by July 30, 1997.
- (9) The owner or operator of a small or large municipal waste combustor plant subject to OAR 340-025-0810 through 340-025-0840 shall submit the following information with any Notice of Construction required by OAR 340-025-0840(2)(c) and OAR 340-028-0800 through 340-028-0820 or Notice of Approval required by OAR 340-028-2270:
  - (a) intent to construct;
  - (b) planned initial startup date;
  - (c) the types of fuels that the owner or operated plans to combust in the municipal waste combustor; and
  - (d) the municipal waste combustor capacity, municipal waste combustor plant capacity, and supporting capacity calculations prepared in accordance with OAR 340-0830(10).

**Compliance Schedule**

340-025-0840

(1) Emissions standards and operating practices.

- (a) For municipal waste combustor units located within a small municipal waste combustor plant, the emissions standards of 340-025-0815 and 0820 are applicable as of December 31, 1997.

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- (b) For municipal waste combustor units located within a large municipal waste combustor plant:
  - (A) The opacity, particulate matter, cadmium, lead, sulfur dioxide, hydrogen chloride, dioxin/furans, fugitive ash, carbon monoxide emissions standards, and the unit load level, particulate matter control device inlet temperature parameter standards specified in OAR 340-025-0815 through 340-025-0820 are applicable as of December 31, 1997; and
  - (B) the nitrogen oxides and mercury emissions standards and carbon injection rate (if applicable) parameter standards are applicable as of June 19, 1998 unless the compliance schedule specified below is implemented and followed to completion.
- (2) Large municipal waste combustor plant compliance schedule for mercury and nitrogen oxides emissions standards and carbon injection rate (if applicable) parameter standards.
  - (a) By no later than December 31, 1996, the owner or operator shall obtain services of an architectural and engineering firm regarding the air pollution control device(s);
  - (b) By no later than March 31, 1997, the owner or operator shall obtain design drawings of the air pollution control device(s)
  - (c) By no later than June 30, 1997, the owner or operator shall submit a Notice of Construction application to the Department in accordance with OAR 340-028-0800 through 340-025-0820;
  - (d) By no later than December 31, 1997, the owner or operator shall order the air pollution control equipment;
  - (e) By no later than December 31, 1998, the owner or operator shall obtain the major components of the air pollution control device(s);
  - (f) By no later than March 31, 1999, the owner or operator shall initiate installation of the pollution control device(s);
  - (g) By no later than March 31, 2000, the owner or operator shall start up the pollution control device(s);
  - (h) By no later than June 19, 2000, the owner or operator shall conduct the initial performance test for mercury and nitrogen oxides emissions and carbon injection (if applicable) parameter standards.
- (3) Operator training and certification.
  - (a) For small municipal waste combustor plants:
    - (A) All chief operators and shift supervisors shall obtain and maintain an ASME provisional certification or other State approved certification by no later than December 19, 1998.
    - (B) All chief operators and shift supervisors shall obtain and maintain a full ASME certification or other State approved certification or shall have scheduled a full certification exam with ASME or other State approved certification by December 19, 1998.
    - (C) After December 19, 1998, no owner or operator shall allow the operation of a municipal waste combustor unit unless one of the persons identified in 340-025-0825(3) and (4) is on duty and at the affected facility.
    - (D) By no later than June 19, 1998, all chief operators, shift supervisors, and control room operators shall have completed the EPA municipal waste combustor operator training course unless the person possesses and has maintained a full or provisional ASME training certification or other State approved certification.
    - (E) By no later than June 19, 1998, the owner operator shall have reviewed the site specific operating manual required by 340-025-0825(6) with all chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers. Following the initial review, the site specific operating manual shall be reviewed with all personnel specified above at least annually.
    - (F) By no later than June 19, 1998, the site specific operating manual shall be available in a readily accessible location for all persons required to undergo training.
  - (b) For large municipal waste combustor plants:
    - (A) All chief operators and shift supervisors shall obtain and maintain an ASME provisional certification by no later than June 19, 1998.
    - (B) All chief operators and shift supervisors shall obtain and maintain a full ASME certification or shall have scheduled a full certification exam with ASME by June 19, 1998.

- (C) After June 19, 1998, no owner or operator shall allow the operation of a municipal waste combustor unit unless one of the persons identified in 340-025-0825(3) and (4) is on duty and at the affected facility.
- (D) By no later than June 19, 1998, all chief operators, shift supervisors, and control room operators shall have completed the EPA municipal waste combustor operator training course unless the person possesses and has maintained a full or provisional ASME training certification.
- (E) By no later than June 19, 1998, the owner operator shall have reviewed the site specific operating manual required by 340-025-0825(6) with all chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers. Following the initial review, site specific operating manual shall be reviewed with all personnel specified above at least annually.
- (F) By no later than June 19, 1998, the site specific operating manual shall be available in a readily accessible location for all persons required to undergo training.
- (4) Continuous monitoring.
- (a) For small and large municipal waste combustor plants, the owner or operator of an affected municipal waste combustor unit shall have installed and certified continuous monitoring systems for opacity, diluent gas (oxygen or carbon dioxide), sulfur dioxide, nitrogen oxides (large municipal waste combustors only), carbon monoxide, municipal waste combustor unit load level (if applicable), and particulate matter control device inlet temperature in accordance with OAR 340-025-0815 and 340-025-0825 by December 31, 1997.
- (b) The owner or operator of a municipal waste combustor unit that installs carbon injection for control of mercury or dioxin/furan emissions shall submit documentation that the carbon injection monitoring system is installed and operational with the first mercury or dioxin/furans performance test report.
- (5) Testing.
- (a) For small municipal waste combustor plants, an initial performance test shall be conducted in accordance with the procedures in OAR 340-025-0830 for particulate matter, opacity, cadmium, lead, mercury, hydrogen chloride, dioxin/furan emissions, and fugitive ash and the results submitted to the Department by no later than June 19, 1998.
- (b) For large municipal waste combustor plants, an initial performance test shall be conducted in accordance with the procedures in OAR 340-025-0830 and the results submitted to the Department by the dates specified below:
- (A) For particulate matter, opacity, cadmium, lead, dioxin/furans, hydrogen chloride, and fugitive ash, the performance test shall be conducted by no later than June 19, 1998.
- (B) For mercury and nitrogen oxides, the performance test shall be conducted by no later than June 19, 2000.
- (6) Recordkeeping and reporting. The recordkeeping and reporting requirements of this rule are effective beginning December 31, 1996.

## Incinerator Regulations

### Purposes and Application

**340-025-0850** The purpose of OAR 340-025-0850 through 340-025-0905 is to establish state of the art emission standards, design requirements, and performance standards for all solid and infectious waste and crematory incinerators in order to minimize air contaminant emissions and provide adequate protection of public health. ~~Except as provided in OAR 340-025-0885 through 340-025-0905, OAR 340-025-0850 through 340-025-0905 apply to all existing waste incinerators and to all that will be built, modified, or installed in the State of Oregon. OAR 340-025-0860 through 340-25-0885 apply to solid waste facilities and infectious waste facilities. OAR 340-025-0890 through 340-025-0905 apply to crematory incinerators.~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 183, 468 & 468A

Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90; DEQ 4-1993, f. & cert. ef. 3-10-93



ORÉGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 25 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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**Applicability**

340-025-0852

- (1) OAR 340-025-0855 through 340-025-0885 apply to all solid and infectious waste incinerators other than municipal waste combustors, including those that burn some medical waste, that are subject to either OAR 340-025-0556, 340-025-0557, or 340-025-0810 through 340-025-0840.
- (2) OAR 340-025-0890 through 340-025-0905 apply to all new and existing crematory incinerators.

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# NOTICE OF PROPOSED RULEMAKING HEARING

Department of Environmental Quality

OAR Chapter 340-025-0556-0557; 340-025-0810-0860  
Municipal Solid Waste Combustors

| DATE:   | TIME:  | LOCATION:   |
|---------|--|---|
| 8-15-96 | 6:00 p.m.  | Coos Bay Library<br>Coos Bay                        |
| 8-16-96 | 6:00 p.m. Informational Meeting<br>7:00 p.m. Hearing | State Capitol Building<br>Hearing Room "A"<br>Salem |

HEARINGS OFFICER(s): Jeff Armstrong

STATUTORY AUTHORITY: 468  
or OTHER AUTHORITY:  
STATUTES IMPLEMENTED: 468A; NSPS and NESHAPS

ADOPT: 340-025-0556; 340-025-0557; 340-025-0810-0860

- This hearing notice is the initial notice given for this rulemaking action.
- This hearing was requested by interested persons after a previous rulemaking notice.
- Auxiliary aids for persons with disabilities are available upon advance request.

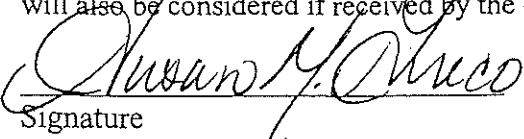
**SUMMARY:**

This proposal would adopt by reference New Source Performance Standards (NSPS) and incorporate Emission Guidelines for Municipal Waste Combustors into existing state regulations. In addition, the State is required to develop a 111(d) State Plan as a federally enforceable mechanism for implementing the Emission Guidelines

LAST DATE FOR COMMENT: August 22, 1996

AGENCY RULES COORDINATOR: Susan M. Greco, (503) 229-5213  
 AGENCY CONTACT FOR THIS PROPOSAL: Mark Fisher (503) 229-5069  
 ADDRESS: 811 S. W. 6th Avenue  
 Portland, Oregon 97204  
 TELEPHONE: 1-800-452-4011

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.

  
 Signature \_\_\_\_\_ Date 9/15/96

## Attachment B2

### State of Oregon Department of Environmental Quality

#### Rulemaking Proposal for Municipal Waste Combustor Plants

## Fiscal and Economic Impact Statement

### Introduction:

Two sources in Oregon will be affected by this rulemaking:

1. Ogden Martin will have to install new control equipment to meet the nitrogen oxides (NO<sub>x</sub>) and mercury (Hg) emission standards. In addition, there will be added operating, training, and testing costs. The capital cost of equipment and the operating and training costs will be passed on to Marion County by contractual agreement. The testing costs are the responsibility of Ogden Martin. It is estimated that the capital equipment costs will be about 4 million dollars; the operating and training costs will be about \$500,000.00 per year; and, the testing costs will be approximately \$40,000.00 per year.
2. Coos County recently completed a retrofit of their municipal waste combustor plant to meet the existing state incinerator rules. The plant modification also resulted in compliance with the new emission limits and standards proposed in this rulemaking. Therefore, this rulemaking will not affect the facility.

### General Public

As stated above, Marion County will pay for the equipment, operation, and training costs. The annual operating and training costs combined with amortizing the equipment costs over 18 years will result in an increase to the general public using the Ogden Martin facility of approximately \$4.00 per ton of waste burned in the municipal waste combustor units.

It is not anticipated that this rulemaking will have any additional affect on the general public in the Coos County area because the cost was already accounted for when the facility was modified to meet the existing state incinerator rules.

### Small Business

Not applicable

### Large Business

Ogden Martin will pay for any costs associated with increased testing requirements. Although testing has been required in the past, the scope of the testing required by the proposed rules would result in an increase in costs of approximately \$40,000.00 per year.

### Local Governments

Both of the municipal waste combustor plants affected by the proposed rulemaking are existing sources. Therefore, it is not anticipated that this rulemaking will have any additional fiscal and economic impact on local governments.

### State Agencies

This rule will be implemented through the existing permit programs (ACDP and Title V). Therefore, it is not expected that there will be any increase in costs to the DEQ. The emission fees collected through the Title V permit program should pay for costs associated with permitting and compliance inspections.

mwcf&e

Attachment B3

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Revisions to Stationary Source Emission Standards and Requirements

Land Use Evaluation Statement

**1. Explain the purpose of the proposed rules.**

The purpose of the proposed rules is to comply with a federal requirement that states either adopt federal rules by reference or develop equivalent regulations that are federally enforceable. EPA recently promulgated New Source Performance Standards and Emission Guidelines for Municipal Waste Combustors. Therefore, the Department proposes to adopt by reference New Source Performance Standards and to incorporate Emission Guidelines into existing state regulations for Municipal Waste Combustors.

**2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?**

Yes  No

**a. If yes, identify existing program/rule/activity:**

The Department's air quality stationary source permitting program: ACDP and Title V.

**b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?**

Yes  No  (if no, explain):

These rules will be implemented through the ACDP and Title V permitting program. Cities and counties currently provide Land Use Compatibility Statement approval prior to issuance of these permits.

c. If no, apply the following criteria to the proposed rules.

Not applicable

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

Not applicable

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

John J. Rusigno  
Division

Robert L. Go...  
Intergovernmental Coord.

6/12/96  
Date

**Attachment B4**

**Questions to be Answered to Reveal  
Potential Justification for Differing from Federal Requirements.**

1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?

Yes. All of the federal requirements are being adopted unchanged from federal guidelines with these exceptions:

1. More stringent SO<sub>2</sub> limit for small combustors

New federal requirement

Proposed requirement

50% reduction/80 ppm

70% reduction/50 ppm

2. More stringent HCL limit for small combustors

New federal requirement

Proposed requirement

50% reduction/250 ppmv

90% reduction/50 ppm

2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?

Technology-based.

3. Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?

Yes. One of the affected sources in Oregon participated in establishing the federal requirements.

4. Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?

Not really. Sources already comply with existing state incinerator rules.

5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?

No

6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?

No

7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)

Yes. The state proposes maintaining the existing state incinerator rules, which will apply to all other types of incinerators.

8. Would others face increased costs if a more stringent rule is not enacted?

The state proposes maintaining existing state standards for SO<sub>2</sub> and HCL for small municipal waste combustors, which are more stringent than the proposed federal standards. These lower standards for small municipal waste combustors will maintain a consistency with the state standards for all other types of incinerators, thereby leveling the playing field for all types of incinerators.

9. Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?

No



10. Is demonstrated technology available to comply with the proposed requirement?

Yes

11. Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?

Since small municipal waste combustors already comply with more stringent standards for HCL and SO<sub>2</sub> than the proposed federal standards, if the state adopted the new limits for these two pollutants, we might see an increase in emissions for these pollutants.

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## Attachment B5

### Cover Memorandum From Public Notice

State of Oregon  
Department of Environmental Quality

Memorandum

**Date:** July 12, 1996

**To:** Interested Parties and Affected Public

**Subject:** Rulemaking Proposal and Rulemaking Statements - Municipal Waste Combustors

This memorandum contains information on a proposal by the Department of Environmental Quality (DEQ) to adopt new rules regarding Municipal Waste Combustors. Pursuant to ORS 183.335, this memorandum also provides information about the Environmental Quality Commission's intended action to adopt a rule.

This proposal would adopt by reference New Source Performance Standards (NSPS) and incorporate Emission Guidelines for Municipal Waste Combustors into existing state regulations. In addition, the State is required to develop a State Plan that represents a federally enforceable mechanism for implementing the Emission Guidelines. Therefore, this proposal includes adopting NSPS by reference, incorporating Emission Guidelines into existing state regulations, and a 111(d) State Plan.

In December of 1995, EPA promulgated these regulations as a requirement of Sections 111 and 129 of the Federal Clean Air Act Amendments of 1990. Congress amended the Federal Clean Air Act in 1990 and, among other actions, included a requirement for establishing Maximum Achievable Control Technology (MACT) standards for Municipal Waste Combustor plants in response to public concern for hazardous air pollutant emissions. In addition to criteria pollutants (particulates, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead) the new regulations include standards for dioxin/furans, metals (cadmium and mercury) and hydrogen chloride.

The Department has the statutory authority to address this issue under ORS 468 and 468A.

### **What's in this Package?**

Attachments to this memorandum provide details on the proposal as follows:

- |              |  |
|--------------|--|
| Attachment A | The official statement describing the fiscal and economic impact of the proposed rule. (required by ORS 183.335)                               |
| Attachment B | A statement providing assurance that the proposed rules are consistent with statewide land use goals and compatible with local land use plans. |
| Attachment C | Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.  |
| Attachment D | A summary of the proposed rule.  |
| Attachment E | A summary of the requirements applying to Municipal Waste Combustors with new requirements covered by this rulemaking, highlighted.            |

### **Hearing Process Details**

You are invited to review these materials and present written or oral comment in accordance with the following:

**COOS BAY**  
**Date:** August 15, 1996  
**Time:** 6:00 p.m.

**Place:** Coos Bay Library  
Gallery Room  
Coos Bay

**SALEM**  
August 16, 1996  
6:00 p.m. Informational Meeting  
7:00 p.m. Hearing  
State Capitol  
Hearing Room "A"  
900 Court Street  
Salem

**Deadline for submittal of Written Comments:** August 22, 1996

Memo To: Interested and Affected Public  
July 12, 1996  
Page 3

Submit written comments to:

Mark Fisher  
Oregon Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

In accordance with ORS 183.335(13), no comments from any party can be accepted after the deadline for submission of comments has passed. Thus if you wish for your comments to be considered by the Department in the development of these rules, your comments must be received prior to the close of the comment period. The Department recommends that comments are submitted as early as possible to allow adequate review and evaluation of the comments submitted.

Jeff Armstrong will be the Presiding Officer at the hearing. Following close of the public comment period, the Presiding Officer will prepare a report which summarizes the oral testimony presented and identifies written comments submitted. The Environmental Quality Commission (EQC) will receive a copy of the Presiding Officer's report and all written comments submitted. The public hearing will be tape recorded, but the tape will not be transcribed.

If you wish to be kept advised of this proceeding and receive a copy of the recommendation that is presented to the EQC for adoption, you should request that your name be placed on the mailing list for this rulemaking proposal.

### **What Happens After the Public Comment Period Closes**

The EQC will consider the Department's recommendation for rule adoption during one of their regularly scheduled public meetings. The targeted meeting date for consideration of this rulemaking proposal is 10-11-96. This date may be delayed if needed to provide additional time for evaluation and response to testimony received in the hearing process. You will be notified of the time and place for final EQC action if you present oral testimony at the hearing or submit written comment during the comment period or ask to be notified of the proposed final action on this rulemaking proposal.

The EQC expects testimony and comment on proposed rules to be presented **during** the hearing process so that full consideration by the Department may occur before a final recommendation is made. In accordance with ORS 183.335(13), no comments can be accepted after the public

Memo To: Interested and Affected Public  
July 12, 1996  
Page 4

comment period has closed by either the EQC or the Department. Thus the EQC strongly encourages people with concerns regarding the proposed rule to communicate those concerns to the Department prior to the close of the public comment period so that an effort may be made to understand the issues and develop options for resolution where possible.

### **Background on Development of the Rulemaking Proposal**

#### **Why is there a need for the rule?**

The Department is required to either adopt federal requirements by reference, or to develop equivalent regulations that are federally enforceable. The Department is proposing to adopt New Source Performance Standards by reference, and to incorporate Emission Guidelines into existing state regulations. The Department is required to develop a State Plan to make the Emission Guidelines federally enforceable

These regulations were promulgated by EPA as a requirement of the Federal Clean Air Act which Congress amended in 1990 to include a requirement for establishing MACT standards for Municipal Waste Combustors in response to public concern for hazardous air pollutant emissions.

#### **How was the rule developed?**

The proposed rules were discussed with the affected sources on May 15 and 16, 1996 and were presented to the Industrial Source Advisory Committee at its June meeting. The Department developed the State Plan through discussions with EPA, Region X. A draft State Plan including the proposed draft rules, information about public notice and hearings, and the Department's statutory authority to adopt standards, etc. was submitted to EPA for review prior to the public notice period.

#### **Whom does this rule affect including the public, regulated community or other agencies, and how does it affect these groups?**

This rule affects two Municipal Waste Combustor plants in Oregon that are currently regulated by state incinerator rules. The proposed rules include standards for acid gases (sulfur dioxide and hydrogen chloride) and carbon monoxide that are as stringent or more stringent than existing state incinerator rules. The proposed rules also include new standards for dioxin/furans, cadmium, lead, mercury and fugitive ash emissions. In addition, the proposed rules include a new nitrogen oxides standard for one of the two affected facilities. The proposed rules includes

Memo To: Interested and Affected Public

July 12, 1996

Page 5

a particulate matter standard that is more stringent than existing state regulations for large Municipal Waste Combustors but less stringent than existing state regulations for small Municipal Waste Combustors. In addition, the pollutant emissions averaging time for sulfur dioxide and opacity are longer than the existing averaging times but these averaging times are consistent with MACT standards established by EPA.

In order to meet the new standards for nitrogen oxides and mercury, large Municipal Waste Combustors will have to install additional control equipment. By contractual agreement, Marion County, one of the two affected sources, will finance the retrofit of controls and will pay for additional operating expenses and training. The affected source will incur additional costs due to increased testing requirements.

**How will the rule be implemented**

The proposed rules will be implemented through the Department's permitting program. Only two sources are currently affected by these proposed regulations and both sources are currently subject to Title V Permits. These permits must be issued by January, 1998 and will replace the current Air Contaminant Discharge Permits (ACDP). The new Title V permits will include the proposed emission standards and all applicable requirements of these new regulations.

**Are there time constraints**

Yes. EPA requires states to adopt these rules by no later than December, 1996. Small and large municipal waste combustors must demonstrate compliance with PM, cadmium, lead, SO<sub>2</sub>, HCL, dioxin/furan standards no later than June 7, 1998, and large municipal waste combustors must demonstrate compliance with NO<sub>x</sub> and mercury standards no later than June 7, 2000.

**Contact for more information**

If you would like more information on this rulemaking proposal, or would like to be added to the mailing list, please contact:

For information on the rule:

Mark Fisher  
(503) 229-5069

In Oregon: 1-800-452-4011

Memo To: Interested and Affected Public  
July 12, 1996  
Page 6

For information on the schedule for rule adoption:

Kathleen Craig  
(503) 229-6833                      In Oregon: 1-800-452-4011

To be added to the mailing list:

Eunice Hopkins  
(503) 229-5464                      In Oregon: 1-800-452-4011

Air Quality Division  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204-1390

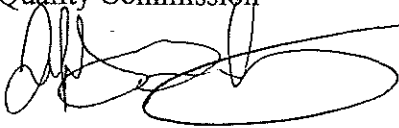
(503) 229-5069                      1-800-452-4011 (in Oregon)

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State of Oregon  
Department of Environmental Quality

Memorandum

Date: August 22, 1996

To: Environmental Quality Commission  
From: Jeff Armstrong   
Subject: Presiding Officer's Report for Rulemaking Hearing, Attachment C

Hearings Date and Time: August 15, 1996, beginning at 6:00 p.m.  
August 16, 1996, beginning at 7:00 p.m.

Hearings Location: The Gallery Room,  
Coos Bay Municipal Library  
525 W. Anderson  
Coos Bay, OR

Hearing Room A  
Oregon State Capitol  
900 Court Street  
Salem, OR

Title of Proposal: Municipal Waste Combustor Rules

Two rulemaking hearings were held on the above titled proposal. The rulemaking hearings on the above titled proposal were convened at 6:00 p.m. on August 15, 1996 and at 7:00 p.m. on August 16, 1996. People were asked to sign witness registration forms if they wished to present testimony. People were also advised that the hearing was being recorded and of the procedures to be followed.

At the Coos Bay Hearing on August 15, 1996, one person was in attendance, and no one signed up to give testimony. Mark Fisher briefly explained the specific rulemaking proposal, the reason for the proposal, and responded to questions from the audience.

At the Salem Hearing on August 16, 1996, nineteen people were in attendance, and nine people signed up to give oral testimony. Three of those people also chose to submit written testimony. Prior to receiving testimony, Mark Fisher briefly explained the specific rulemaking proposal, the reason for the proposal, and responded to questions from the audience. People were then called to testify in the order of receipt of witness registration forms and presented oral testimony as noted below.



Memo To: Environmental Quality Commission  
August 22, 1996  
Presiding Officer's Report on  
August 15 & 16, 1996 Rulemaking Hearings  
Attachment C, Page 2

**Coos Bay, August 15, 1996, 6:00 p.m.**

No one presented testimony at this hearing. The record was closed at 7:10 p.m.

**Salem, August 16, 1996, 7:00 p.m.**

1. Michael Cross, Citizen.

Mr. Cross expressed support for municipal waste combustors in general. Mr. Cross gave testimony expressing concern over the cost of retrofitting the Ogden Martin Municipal Waste Combustor because that cost would be passed on to consumers in the form of higher garbage collection fees. Mr. Cross thought that higher garbage collection fees would be especially unfair to those on fixed incomes. Mr. Cross also stated that the cost involved in implementing the proposed regulations was too high compared to the benefits derived.

He claimed that further regulating the Ogden Martin facility was not the most effective way of addressing air pollution problems because he thought fireplaces and automobiles were a far larger air quality concern. Mr. Cross also expressed a desire to see DEQ do its own studies and propose its own regulations for dioxin control rather than adopt EPA's standards because he thinks that DEQ, rather than EPA, better knows what is right for Oregon.

2. Marianne Morgan Brugger, Citizen.

Ms. Brugger gave testimony expressing her concern that the proposed regulations would cause higher garbage collection fees. She thought that higher collection fees would have a particularly bad effect on elderly people with fixed incomes.

3. Sheila McIlrath, Citizen.

Ms. McIlrath gave testimony expressing concern that EPA's New Source Performance Standards and Emission Guidelines proposed for adoption by DEQ do not adequately protect Oregonians from emissions from municipal waste combustors. She pointed out that municipal waste combustors cannot be continuously monitored for the pollutants they are putting into the air. Ms. McIlrath also claimed that the proposed regulations were promulgated before the completion of the Government Accountability Project on Dioxins, showing a disdain for the

Memo To: Environmental Quality Commission  
August 22, 1996  
Presiding Officer's Report on  
August 15 & 16, 1996 Rulemaking Hearings  
Attachment C, Page 3

general public health and welfare on the part of EPA. Ms. McIlrath also claimed that the only reason that toxic emissions are allowed at all is because EPA bases their studies on limited information and selected science and works too closely with the regulated sources.

Ms. McIlrath claimed that the polluting corporations hold too much power over the federal government, and that those corporations used that power to hide information. Ms. McIlrath averred that, in light of corporate sway over EPA, it was the responsibility of the state and local community to find out the real impact of toxic emissions. As support for her contention, she pointed out that EPA has divisions within its ranks concerning how to best control pollution and that many of EPA's high ranking staff have recently taken jobs with large polluters.

Ms. McIlrath went on to state that regulations cannot adequately control pollution and that it should be necessary for potential polluters to prove that their proposed pollutants are not harmful before being allowed to emit them. She also stated that potential effects of the combustor on the entire ecosystem had not been adequately studied and urged DEQ to look into an alternative approach to chemical regulation proposed by the International Joint Commission Between the United States and Canada in their eighth report.

4. David Schreiner, Citizen

Mr. Schreiner pointed out that concern over any potential increase in garbage collection fees should be brought before the county commission, not DEQ. Mr. Schreiner generally supported the proposal, but thought that the proposal could be better. He welcomed a mercury standard but did not think DEQ did adequate research to determine what the proper standard should be. He thought DEQ should have also studied mercury speciation when burned and the amount of methyl mercury emitted when mercury is burned in order to derive the proper mercury standard.

Mr. Schreiner expressed a concern that the proposed dioxin emission limits are not strict enough in light of scientific evidence of the synergistic effects of even low levels of dioxin over a long period of time. He urged that the U.S. look to permitted dioxin emission levels in European countries, pointing out that the U.S. already imports European trash burning technology.

Mr. Schreiner also requested that DEQ consider a system of surprise spot checks in its monitoring program, arguing that annual source tests do not necessarily provide an accurate portrayal of what a site does during the year. Mr. Schreiner went on to state that giving Ogden Martin three years to comply with the new standards was too lenient, especially in light of the fact that it only took a year and a half to build the entire facility.

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Finally, Mr. Schreiner stated that DEQ should be taking a more progressive approach to pollution prevention and characterized the proposed regulations as a "Band-Aid" approach. He thought a far more effective way to address the problem would be to enact a policy of waste separation similar to the policy already in effect for wallboard so that chlorine based plastics never make it to the incinerator.

Mr. Schreiner also submitted written comments for the record. These written comments included a written version of Mr. Schreiner's oral testimony, a computer diskette copy of the Executive Summary of EPA's Second Dioxin Reassessment, and a transcribed copy of the proceedings for a Physicians for Social Responsibility Colloquium entitled: Dioxin and Health: Truth or Consequences, a discussion of the potential harms from dioxin.

5. Carroll Johnston, Physicians for Social Responsibility

Dr. Johnston represented Physicians for Social Responsibility and expressed the opinion that Oregon would be healthier without the two waste incinerators affected by the proposal because they emit some of the most dangerous toxins on earth. He also expressed that his organization believed that no further dioxin emissions from any source should be allowed to occur because dioxins have very adverse effects on people at very minute doses.

Dr. Johnston went on to outline the characteristics of dioxins, which include biomagnification in the food chain, synergistic effects with other toxins, the ability to pass through the placental barrier and tendency to accumulate in breast milk, the ability to pass through the blood-brain barrier, the long half life in humans and the environment, and the ability to mimic natural hormones in the body and disrupt bodily functions.

Dr. Johnston stated that these effects should require DEQ to treat dioxins with greater attention than less complex toxins and that traditional "one-toxic-one effect" assumptions should be discarded. Dr. Johnston proposed that permissible dioxin emissions be set at safe "lifetime body burdens" that take into account the effects of all interacting toxins from all sources.

Dr. Johnston further warned against "misinformation campaigns" being waged by dioxin-producing industries and compared those industries to the tobacco industry. He accused dioxin-producing industries of using "pseudoscience" and fabrication to shed doubt on the effects of dioxin on people and the environment.

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Dr. Johnston concluded by pointing out that not spending the money necessary at present to bring the Ogden Martin facility into compliance with the proposed regulations would cost Oregonians far more in the run long.

Dr. Johnston also submitted written comments for the record. These written comments included a written version of Dr. Johnston's oral testimony, a guide Dr. Johnston has written concerning resources for learning more about dioxin, and a copy of Dioxin and Human Health: A Public Health Assessment of Dioxin Exposure in Canada, by Tom Webster at the Boston University School of Public Health. Dr. Johnston also submitted for the record a copy of an excerpt from a newspaper article he had published in the Salem *Statesman Journal* on March 30, 1996, a copy of an article entitled The Health Impacts of Incineration published in April, 1994 in *Waste Not*, and a copy of the foreward to Our Stolen Future: Are We Threatening Our Fertility, Intelligence, and Survival? -- A Scientific Detective Story, a book by Theo Colborn, Dianne Dumanoski, and John Peterson Myers.

6. Todd Silverstein, Citizen

Dr. Silverstein testified on three main issues. His first point was that he thought DEQ was moving in the right direction with the proposed regulations, but that the regulations did not go far enough.

Dr. Silverstein's second issue concerned products that produce dioxins when incinerated. Dr. Silverstein felt that these compounds (mostly PVC plastics, but also paints, pesticides, oil, and detergents) should be removed from the "trash stream" before incineration. He contended that studies have proven the removal process to be easy and effective in reducing dioxin emissions, and pointed out that the removed products could generally be recycled.

Dr. Silverstein's final point concerned the controversies over the determination of a scientifically acceptable dioxin threshold and dioxins' synergy with pesticides and other toxins and their potential effect on humans. Dr. Silverstein realized that DEQ had to set standards presently, but urged DEQ to act conservatively and set strict limits on dioxin emissions until a clearer answer emerged from the controversy in the form of more definitive scientific study.

Dr. Silverstein also submitted written comments for the record, an article that Dr. Silverstein wrote entitled The Chemistry of Dioxin Formation and Breakdown.

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7. Charla Richards - Kreitzberg, Citizen.

Ms. Richards - Kreitzberg gave testimony expressing concern over the safety of the Ogden Martin municipal waste incinerator in particular and the prevalent use and emission of chemicals in general. She chronicled her own health problems, which she blames on pollutants in the environment, and asked DEQ to either make Ogden Martin safer or to shut it down completely.

8. Ellen Twist, Citizen.

Ms. Twist gave testimony concerning the overall safety of the Ogden Martin facility. She analogized municipal waste combustors to the drug manufacturing industry, arguing that municipal waste combustors and other polluters should have to prove their products' safety before being allowed to emit them, just as a pharmaceutical company has to prove the safety of their drugs before marketing them.

Ms. Twist also advocated using an independent source facility tester for Ogden Martin to perform unannounced tests on the facility.

9. Michael Marsh, Citizen.

Mr. Marsh gave testimony concerning the relationship between EPA and DEQ. Mr. Marsh thought DEQ should be making decisions on what is right for Oregon rather than EPA. He stated that DEQ was more readily accessible to the average Oregonian than EPA. Mr. Marsh also got the impression that DEQ was hiding behind numbers the average person could not understand and asked DEQ to do less quantitative analyses and to provide more qualitative analyses.

10. Gary Pullman, Citizen

Mr. Pullman argued that the focus of the DEQ and the public in general should be on more recycling and on less combustion and landfills.

There was no further testimony and the hearing was closed at 7:45 p.m.

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Attachments:

Written Testimony Submitted for the Record. (Attachment C1)

- Testimony submitted by David Schreiner (Attachment C1-A)
- Testimony submitted by Carroll Johnston (Attachment C1-B)
- Testimony submitted by Todd Silverstein (Attachment C1-C)

**Attachment C1**

**Index of Public Comments Received**  
**Attachment to Presiding Officer's Report for Rulemaking Hearing**

|    | <b><u>Name/Representing</u></b>   | <b><u>Comment Type</u></b> |
|----|---|----------------------------|
| 1  | Sheila McIlrath<br>Marion Cty. Solid Waste Advisory Council<br>Lay position | Written/Oral               |
| 2  | Dr. Carroll Johnston<br>Physicians for Social Responsibility                | Written/Oral               |
| 3  | Kelly Champion<br>Ogden Martin Systems of Marion, Inc.                      | Written                    |
| 4  | Susan and Karyn Jones<br>CEQ, GASP, CWWG                                    | Written                    |
| 5  | Mary Vogel<br>Friends of Rock, Bronson & Willow Creeks                      | Written                    |
| 6  | Charles Holzweissig   | Written                    |
| 7  | Gerald Warren   | Written                    |
| 8  | Sarvahara Judd<br>Friends of Upper Willamette River, Inc.                   | Written                    |
| 9  | Thomas Stilbolk, Jr.  | Written                    |
| 10 | Robert Richardson   | Written                    |
| 11 | Frederick Gill  | Written                    |
| 12 | Claire Denning  | Written                    |
| 13 | Marcola Hovey (sp?)   | Written                    |
| 14 | Bob ? (illegible last name)   | Written                    |
| 15 | Rosalie Thelander   | Written                    |

## Attachment C1

### Index of Public Comments Received Attachment to Presiding Officer's Report for Rulemaking Hearing

|    | <u>Name/Representing</u>  | <u>Comment Type</u> |
|----|---|---------------------|
| 16 | Arthur Hayward  | Written             |
| 17 | Robert Unitan (sp?)   | Written             |
| 18 | Kristine Bennett  | Written             |
| 19 | Lisa Brenner<br>Oregon Environmental Council<br>Industrial Source Advisory Committee Representative             | Written             |
| 20 | Marianne Barisonek<br>Drolma, Inc.  | Written             |
| 21 | Sharon Genasci<br>Rainbow Video and Film Productions<br>and Industrial Source Advisory Committee Representative | Written             |
| 22 | Bill Smith  | Written             |
| 23 | Michael Pullen<br>Urban League of Portland  | Written             |
| 24 | Beth Woodward   | Written             |
| 25 | Paige Knight<br>Chair, Hanford Watch  | Written             |
| 26 | Michael Cross   | Oral                |
| 27 | Marianne Morgan Brugger   | Oral                |
| 28 | David Shreiner  | Written/Oral        |
| 29 | Dr. Todd Silverstein  | Written/Oral        |
| 30 | Charla Richards   | Oral                |



**Attachment C1**

**Index of Public Comments Received**  
**Attachment to Presiding Officer's Report for Rulemaking Hearing**

|    | <u>Name/Representing</u> | <u>Comment Type</u> |
|----|--------------------------|---------------------|
| 31 | Ellen Twist              | Oral                |
| 32 | Michael Marsh            | Oral                |
| 33 | Gary Pullman             | Oral                |

## Attachment D

### Department's Evaluation of Public Comment

The following comments were summarized from 25 written comments submitted during the comment period and 9 oral testimonies presented during the public hearings. These comments are in response to mailing public notices to a mailing list of 900 interested parties and 2 effected sources.

**COMMENT 1: Inadequate protection of public health** (Commenters: 1, 2, 4 through 25, and 28 through 31)

Commenters expressed concern that the proposed rulemaking does not adequately protect for public health.

**RESPONSE:** This rule is a federal Clean Air Act section 129 technology-based standard. Congress abandoned the risk-based approach because it was found to be ineffective. In the 1970's and 1980's, numerous technology-based standards were implemented under section 111 of the federal Clean Air Act as compared to only a few risk-based standards under section 112 of the federal Clean Air Act. It is recognized that there are health concerns associated with hazardous air pollutants (primarily dioxin/furans and mercury). The proposed emission standards and guidelines will reduce hazardous air pollutant emissions. Within 5 years of implementation of these rules, the EPA will conduct a risk based analysis.

**COMMENT 2: Increased garbage handling fees** (Commenters: 26 and 27)

Two commenters expressed concern about higher garbage fees as a result of the proposed rule.

**RESPONSE:** The Department is required by the federal Clean Air Act to adopt the proposed rules. The fiscal impact of the regulations were evaluated at the national level and determined to be reasonable relative to the environmental benefit of reduced pollutant emissions. The Department recommends that any concern over potential increases in garbage handling fees be addressed to the county commission.

**COMMENT 3: Implement waste separation program** (Commenters: 1, 2, 4 through 25, 28, and 29)

Commenters suggested that dioxin formation could be avoided by eliminating chlorinated materials from the waste stream prior to incineration.

**RESPONSE:** The Department acknowledges that the removal of some types of materials from the waste stream prior to incineration would reduce some hazardous air pollutants. This is especially true for metals such as mercury, lead, and cadmium. As a result, the Department has put restrictions on the type of materials that can be accepted. For example, the current Solid Waste Disposal Permit prohibits Ogden Martin Systems from accepting certain types of materials such as lead-acid batteries.

For other types of hazardous air pollutants, the cause and effect relationship between the type of material burned and the pollutant emissions is not as well defined. This is especially true for dioxin/furan emissions. While it is acknowledged that some form of chlorine is a necessary factor in dioxin/furan formation, the chemical reactions are also influenced by the presence of organic compounds remaining as the result of incomplete combustion and temperatures within certain areas of the exhaust stream. If all organic material were completely oxidized to carbon dioxide and water, there would be no possibility of forming dioxin/furans. In addition, the formation of dioxin/furans only occurs within certain temperature zones downstream of the combustion process. Therefore, since it is virtually impossible to remove all sources of chlorine/chloride from the waste stream, the best approach for minimizing dioxin/furan emissions is to ensure as complete of combustion as possible and regulate the exhaust gas temperature in the particulate emissions control device where dioxin/furans form.

The proposed rules include operating practice requirements that limit the carbon monoxide emissions, pollution control device inlet temperature, and the unit load level. Carbon monoxide is a surrogate for combustion efficiency since it is generally more difficult to completely burn as compared to other organic compounds. The pollution control device inlet temperature is limited to prevent the formation of dioxin/furans in the pollution control device. The unit load level is limited to prevent excessive particulate matter from being carried out of the furnace, which would then be captured in the pollution control device. Both the pollution control device inlet temperature and the unit load limit are established during each dioxin/furan source test. The proposed rules include requirements for continuously monitoring the carbon monoxide emissions, pollution control device inlet temperature, and unit load level.

In addition to the operating practices identified above, the hydrochloric acid (HCl) limits require the removal of most (95%) of the acid gas from the exhaust gas. This is accomplished by a semi-dry lime spray scrubber and baghouse. The effectiveness of the scrubber/baghouse is continuously monitored by monitoring the removal of sulfur dioxide which is also an acid gas and is generally more difficult to remove than HCl.

One other feature of the proposed rule is that the control of mercury emissions requires the use of carbon injection. This control technique is also credited for reducing dioxin/furan emissions. EPA estimates approximately a 50% reduction of dioxins/furans as a result of carbon injection.

While the Department believes that the control mechanisms described above are reasonable and effective, it is also acknowledged that if some types of wastes could be removed prior to incineration and recycled, there would be a net environmental gain. Although waste separation is outside the scope of this rulemaking for existing sources, the Department is investigating the possibility of facilitating a discussion of this issue with all interested parties (regulated source, municipalities, and concerned citizens). This activity would involve a concerted effort by both the Solid Waste and Air Quality Divisions within the Department. It should be noted that the New Source Performance Standards that are included in the proposed rulemaking for new sources do include provisions for developing and evaluating materials separation plans.

**COMMENT 4: Alternative International Joint Commission Approach to regulating air toxic pollutants** (Commenter: 2)

One commenter opposed the proposed regulation and suggest that the Department consider the International Joint Commission between US and Canada approach to regulating persistent toxic chemicals, which favors a more democratic decision making between state and communities.

**RESPONSE:** These regulations are federally mandated by Congress so Oregon cannot postpone the implementation to wait for a better approach. In addition, a postponement would result in not realizing the emissions reductions for existing sources provided by the proposed requirements.

**COMMENT 5: Inadequate monitoring and enforcement** (Commenter: 28)

The commenter was concerned the pollutant emissions cannot be continuously monitored and the Department needs to be more aggressive with enforcement.

**RESPONSE:** While it is true that particulate matter, metals, hydrogen chloride, and dioxin/furan emissions cannot be continuously monitored, the rules include surrogate monitoring for all of these pollutants. As discussed above, operating practices are monitored to assure compliance with the dioxin/furan emissions limits; sulfur dioxide is monitored to assure compliance with the hydrogen chloride emissions limits; and, visible emissions (opacity) is continuously monitored to assure compliance with the particulate matter and metals emissions limits. Combined with continuous monitoring of nitrogen oxides and excess air, and extensive operator training requirements, Municipal Waste Combustors are the most thoroughly monitored source of any in Oregon.

In addition to the continuous monitoring, some of which is surrogate monitoring, the proposed rules include an aggressive source testing schedule for particulate matter (annual), metals (annual), hydrogen chloride (annual), and dioxin/furans (annual). In

some cases, the testing frequency may be reduced based on a proven record of continued compliance.

Some commentors were concerned that source testing is not a good indication of continuous compliance because the test conditions may be purposely manipulated by the source owner or operator to achieve atypical results. While it is true that source testing is not necessarily spontaneous, random, or unbiased, the Department does observe each test to ensure that the process is operating within "normal" operating conditions as especially relates to the type of material being burned and ensures that the proper test methods and procedures are being followed. This, in conjunction with the surrogate monitoring described above, provides a basis for evaluating continuous compliance.

**COMMENT 6: Commingling of power and money between corporations and government leads to cover-up of hazards to public health and environment.**

(Commenter: 2)

**RESPONSE:** The federal regulations were developed by the regulatory negotiation process that involves all interested parties (federal government, local governments, industry, environmental groups, and the public).

**COMMENT 7: Over restrictive continuous monitoring certification reporting requirements** (Commenter: 3)

One of the affected sources had the following comments:

- a. Question the rationale for owners/operators to submit a statement identifying the date continuous monitoring systems was initially certified. Feel this requirement is not found in Federal Register, and feels the requirement exceeds the minimum standards required by EPA.
- b. Concerned above requirement is imposed on combustors and not on other sources in state. Believe combustors should not be held to standards that are more stringent than necessary to get EPA approval, and is more stringent than other industries in the state.

Recommendation to delete requirement, or insert alternative language provided.

**RESPONSE:** The Department has reviewed the continuous monitoring requirements included in the Department's Continuous Monitoring Manual and agrees that it is not necessary to impose additional requirements beyond those included in the Emission Guidelines. Existing continuous emissions monitoring systems must meet on-going quality assurance requirements (accuracy audits) that will ensure that the systems are providing reliable data.

**COMMENT 8: European emission standards and control technology requirements.**

(Commenter: 1, 2, 4 through 25, and 28)

**RESPONSE:** It is difficult to compare European performance data to U.S. performance data due to differences in test methods, quality assurance standards, and reporting methods. In addition, there are differences between European and EPA guidelines with regard to regulatory flexibility, compliance, and test methods used to measure emissions. These factors must be considered when comparing the respective emission requirements. Also, there are differences in national policy towards combustion of municipal solid waste and funding of projects. Although not precluded from using foreign data, the EPA chose to rely on the reasonably large pool of performance and permit data from domestic plants. For this reason, the data from European plants were not used in selecting the MACT floor emission levels, NSPS emission limits, or emission guidelines emission limits.

## Attachment E

### Changes to Initial Rulemaking Proposal in Response to Comments

1. The second sentence of OAR 340-025-0835(2)(c) was deleted:

(c) Unless previously submitted, the performance evaluation of the continuous emission monitoring systems using the applicable performance specifications in the Department's Continuous Monitoring Manual. ~~If previously submitted, the initial performance test report must include the date of the continuous monitoring system performance evaluation and the date that the report was submitted to the Department.~~

2. OAR 340-025-0840(4)(a)(A) and (B) were deleted:

(4) Continuous monitoring.

(a) For small and large municipal waste combustor plants, the owner or operator of an affected municipal waste combustor unit must have installed and certified continuous monitoring systems for opacity, diluent gas (oxygen or carbon dioxide), sulfur dioxide, nitrogen oxides (large municipal waste combustors only), carbon monoxide, municipal waste combustor unit load level (if applicable), and particulate matter control device inlet temperature in accordance with OAR 340-025-0815 and 340-025-0825 by December 31, 1997.

~~(A) For existing continuous monitoring systems that have been certified, the owner or operator must submit to the Department by December 31, 1997 a statement identifying the date that the system(s) was initially certified and whether any significant modifications have been made to the system. For the purposes of this rule, a significant modification of a continuous monitoring system is any of the following:~~

~~(i) a pollutant analyzer change, including internal electronics and sensor detection components other than those specified by the manufacturer as routine maintenance;~~

~~(ii) a data acquisition system replacement; or~~

~~(iii) a change in any other component (e.g., sample probe, sample line, sample conditioner) that involves a change in technology (e.g., a wet basis dilution probe is replaced with a dry basis dilution probe).~~

~~(iv) Like for like changes of components other than pollutant analyzers are not considered significant modifications.~~

~~(B) If a significant modification has been made to the existing continuous monitoring system, the owner or operator must conduct~~

~~a performance specification test for recertifying the system and submit the results to the Department by December 31, 1997.~~

(b) The owner or operator of a municipal combustor unit that installs carbon injection for control of mercury or dioxin/furan emissions must submit documentation that the carbon injection monitoring system is installed and operational with the first mercury or dioxin/furans performance test report.

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## **New Source Performance Standards (NSPS) and Emission Guidelines**

### **Municipal Waste Combustor Plants**

The following is a summary of proposed NSPS and Emission Guidelines for municipal waste combustor plants. Copies of the proposed rules may be requested from Eunice Hopkins at (503) 229-5464, or 1-800-452-4011 (in Oregon).

#### **What is this rulemaking about?**

In response to section 129 of the 1990 Clean Air Act Amendments, EPA promulgated on December 7, 1995 regulations for new and existing municipal waste combustor (MWC) plants that have capacities greater than 35 megagrams per day. Regulations for new MWC plants that commence construction after September 20, 1990 were promulgated as a New Source Performance Standard (NSPS) in 40 CFR Part 60 Subpart Eb. Like all other NSPS regulations, the DEQ is proposing to adopt the requirements by reference into the Oregon Administrative Rules (OAR).

For existing MWC plants that commenced construction before September 20, 1994, EPA promulgate Emission Guidelines with the requirement that each state shall adopt and submit to EPA a 111(d) State Plan for the control of the designated pollutant to which the guideline document applies. Emission guidelines reflect the degree of emission reduction achievable through the application of the best system of emission reduction which (taking into account the cost of such reduction) the EPA has determined has been adequately demonstrated for designated facilities. EPA uses the emission guidelines and State Plan approach for existing sources instead of the NSPS rulemaking process so that each state can adopt the requirements while addressing any state, public, or source specific concerns and provide appropriate compliance schedules for retrofitting existing facilities to add any necessary controls. In general, State Plans shall include:

1. emission standards that are no less stringent than identified in the Emission Guidelines; unless the state provides adequate justification;
2. a compliance schedule no longer than 12 months from Plan approval; unless the state provides adequate justification for a longer schedule, but not to exceed 3 years;
3. emission inventories and source surveillance; and
4. show that the state has legal authority to carry out the plan.

Note: For the MWC emission guidelines, EPA has required that the state adopt emission limits and standards at least as stringent as those identified in the emission guidelines with no exceptions. Furthermore, any compliance schedule extending beyond 12 months shall include legally enforceable increments of progress to achieve compliance for each designated facility.

DEQ proposes to satisfy the legal authority requirement by incorporating the emission guidelines into existing Oregon Administrative Rules (Chapter 340, Division 25). The State Plan, including the state rules, is required to be submitted to EPA by December 7, 1996. Prior to adoption of the Plan, the state must provide for one or more public hearings (see schedule below).

Existing MWC plants are currently subject to the state solid waste incinerator rules (OAR 340-025-0850 through 0885). However, because of the overlap in regulations and numerous inconsistencies, the Department has decided to propose new rules to incorporate the emission guidelines and exclude MWC plants from the state incinerator rules. The state incinerator rules will remain in effect for all other types of incinerators and MWC plants with capacities less than 35 megagrams per day. The Department has chosen to propose new rules for the MWC plants because the state solid waste incinerator rules were developed as general requirements for all types of incinerators; whereas, the emission guidelines were carefully developed through EPA's rulemaking process specifically for municipal waste combustors. During the rulemaking, EPA evaluated emission limits, averaging times, monitoring, testing, recordkeeping and reporting using the procedures for establishing maximum available control technology (MACT) standards in accordance with section 112(d) of the Clean Air Act. This rigorous analysis was much more comprehensive than the analysis used to establish the existing state incinerator rules.

#### Why is this rulemaking being proposed?

This rulemaking is being proposed in response to EPA requirements for addressing adverse health and environmental effects from MWC units.

#### Who does this rulemaking affect?

The NSPS will affect new MWC plants that commence construction after September 20, 1994. To this date, there have been no applications for new MWC plants in Oregon.

The Oregon Administrative Rules that incorporate the emission guidelines affect the following two MWC plants in Oregon:

1. Ogden Martin operates two MWC units located at Brooks. For purposes of the proposed rules, this facility is designated as a large MWC plant (combined capacity >225 megagrams/day).
2. Coos County operates three MWC units located at Beaver Hill. For purposes of the proposed rules, this facility is designated as a small MWC plant (combined capacity <225 megagrams/day).

What are the basic requirements?

1. Emission limits and standards:

A summary of the proposed emission limits and standards for small and large MWC plants is provided in Table 1.

2. Testing and monitoring:

A summary of the proposed testing and monitoring for small and large MWC plants is provided in Table 2.

3. Reporting and recordkeeping

Each MWC plant shall maintain records of testing and monitoring information, including emissions data, MWC unit operation data, test reports, quality control data for continuous monitors, and operator training information. An initial compliance certification report is required by the compliance schedule date and monitoring reports, including compliance certification reports, are required semi-annually thereafter.

4. Compliance schedules:

- a. Based on monitoring data and the results of a recent source test conducted at the Coos County facility, all of the MWC units are in compliance with all of the emission limits and standards in the proposed rule. Therefore, the emission limits and standards have an effective date of June 7, 1997 with compliance to be demonstrated by no later than June 7, 1998.

- b. Based on monitoring data and the results of the most recent tests conducted at the Ogden Martin facility, both of the MWC units are in compliance with the PM, Opacity, lead, HCl, SO<sub>2</sub>, dioxin/furan, and CO limits. It is also presumed that the units are in compliance with the cadmium limit. Therefore, like Coos County, the emissions limits and standards for the pollutants listed above have an effective date of June 7, 1997 with compliance to be demonstrated by no later than June 7, 1998.
- c. It is anticipated that Ogden Martin will require a retrofit of the MWC units to install thermal deNO<sub>x</sub> and carbon injection to meet the emissions limits for NO<sub>x</sub> and Mercury; respectively. The emission guidelines require compliance within one year of the State Plan approval by EPA (we anticipate June 7, 1997), unless the state plan includes a federally enforceable compliance schedule, then the compliance period could be as long as 3 years. Available information suggests that meeting the 12 month compliance date is not a reasonable expectation due to the magnitude of the retrofit project. Ogden Martin is in compliance with existing NO<sub>x</sub> and Hg emission limits in their Air Contaminant Discharge Permit so the DEQ proposes to allow the maximum amount of time to demonstrate compliance with the new emission limits for NO<sub>x</sub> and Hg.

What is the rulemaking schedule?

|   |                     |
|---|---------------------|
| Hearing Authorization Topic Form Due                      | 6-11-96             |
| Hearing Authorization Topic Review Meeting                | 6-18-96             |
| Draft Public Information Package to reviewers<br>(at DEQ) | 6-20-96             |
| Hearing notice to Secretary of State (SOS)                | 7-15-96             |
| Mail notice and public information package                | 7-15-96             |
| Notice published in SOS Bulletin                          | 8-1-96              |
| Public hearing  | 8-15-96 and 8-16-96 |
| EQC Meeting (adoption date)                               | 10-10-96            |

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**Air Quality Industrial Source Advisory Committee IV Members**  
**Page 2**

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## **Attachment H**

### **Rule Implementation Plan**

### **Municipal Waste Combustors**

#### **Summary of the Proposed Rule**

This rulemaking proposal establishes New Source Performance Standards and Emission Guidelines for Municipal Waste Combustors with capacities greater than 35 Mg/day. The proposed rules establish emission limits and standards for new and existing municipal waste combustor plants.

#### **Proposed Effective Date of the Rule**

December 31, 1997.

#### **Proposal for Notification of Affected Sources**

The Department discussed the proposed rule with affected sources on May 15 and 16, 1996 and were notified as part of the mailing prior to the public hearings.

#### **Proposed Implementing Actions**

The proposed rules will be implemented through the Department's permitting program. Once the proposed rules are adopted and the State Plan is approved by EPA, no later than June 19, 1997 the Department will issue Oregon Title V Operating Permits to the affected sources that will replace their existing Air Contaminant Discharge Permits to incorporate the new standards contained in this rule. The Title V permits must be issued by January 3, 1998.

#### **Proposed Training/Assistance Actions**

No additional training is required because the proposed rules will be implemented through our existing permitting programs.

mwcimpl2

## Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item H  
October 11, 1996 Meeting

**Title:**

LRAPA PM10 Control Strategy for the Oakridge PM10 Nonattainment Area as a revision to the State of Oregon Clean Air Act Implementation Plan (SIP), OAR 340-20-047.

**Summary:**


Ambient air quality in Oakridge, Oregon (population 3,700) has exceeded the 24-hour national ambient air quality health standard for respirable particulate (PM10) twelve times since 1990. As a result, Oakridge has been designated by the Environmental Protection Agency as a moderate PM10 Nonattainment Area. The Lane Regional Air Pollution Authority (LRAPA) has primary responsibility for the development and implementation of air quality control programs in Lane County. The redesignation of Oakridge to nonattainment has required LRAPA to develop a PM10 emission control strategy which will reduce emissions and demonstrate compliance with standards by the Clean Air Act deadline of December 31, 2000. The Oakridge PM10 Control Strategy involves two primary emission reduction measures (residential woodsmoke curtailment and winter road sanding reductions) which will have some effect on the public, local government, and Oregon Department of Transportation. The Environmental Quality Commission must adopt LRAPA's plan as a revision to the SIP before it can be submitted to the Environmental Protection Agency for approval.

**Department Recommendation:**

It is recommended that the Commission adopt the Oakridge PM10 Control Plan as presented in Attachment A as a revision to the SIP.

  
Report Author

  
Division Administrator

Director 



State of Oregon  
Department of Environmental Quality Memorandum

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Date: September 4, 1996  
To: Environmental Quality Commission  
From: Langdon Marsh  
Subject: Agenda Item H, October 11, 1996 EQC Meeting

LRAPA PM<sub>10</sub> Control Strategy for the Oakridge PM<sub>10</sub> Nonattainment Area, as a revision to the State of Oregon Clean Air Act Implementation Plan.

Background

On July 16, 1996, the Air Quality Division Administrator authorized the Lane Regional Air Pollution Authority (LRAPA) to act as hearing's officer for the Commission and proceed to a rulemaking hearing on proposed rules which would adopt a PM<sub>10</sub> emission control strategy for the Oakridge PM<sub>10</sub> Nonattainment Area developed by LRAPA.

Hearing notice was subsequently published in the Eugene Register Guard and Oakridge Dead Mountain Echo. Notice of intent to bring this action before the Commission for proposed adoption was published in the Secretary of State's Bulletin on September 1, 1996. The Hearing Notice and informational materials were mailed to those persons who have asked to be notified of rulemaking actions, and to persons known by the Department to be potentially affected by or interested in the proposed rulemaking action.

A Public Hearing was held by LRAPA in Oakridge on July 18, 1996, with the comment period open through August 12, 1996. No public comment was received. The LRAPA Board of Directors adopted the Oakridge Control Strategy on August 13, 1996. The Department and Environmental Protection Agency provided some technical comments prior to public hearing that have been addressed. The Presiding Officer's Report (Attachment C) summarizes the public hearing.

The following sections summarize the issue that this proposed rulemaking action is intended to address, the authority to address the issue, the process for development of the rulemaking proposal including alternatives considered, a summary of the rulemaking proposal presented for public hearing, a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

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

Issue this Proposed Rulemaking Action is Intended to Address

Ambient air quality in Oakridge, Oregon (population 3,700) has exceeded the 24-hour national ambient air quality health standard for respirable particulate (PM<sub>10</sub>) twelve times since 1990. As a result, Oakridge has been designated by the Environmental Protection Agency (EPA) as a moderate PM<sub>10</sub> Nonattainment Area. Exposure to PM<sub>10</sub> is of concern because of human health effects such as changes in lung functions and increased respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alteration in the body's defense system against foreign materials, damage to lung tissue, increased risk of cancer and, in extreme cases, premature death. Most sensitive to the effects of respirable particulate matter are people with chronic obstructive pulmonary cardiovascular disease and those with influenza, asthmatics, the elderly, children and mouth-breathers.

The Lane Regional Air Pollution Authority (LRAPA) has primary responsibility for the development and implementation of air quality control programs in Lane County. The redesignation of Oakridge to nonattainment requires LRAPA to develop a PM<sub>10</sub> emission control strategy which will reduce emissions and demonstrate compliance with standards by the federal Clean Air Act deadline of December 31, 2000.

Relationship to Federal and Adjacent State Rules

The Clean Air Act requires PM<sub>10</sub> control strategies to be developed and submitted for EPA approval by a certain date. The Clean Air Act submittal deadline for the Oakridge PM<sub>10</sub> Control Plan was July 20, 1995. Because of deficiencies in work conducted by a private contractor hired to perform technical analysis and plan development, LRAPA had to conduct extensive additional technical and development work, significantly delaying completion of the PM<sub>10</sub> control plan. EPA was kept apprised throughout the process, and has allowed some flexibility in meeting the submittal deadline. However, EPA is eager to receive the completed plan as soon as possible. The attainment date for Oakridge is December 31, 2000. The proposed control strategy is consistent with federal PM<sub>10</sub> nonattainment area requirements. Adjacent states have adopted similar control measures for PM<sub>10</sub> nonattainment areas.

Authority to Address the Issue

|                       |   |
|-----------------------|---|
| ORS 468A.035          | Comprehensive Air Pollution Control Plan          |
| OAR 340-20-047        | State of Oregon Clean Air Act Implementation Plan |
| 42 USC §§ 7401 et.al. | Clean Air Act Amendments of 1990                  |

Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)

LRAPA has worked closely with city officials, the Department of Environmental Quality, the Department of Transportation, and a citizen's air quality advisory committee representing the general public, civic, business, and industry leaders, to evaluate and select appropriate control strategies. Failure to adopt a required control plan can result in citizen law suits and EPA sanctions.

Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.

Implementation of the Oakridge PM<sub>10</sub> Control Strategy involves two primary measures which will have some effect on the public, local government, and Oregon Department of Transportation. Residents with woodstoves and fireplaces are the groups most affected by the proposed control strategy..

1. **Residential Woodheating Measures.** The principal means of achieving the needed PM<sub>10</sub> emission reductions in Oakridge is through a voluntary woodburning curtailment and emission reduction program, an aggressive public education program, a noncertified woodstove replacement program, a ban on the installation of noncertified stoves, and restrictions on residential open burning. Under the voluntary curtailment program, woodburning households will be asked to curtail woodburning in stoves and fireplaces during air stagnation episodes. A minimum compliance target rate of 25 percent has been set for the voluntary program. Low income and sole source wood-heated homes are being exempted from this action.

The typical cost to comply with woodburning curtailment is estimated at \$2-\$5 per curtailment day per woodburning home, depending upon the type of alternative heat, amount of weatherization, and size of home. It is expected that homeowners will be asked not to burn wood on 10 to 20 days during the winter heating season when the voluntary curtailment program is in effect. Based on these estimates, the total cost per household associated with the voluntary curtailment program is expected to range from \$20 to \$100 each year.

Many low-income residents have already benefited from a noncertified-woodstove replacement assistance program administered by the City of Oakridge and funded through a \$300,000 grant. This program has provided zero-interest loans to low-income households for the replacement of noncertified woodstoves, and uses loan repayments to finance additional replacements. Approximately 130 noncertified woodstoves have already been replaced under this program.

For those households installing a new woodheating system, the ban on the sale and installation of used, noncertified woodstoves will eliminate the lower cost option of a used, noncertified

woodstove. The woodheating strategy is implemented through the Oakridge Air Quality Program ordinance and the Department's rules regulating woodstoves. Additional emission reductions will be achieved through a seasonal limitation on residential backyard burning.

2. **Industrial Emissions and Growth Measures.**

There are no significant industrial emission sources in Oakridge. Wood products industry has been closed for several years. The city is actively seeking new economic opportunities for the community, including new industry. New industrial sources within the nonattainment area will be subject to the Department's New Source Review rules.

3. **Road Sanding-Dust Measures.** The Oregon Department of Transportation will coordinate with Oakridge officials to reduce emissions from winter road sanding through the use of the liquid chemical de-icing compound CMA (Calcium Magnesium Acetate). Use of a liquid chemical de-icing strategy is viewed as superior to conventional sanding control measures because of the additional emission reductions achieved. The decision to use this material is based in part on its negligible water quality impacts. The strategy was reviewed and approved by the Department's Western Region water quality staff.

4. **Prescribed Forestry Burning Measures.** A Special Protection Zone (SPZ) has been established in a 20 mile radius around Oakridge in order to protect against smoke intrusions from prescribed burning. Operation of this SPZ is the responsibility of the Oregon Department of Forestry. The SPZ will also affect private land owners who wish to conduct prescribed burning during the winter control period.

5. **Contingency or Backup Measures.** The federal Clean Air Act requires states to include contingency measures in the  $PM_{10}$  control strategy that can be automatically implemented if the base attainment strategy fails to demonstrate Reasonable Further Progress (RFP) toward attainment, or attainment of the NAAQS by the Clean Air Act deadline. The RFP milestone of December 31, 1999 will require an evaluation of the success achieved in implementing the primary  $PM_{10}$  control strategy and in reducing emissions. If the Department, in consultation with LRAPA, EPA and the City of Oakridge, determines that RFP has not been demonstrated, contingency measures will be implemented.

The Oakridge PM<sub>10</sub> Control Strategy includes the following contingency measures:

1. The Oakridge Clean Air Ordinance provides for the implementation of a mandatory residential woodheating curtailment program if the area fails to show Reasonable Further Progress by December 1998, or attain the standard by the 1999 deadline. A mandatory curtailment program would include enforcement of curtailment requirements, including possible civil penalties. Generally, low income and sole-source woodburning homes are exempt from curtailment requirements.
2. The state has authority to implement a required curtailment program if the local government fails to do so.
3. The state has authority to require, as a PM<sub>10</sub> contingency measure, the removal of noncertified woodstoves in a PM<sub>10</sub> nonattainment area upon sale of a home. If implemented, homeowners would lose any resale value assigned to the used stove, typically in a range of \$50 to \$300.

#### Summary of Significant Public Comment and Changes Proposed in Response

A public hearing was held in Oakridge on July 18, 1996. No public comment was received. Technical comments from the Department and Environmental Protection Agency were incorporated into the draft plan prior to public hearing.

#### Summary of How the Proposed Rule Will Work and How it Will be Implemented

The City of Oakridge will work with LRAPA to implement the required local PM<sub>10</sub> control measures. Regional Oregon Department of Transportation staff will work to implement the new winter road de-icing program. The DEQ staff can provide technical assistance if necessary to LRAPA and the City of Oakridge.

Oregon Department of Forestry will be responsible for operation of the Oakridge Special Protection Zone.



Recommendation for Commission Action

It is recommended that the Commission adopt the Oakridge PM<sub>10</sub> Control Plan as presented in Attachment A.

Attachments

- A. Rule (Amendments) Proposed for Adoption
- B. Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Fiscal and Economic Impact Statement
  - 3. Land Use Evaluation Statement
  - 4. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
  - 5. Cover Memorandum from Public Notice
- C. Presiding Officer's Report on Public Hearing/LRAPA's Evaluation of Comment
- D. Local Ordinance for Contingency Measure
- E. Oregon Department of Transportation Commitment

Reference Documents (available upon request)

Technical appendix for the Oakridge PM<sub>10</sub> Control Plan are available from the Lane Regional Air Pollution Authority.

Approved:

Section:

Division:

*John F. Kawalysz*  
*Gregory A. Green*

Report Prepared By: David L. Collier

Phone: (503) 229-5177

Date Prepared: September 4, 1996

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10/19/95

Attachment A

ATTAINMENT PLAN  
FOR THE OAKRIDGE, OREGON  
PM<sub>10</sub> NONATTAINMENT AREA

Lane Regional  
Air Pollution Authority

August, 1996



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## EXECUTIVE SUMMARY

The City of Oakridge, Oregon, does not meet National Ambient Air Quality Standards (NAAQS) established by the federal government, primarily due to historic high levels of very small airborne particulate (PM<sub>10</sub>). As a result, in December of 1993, the US Environmental Protection Agency declared the City of Oakridge a PM<sub>10</sub> non-attainment area, effective January 9, 1994.

Under the Clean Air Act Amendments of 1990, areas so designated must develop a plan which documents periods of excessive PM<sub>10</sub> levels ("exceedances" of the standard), examines the causes, and outlines a strategy to reduce emission levels to meet air quality standards by the end of the sixth year after designation.

In Oakridge the specific ambient air quality standard exceeded is the short-term (24-hour) average of 150  $\mu\text{g}/\text{m}^3$  (150 micrograms per cubic meter) of air. Observed values from saturation monitoring studies throughout the area of Oakridge show maximum PM<sub>10</sub> ambient concentrations of 210-220  $\mu\text{g}/\text{m}^3$ . These values are related to the permanent monitoring site. Further, an emission inventory, combined with telephone and visual surveys, have documented that most (about 76 percent) PM<sub>10</sub> emissions are from residential wood heating devices (woodstoves) and, to a lesser degree, from dust created from wintertime street traffic, unpaved streets and traction sanding on Highway 58. Chemical Mass Balance analysis of airborne material indicates a close correlation, in that 81 percent of air quality impact at sampling sites is from residential woodstove emissions, and approximately 16 percent impact from road dust. Other minor contributing sources include transportation, railroad diesels, industry and logging slash burning.

The plan outlined in this document provides for reduction of PM<sub>10</sub> concentrations in Oakridge to a value that on any expected "worst-case day" will comply with the NAAQS 150 microgram limit. Attainment strategies include:

### Woodstoves

- Enhancement of an ongoing voluntary wood burning curtailment program to include aggressive educational and outreach measures, as well as an on-site contractor to concentrate compliance efforts on repeat violators of the wood heating advisory. An enhanced public education program will provide a local woodstove information and compliance person to encourage clean wood-burning techniques, support stove replacement, and encourage the present voluntary curtailment advisories. This program will encourage, as will a city- and agency-wide policy, home weatherization and energy conservation.
- Continuation, as long as funds are available, of a demonstration woodstove buyback program to be administered by the City of Oakridge. Emission reduction credit is taken for the program, to date. The program enables eligible residents to purchase new, low-emission heating appliances (along with

selected weatherization measures) up to \$2500, using a no-interest loan or grant, depending on each resident's financial situation. Additional funding has not been identified except for the possibility that the city of Oakridge may seek CDB grant requests to additionally fund the program. About 130 stoves have been replaced thus far.

- A mandatory woodstove curtailment program will be implemented upon notification by EPA that the plan will not attain NAAQS or that milestones are not being met prior to the attainment date. The city has committed to adopting an ordinance for curtailment with an effective date to be based on EPA notification.

#### Road Dust

- City program of paving unpaved streets, much of which has occurred in the last several years.
- Dust from de-icing of Highway 58 will be reduced through use of non-dusty de-icing compounds, such as liquid de-icers.

The strategies here will demonstrate attainment and maintenance with a small margin for growth beyond that projected. Other measures which will enhance air quality and provide additional growth allowance, but which are not given specific credit in the attainment demonstration, are a city ordinance limiting open (backyard) burning to periods in the spring and fall, normal turnover of uncertified woodstoves, and a city ordinance banning construction of unpaved commercial driveways. In addition, the Oregon Department of Forestry's smoke management plan provides a Special Protection Zone (SPZ) around Oakridge for slash burning. Industry is not a significant source, and there are no additional control measures affecting existing industrial sources.

Assumptions and methodologies used to estimate emissions and make projections are conservative; that is, they tend to be at mid-range or worst-case end of likely air quality scenarios. This is particularly important to note in that, unless emissions reduction measures beyond those in the plan are taken, there is not much room in the Oakridge airshed for heavy industrial growth with PM emissions; nor is there much room for high population growth, with the attendant transportation increases, beyond that projected.

This plan has been developed with the cooperation of the Oregon Department of Environmental Quality, Lane Regional Air Pollution Authority, the Oregon Department of Transportation Highway Division, the Oakridge Air Quality Committee, and the citizens of Oakridge. It represents a challenging but innovative approach to permanently solving this non-attainment problem.

## 4.18.1 INTRODUCTION

### 4.18.1.1 BACKGROUND

On July 1, 1987, the United States Environmental Protection Agency (EPA) adopted a revised National Ambient Air Quality Standard (NAAQS) for airborne particulate matter less than 10 micrometers in aerodynamic diameter. These particles, termed  $PM_{10}$ , which is about one-tenth of the diameter of a human hair, is considered a risk to human health due to the body's difficulty in expelling them. The small  $PM_{10}$  particles enter through the nose and mouth and can penetrate the deeper regions of the lung where they contribute to respiratory distress, especially among people with lung diseases, young children, and the elderly. Among these populations, high levels of air pollution have been linked with an increase in mortality.

$PM_{10}$  is defined as particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by an approved method listed in 40 CFR 53. National Ambient Air Quality Standards for  $PM_{10}$  include a 24-hour concentration of  $150\mu\text{g}/\text{m}^3$ , not expected to be exceeded more than one time per year. Compliance with this short-term standard is determined by dividing the number of 24-hour exceedances in the most recent 3-year period by three. If the result is greater than one, the 24-hour NAAQS is exceeded. The standards also include an annual arithmetic mean of  $50\mu\text{g}/\text{m}^3$ , which is determined by a averaging of the 24-hour values for the year, in accordance with Appendix K. (See Appendix K, Part 50, CFR)

The State of Oregon and Lane Regional Air Pollution Authority have adopted both of these standards, which must be met everywhere in the outdoor atmosphere where there may be public access.

While air quality data have indicated no exceedances in Oakridge of the annual  $PM_{10}$  standard of  $50\mu\text{g}/\text{m}^3$ , nine exceedances of the 24-hour standard were recorded in 1991, two in 1992, one in 1993, and none in 1994. In December, 1993, the U.S. EPA designated Oakridge, Oregon as a  $PM_{10}$  non-attainment area, effective January, 1994. The Clean Air Act Amendments of 1990 requires the submittal of a control strategy as part of the State Implementation Plan (SIP) to bring Oakridge into compliance with the NAAQS.

### 4.18.1.2 METHODOLOGY FOR CREATING THE OAKRIDGE SIP

The State Implementation Plan (SIP) must demonstrate that as expeditiously as practicable, but no later than by the end of the sixth calendar year after the effective date of designation (December 31, 2000) the air quality in the area will attain the federal standards. The plan must contain: (a) enforceable emission reduction measures to bring the area into attainment, (b) milestones showing progress toward the goal, and (c) contingency and emergency episode plans that will be automatically implemented should control measures not produce the designed

emission reductions, eliminate ambient exceedances or if air quality emergencies require additional control measures.

The specific steps for creating a SIP for Oakridge are:

1. Establish Base Year Data

The baseline year will be a recent "worst-case" year having the greatest number of NAAQS exceedances during extreme meteorological and air quality conditions. Once the base year is determined, ambient air quality data is used to set a baseline PM<sub>10</sub> concentration on a worst-case day for that year. Since one exceedance per year is allowed for running three-year periods, and if sufficient data is used, the design value will be the fourth highest measured concentration. It should, however, be set in an area of maximum concentration, to ensure that all areas meet the NAAQS.

In addition to the air quality data, a baseline year emissions inventory (EI) identifies and quantifies sources of PM<sub>10</sub> emissions that contribute to the problem. This inventory is then converted to a worst-case day, in order to evaluate the impact of each source category. The selected control measures' effect on the 24-hour concentrations are then evaluated.

2. Calculate Attainment Year Requirements

The worst-case day emissions for each source category are projected forward to a worst-case day in the attainment year, accounting for changes in emissions due to population, dwelling units, transportation and industrial growth in the community. Based on these projected emissions, an analysis is performed which shows what the impact will be on air quality without control measures.

The attainment year requirements are calculated using a rollback technique, which assumes that emission reductions will result in proportional reductions in ambient concentrations, minus background under worst-case meteorology. Thus, overall emissions rollback needed in the attainment year is the same percentage of total emissions as is the percent difference between design value and the NAAQS.

3. Establish Control Strategies

The control strategies incorporate selected emission reduction measures to achieve attainment. The SIP will identify specific emission reductions achieved by each measure, identify resources to implement the control measures and how and by whom the measures will be implemented, including any necessary rules, ordinances, and government commitments required.



#### 4. Other Requirements

The SIP must also document how the standards will be maintained for at least three years after the attainment year. It must provide a contingency plan which will be quickly implemented if the SIP is deemed inadequate, or should it fail to achieve the standards by the attainment date or if RFP is not demonstrated. Finally, the SIP process must involve the public, and these involvements must be described.

##### 4.18.1.3 ORGANIZATION OF THIS SIP

This State Implementation Plan has eight sections. The first is this section, the Introduction. The second describes the Oakridge area, its physical and economic aspects, and its meteorology. The third examines the ambient air quality for Oakridge, identifying the base year and establishing air quality data for that year, including the worst-case day. The fourth inventories and quantifies the area's particulate emissions for the base year, including the worst-case day. The fifth projects the worst-case day air quality and emissions, without controls and with anticipated growth, for the attainment year. It determines the design value and calculates the emission reductions needed to achieve attainment. The sixth section describes the control measures, their calculated air quality impact, cost, resources, how each measure will be implemented, and by whom. The seventh section outlines provisions to maintain compliance with the NAAQS as Oakridge develops, and establishes a  $PM_{10}$  budget for transportation conformity determinations. The last section describes public participation in the implementation of the SIP. Finally a number of appendices provide supplemental documentation supporting the SIP.

## 4.18.2 THE OAKRIDGE AREA

### 4.18.2.1 PHYSICAL DESCRIPTION

Oakridge, Oregon lies in an alluvial plain in the foothills at the southern end of the Willamette River valley. The city is in Lane County, Oregon, approximately 45 miles east-southeast of Eugene, and 28 miles west of Willamette Pass, the summit of the Cascade Mountain Range. The city limits of present-day Oakridge includes the historic city of Oakridge and, directly west, the area formerly known as Willamette City. Figure 2.1 shows the Oakridge area.

The area of applicability for this SIP is the Oakridge Urban Growth Boundary (UGB), much of which is common to the city limits. This comprises an area approximately 2.6 miles by 0.9 miles, or approximately 2.4 square miles. The UGB is situated in a valley oriented east-west, through which flows the middle fork of the Willamette River. Elevation of the area ranges from 1100 feet at the lower (west) end of the UGB to 1600 feet, MSL, with areas of densest population situated between 1100 feet and 1200 feet. Mountains rise on the north and south sides to 1700 feet and 1600 feet, respectively. Figure 2.2 shows the immediate area, including the UGB.

### 4.18.2.2 ECONOMY AND POPULATION

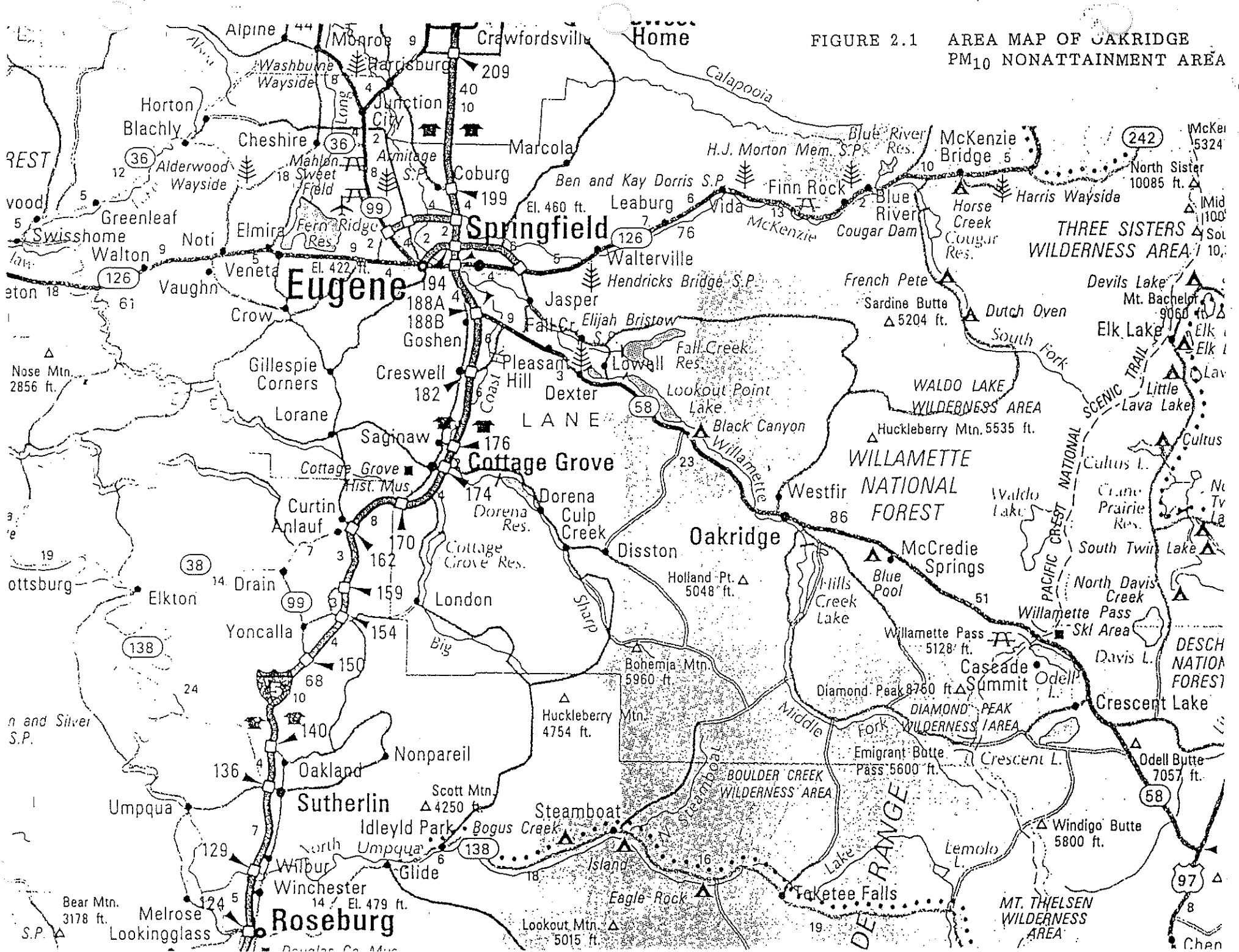
Population within the UGB is approximately 3,100 people, living in approximately 1,600 dwellings. Approximately 1,000 more people live in the surrounding area. Recent census data suggests the population is stable or slowly increasing after years of stability or decreases in population. This pattern is reflected by low vacancy rate in local housing, and a recent upturn in building activity.

Oakridge is surrounded by the Willamette National Forest which, through timber production, has traditionally served as the base for employment and the local economy in general. In addition to logging, jobs associated with the forest include trucking, equipment sales and maintenance, and a variety of supporting government occupations in forest management. More recently, the area has become known for its recreational opportunities. Mountain biking, in particular, has caught on in the area. The service and tourist economy has picked up accordingly, with several food service establishments and a motel being added in the last three years.

#### 4.18.2.2.1 Industry

Historically, industry in Oakridge developed around the harvesting and processing of timber and timber products, and the businesses which service those industries. Today, timber harvesting plays a much smaller role in the economic livelihood of the

FIGURE 2.1 AREA MAP OF OAKRIDGE PM10 NONATTAINMENT AREA



OAKRIDGE PM<sub>10</sub> NON ATTAINMENT AREA

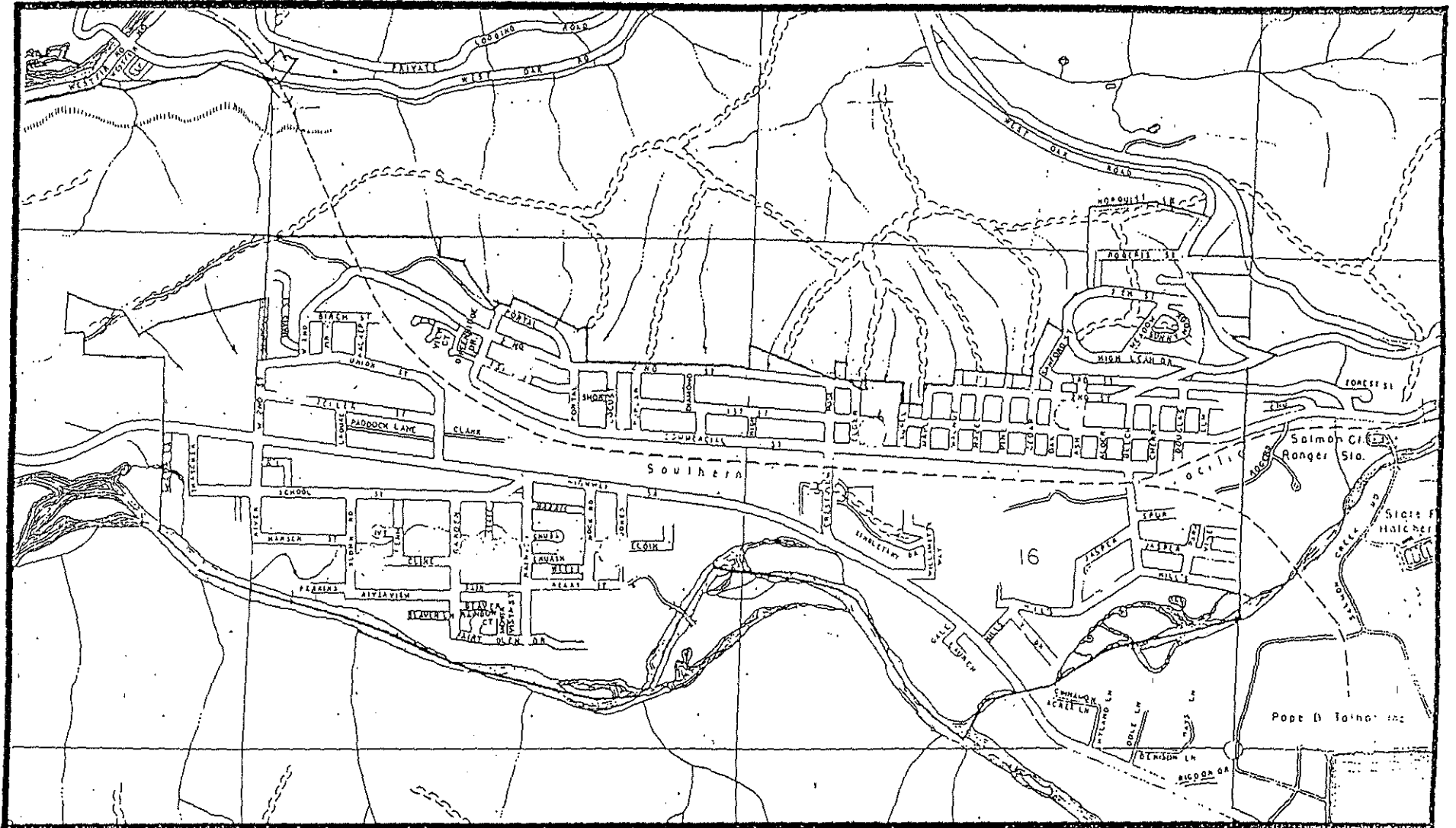


Figure 2.2

community, as the timber base throughout the Pacific Northwest region shifts from large, old-growth timber to smaller, second-growth.

This shift is accompanied by a move toward the processing of timber at large centralized mills, as fewer small mills are able to successfully compete with larger mills that incorporate high-technology processing operations. This move, along with intense competition for the remaining public timber resources in the area, has resulted in the closure and dismantling of the large wood processing facilities in Oakridge.

These large industries, a sawmill and a plywood veneer manufacturing operation, have been replaced by a small log-chipping mill which operates at the site. Other small industry includes a rock crushing and gravel extraction plant south of downtown near the Willamette River. Several cottage industries have started manufacturing operations at the former sawmill and veneer plant sites.

#### 4.18.2.2.2 Public Sector Employment

The headquarters of two U.S. National Forest Service ranger districts of the Willamette National Forest are located in Oakridge. Oakridge and Rigdon ranger districts provide employment for approximately 110 individuals, many of whom live in the Oakridge area. The U.S. Fish and Wildlife Department also operates a fish hatchery providing employment for 14 people.

#### 4.18.2.2.3 Other Employment

Other businesses supporting the timber industry, such as road construction, equipment supply, trucking, and maintenance also contribute to the economy. Tourism is becoming increasingly important as the area capitalizes on its rugged beauty and easy access for camping, fishing, boating, and recently, mountain bicycling activities.

Local climate is affected by the nearby Willamette Valley, although area geography contributes to substantially more sunshine in Oakridge than occurs in the Willamette Valley. This, along with its small-town environment and access to recreational activities, has contributed to increased popularity of this area as a destination for retirees, who account for 30 percent of the population.

#### 4.18.2.3 METEOROLOGY

As do most areas west of the crest of the Oregon Cascades, Oakridge experiences a marine climate, with 46 inches of precipitation annually (approximately 17 inches of the total amount is contributed by snowfall), with most falling from November through March. Annual mean temperature is 51°F. August is the hottest month, with average daily temperatures ranging from 50-83°F, and January is the coolest month with average daily temperatures ranging from 30-46°F.

Wintertime weather is generally cool and wet, characterized by successive storm fronts originating from marine, offshore flow which pass primarily from southwest to northeast. Other characteristic weather includes periodic episodes of air stagnation near the valley floor. These periods of poor atmospheric ventilation are usually the result of high atmospheric pressure overlaying the valley which creates stable air, with low wind speeds, clear skies, and cold nighttime temperatures. These conditions lead to temperature inversions that trap air pollutants from local sources close to the ground. The inversions may last several days, breaking usually with the passage of a storm front through the area.

Locally, ventilation is affected by winds moving up and down the Willamette River canyon. During the day the Central Oregon plateau receives substantial solar heat gain due to the blocking effect of the Cascade Mountains. This heating creates a daily "thermal low" pressure area in Central Oregon, which results in a light but reliable west-to-east wind pattern during the day. At night airflow reverses direction as radiational cooling causes cool air to drain down the valley from east to west.

Area geography plays a large part in the observed wind direction at the local monitoring site. Besides the effect of the east-west river valley, solar heating of the south-facing canyon walls located on the north side of town create a very light south-to-north breeze during the day, which re-distributes nighttime PM<sub>10</sub> emissions across the city.

## 4.18.3 AMBIENT AIR QUALITY

### 4.18.3.1 MONITORING NETWORK

Since 1983 LRAPA has obtained Oakridge meteorological and air quality data from a single monitoring site near the Willamette Activities Center (WAC) at 47674 School Road. This site is part of the federally required network of State and Local Air Monitoring Stations, or SLAMS (AIRS site code 0392013). SLAMS utilize EPA reference-or equivalent-method monitoring equipment to obtain ambient air quality data. Located in an open field several hundred feet southeast of the activity center, the site is roughly 100 feet from the nearest residence north of the site and 200 feet from the nearest residence south of the site. The general area is north and south of the city center in the area previously known as Willamette City. This area was selected because observations indicate air currents tend to concentrate wood smoke emissions there from throughout Oakridge, and it is believed to be the area of highest  $PM_{10}$  concentrations.

Monitoring equipment at the WAC site includes: a Sierra-Anderson 1200  $PM_{10}$  sampler that operates every sixth day, year-round; a DEQ-designed medium-volume  $PM_{10}$  sampler, designated as an equivalent method by EPA, that provides daily samples between October 1 and March 31 (roughly 180 days during the wintertime); an integrating nephelometer that measures diurnal variations in smoke levels; a wind set to determine wind direction and velocity; a tower with ambient temperature sensors at 2 and 10 meters to help determine inversion heights; and a solar pyrometer to measure radiation. This equipment is installed in a climate-controlled trailer. Figure 3.1 shows the location of the WAC monitoring site.

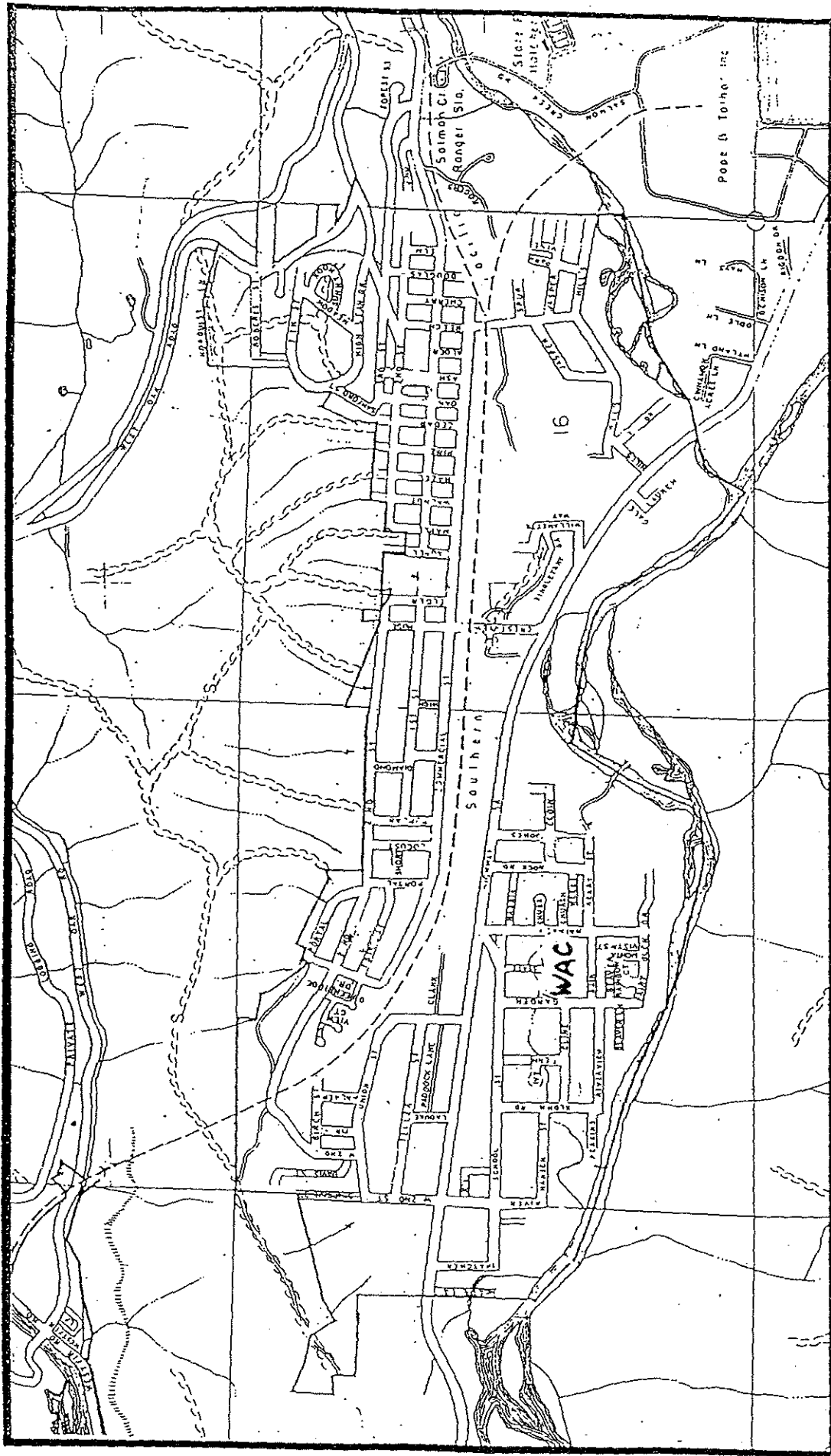
### 4.18.3.2 AIR QUALITY DATA

#### 4.18.3.2.1 Annual $PM_{10}$ Concentration

$PM_{10}$  is known to vary seasonally, the highest values occurring in the winter during periods of air stagnation, usually accompanied by cold temperatures. The sampling schedule for  $PM_{10}$  is seasonal, with 6-day sampling scheduled from April 1 to September 30, and every day from October 1 through March 31. This yields just over two hundred 24-hour samples every year.

Annual arithmetic mean concentrations of  $PM_{10}$  have been in the mid 20s to low 30s  $\mu g/m^3$  compared with the NAAQS standard of 50  $\mu g/m^3$ . In the last several years, 1990 through 1994, the annual mean concentrations for each year have trended downward. These levels are calculated in accordance with Appendix K. Table 3.1 shows the annual means for these calendar years.

FIGURE 3.1 WAC SITE LOCATION





**Table 3.1- Average Annual Ambient PM<sub>10</sub> Concentration at WAC,  $\mu\text{g}/\text{m}^3$**

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| Year | 1990 | 1991 | 1992 | 1993 | 1994 |
| Mean | 33   | 37   | 32   | 32   | 26   |

#### 4.18.3.2.2 24-Hour PM<sub>10</sub> Concentration

The 24-hour PM<sub>10</sub> NAAQS is 150  $\mu\text{g}/\text{m}^3$ , exceedance of which is allowed no more than once per year on a three-year average. Compliance with the PM<sub>10</sub> NAAQS is calculated using successive rolling three years of data. The calculation is:

$$\frac{\text{Number of 24-hour values greater than } 150 \mu\text{g}/\text{m}^3 \text{ (for the last 3 years)}}{3 \text{ years}}$$

If the calculated value of the expected number of exceedances is greater than 1, the 24-hour NAAQS is exceeded.

The 24-hour values at the WAC site consider each data point discretely to determine compliance with the 24-hour PM<sub>10</sub> NAAQS. Table 3.2 shows the number of days each year, from 1990 to 1994, that the 24-hour NAAQS was exceeded.

**Table 3.2 Recorded 24-Hour PM<sub>10</sub> Exceedances at Oakridge WAC site**

| Calendar Year | Number of Days Sampled* | Number of Exceedances** |
|---------------|-------------------------|-------------------------|
| 1990          | 198                     | 0                       |
| 1991          | 204                     | 9                       |
| 1992          | 205                     | 2                       |
| 1993          | 201                     | 1                       |
| 1994          | 211                     | 0                       |

\* This value represents the total number of sample data points conducted at the site. Variation in number of sampling days is the result of either equipment failure, overlapping and variable operating schedules, or invalidation of samples due to quality assurance measures.

\*\* An exceedance is any concentration above 150  $\mu\text{g}/\text{m}^3$ , rounded to the nearest 5  $\mu\text{g}/\text{m}^3$ .

Note that the trend is downward since 1991. This downward trend is supported by observing the four highest ambient concentration levels observed at the WAC site for each month in each year, 1990 through 1994 (see Table 3.3). Shaded cells in this table indicate concentrations in excess of the NAAQS.

All the 24-hour exceedances occurred during periods of intense wintertime atmospheric stagnation and are consistent with those expected from wintertime residential wood heating. They are supported with data from the nephelometer and meteorological equipment at the WAC site. This data indicates a correlation with a consistent diurnal pattern of high concentrations of particulate which develop during wintertime, primarily in the evening when wind speeds decrease.

Table 3.3 Four Highest Observed Ambient Particulate Levels - 1990-1994, by month - in  $\mu\text{g}/\text{m}^3$  of air

|     | 1990 |     |     |     | 1991 |     |     |     | 1992 |     |     |     | 1993 |     |     |     | 1994 |     |     |     |
|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
|     | Max  | 2nd | 3rd | 4th | Max  | 2nd | 3rd | 4th | Max  | 2nd | 3rd | 4th | Max  | 2nd | 3rd | 4th | Max  | 2nd | 3rd | 4th |
| Jan | 149  | 133 | 131 | 94  | 187  | 184 | 184 | 178 | 178  | 161 | 112 | 97  | 166  | 114 | 113 | 85  | 144  | 120 | 116 | 100 |
| Feb | 136  | 136 | 113 | 94  | 116  | 116 | 108 | 100 | 140  | 127 | 122 | 119 | 138  | 134 | 133 | 112 | 103  | 102 | 100 | 98  |
| Mar | 108  | 79  | 74  | 60  | 60   | 49  | 48  | 44  | 73   | 64  | 63  | 62  | 80   | 55  | 47  | 37  | 57   | 54  | 53  | 50  |
| Apr | 41   | 26  | 15  | 13  | 39   | 31  | 26  | 14  | 26   | 17  | 15  | 9   | 20   | 14  | 12  | 10  | 16   | 16  | 14  | 12  |
| May | 24   | 21  | 12  | 8   | 26   | 18  | 14  | 12  | 34   | 27  | 19  | 15  | 28   | 17  | 12  | 11  | 16   | 16  | 13  | 13  |
| Jun | 20   | 18  | 11  | 10  | 25   | 21  | 13  | 13  | 50   | 36  | 15  | 8   | 23   | 20  | 14  | 9   | 11   | 9   | 8   | 6   |
| Jul | 26   | 26  | 22  | 22  | 29   | 28  | 23  | 21  | 24   | 21  | 13  | 8   | 15   | 14  | 11  | 11  | 23   | 21  | 21  | 21  |
| Aug | 26   | 16  | 11  | **  | 36   | 24  | 20  | 13  | 24   | 24  | 20  | 17  | 28   | 17  | 14  | 10  | 28   | 25  | 24  | 19  |
| Sep | 27   | 24  | 20  | 14  | 30   | 26  | 23  | 23  | 25   | 21  | 18  | 31  | 32   | 28  | 28  | 26  | 35   | 18  | 15  | 8   |
| Oct | 36   | 29  | 26  | 20  | 93   | 88  | 75  | 72  | 49   | 43  | 37  | 31  | 50   | 46  | 42  | 42  | 42   | 36  | 34  | 30  |
| Nov | 94   | 79  | 74  | 63  | 52   | 52  | 49  | 46  | 89   | 51  | 40  | 39  | 90   | 81  | 73  | 72  | 64   | 54  | 38  | 37  |
| Dec | 141  | 140 | 100 | 94  | 164  | 136 | 112 | 109 | 110  | 92  | 57  | 51  | 151* | 135 | 134 | 133 | 143  | 85  | 80  | 74  |

No data is available prior to June, 1988. Shaded values represents a 24-hr. exceedance of  $150\mu\text{g}/\text{m}^3$  for each month of 1990-1994

\*For determining non-attainment, all values are rounded to the nearest  $5\mu\text{g}/\text{m}^3$ . This value rounds to 150, which is not an *exceedance* of the NAAQS.

\*\* Insufficient data

#### 4.18.3.3 BASELINE YEAR

The baseline year can be any recent year in which violations of the NAAQS were measured and in which meteorological conditions and emissions were known. Ideally it is the worst-case year both meteorologically and in terms of air quality. Table 3.4 shows 1991 with both the highest levels of particulate concentrations and the most extreme meteorological conditions. It was therefore selected as the baseline year.

**Table 3.4 Historical Meteorological Data from Oakridge--Salmon Fish Hatchery Data 1988--1995**

The State of Oregon has maintained a minimal meteorological site at the Salmon Fish Hatchery in the southeast part of Oakridge for a number of years. This site collects daily maximum and minimum temperatures and precipitation. The January averages for the past 8 years are as follows:

| Year | Mean Temp<br>(°F) | Total Precip.<br>(In.) |
|------|-------------------|------------------------|
| 1988 | 36.9              | 5.46                   |
| 1989 | 37.4              | 6.57                   |
| 1990 | 39.3              | 7.05                   |
| 1991 | 34.5              | 2.96                   |
| 1992 | 39.0              | 3.09                   |
| 1993 | 34.9              | 3.66                   |
| 1994 | 39.6              | 4.31                   |
| 1995 | 41.6              | 8.15                   |

January of 1991 was the coldest and driest of any January in the last 8 years, and ranked as the coldest and 7th driest in the past 35 years. The dry weather would imply a general lack of frontal passages and therefore potentially had increased periods of air stagnation.

#### 4.18.3.4 BASELINE YEAR METEOROLOGICAL CONDITIONS

In general, the months of January and December are the most likely months when PM<sub>10</sub> NAAQS exceedances occur. Temperature data gathered over 30 years show these two months have the lowest maximum, minimum and mean temperatures.

For the year 1991, meteorological conditions represented actual worst-case for air quality observed since LRAPA began monitoring for PM<sub>10</sub>. January, 1991 had the coldest mean temperatures of any January in the last 35 years. It was also the 7<sup>th</sup> driest January in that period. Appendix I shows the historical meteorology at the fish hatchery in Oakridge, since 1961.

Beginning January 1, through January 30, 1991, a succession of days with cold temperatures and low wind speeds occurred. Intense temperature inversions set in almost every evening. Woodstove use was high. Air quality exceeded the 24-hour NAAQS on eight days. A ninth day of exceedance was recorded in December, 1991. Table 3.4 shows the meteorology on these were the worst-case days. Table 3.5 shows the temperature conditions for that period. Note that the minimum daily temperatures are around 20 degrees<sup>f</sup>, not the coldest. The very low minimum daily temperatures, in the 0 degree<sup>f</sup> range, are usually associated with unsettled conditions, which provide better ventilation than on worst-case days.

Table 3.5 Met Data from WAC, during exceedances in January, 1991

| Date  | PM10<br>μg/m <sup>3</sup> | Min T<br>°F | Max T<br>°F | Degree<br>Days | Precip. |
|-------|---------------------------|-------------|-------------|----------------|---------|
| 1/21  | 187                       | 27.0        | 66.0        | 18.5           | 0       |
| 1/22  | 171                       | 26.5        | 66.3        | 18.6           | 0       |
| 1/23  | 109                       | 26.1        | 51.3        | 26.4           | 0       |
| 1/24  | 139                       | 25.8        | 59.1        | 22.6           | 0       |
| 1/25  | 156                       | 21.8        | 61.9        | 23.2           | 0       |
| 1/26  | 178                       | 22.2        | 61.2        | 23.3           | 0       |
| 1/27  | 184                       | 19.3        | 58.4        | 26.2           | 0       |
| 1/28  | 157                       | 20.9        | 56.1        | 26.5           | 0       |
| 1/29  | 173                       | 17.7        | 61.5        | 23.9           | 0       |
| 1/30  | 184                       | 16.8        | 54.0        | 29.6           | 0       |
| 12/27 | 164                       | 37.0        | 51.0        | 21.0           | 0       |

#### 4.18.3.5 BASELINE YEAR 24-HOUR DESIGN CONCENTRATION

There are several techniques used to determine what the 24-hour design concentration should be. The methodology for Oakridge takes advantage of the large data set at WAC to pick a concentration value which will not be exceeded more than three times in any three years. This is the EPA-approved "table look-up" method, which allows the use of the fourth-highest actual base-year measured value to be used. From table 3.3, the fourth-highest value is  $178 \mu\text{g}/\text{m}^3$  at the WAC site in 1991.

#### 4.18.3.6 SATURATION STUDIES

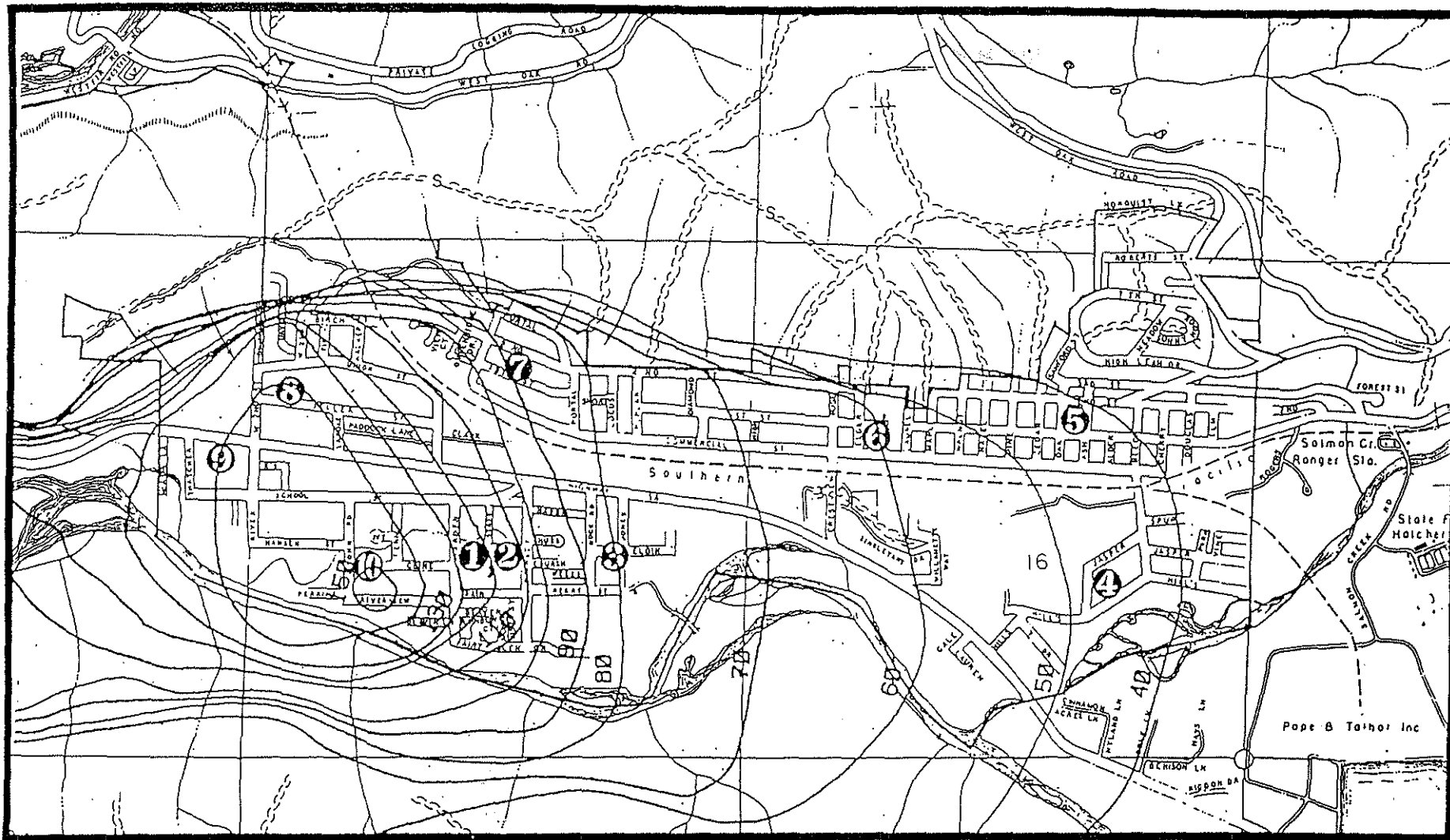
In 1990 LRAPA undertook to determine whether the WAC site was in fact located in the area of highest particulate concentrations, and how much difference in 24-hour concentrations existed at different points within the Oakridge non-attainment area. Two saturation studies were conducted, in 1991 and again in 1994 (See Appendix II, Saturation Monitoring Studies). On the second study Chemical Mass Balance analysis was performed to determine source contribution in the areas sampled. The sampling was conducted during the winter season, when highest  $\text{PM}_{10}$  levels were expected to occur. The studies consisted of short-term daily sampling at ten locations, including the WAC, using portable mini-vol air samplers designed by LRAPA. Figure 3.2 shows the locations of the saturation sites, relative to the WAC site.

The studies showed that, although the WAC site was near the actual area of highest concentrations, several other areas showed consistently higher concentrations during elevated levels of  $\text{PM}_{10}$  than did the WAC site. The site of highest concentrations, known as Cline Street, is in a neighborhood area west and a little south of the WAC site. Two other sites of high concentration are the High Lakes Cafe, just off Highway 58 west, and a site known as Saint Luke's Church in a residential area west and north of the WAC.

Analysis of the data from all the saturation sampling sites shows that in general, the highest concentrations in Oakridge are at the western and southern-most sites. The three sites listed above have maximum concentrations that are statistically about 20 percent higher than the WAC site. Although the relationship is not linear, this relationship occurs at the higher concentrations of interest. Simply stated, when the WAC site is at or about the  $150 \mu\text{g}/\text{m}^3$  NAAQS, the Cline Street site may be as high as  $180 \mu\text{g}/\text{m}^3$ . Higher levels at the WAC, in the  $170$  to  $180 \mu\text{g}/\text{m}^3$  range, coincide with corresponding higher levels at Cline Street, in the  $210$  to  $225 \mu\text{g}/\text{m}^3$  range. The relationship between the WAC and Cline Street sites at their respective high concentrations is the basis for establishing the baseline year 24-hour design concentration. (See Appendix III which provides correlation of WAC and Cline Street sites.)

It happens that  $214 \mu\text{g}/\text{m}^3$  at Cline street is the highest level measured during the saturation studies, during meteorological conditions which represent worst-case 24-hour periods. This is the mid-range of the expected values when the 4<sup>th</sup> highest value

FIGURE 3.2 MONITORING SITES IN RELATION TO WAC SITE



- |                            |                       |
|----------------------------|-----------------------|
| ○ WAC Trailer (Official)   | ○ Elder Street        |
| ⊗ WAC Trailer (Collocated) | ○ West 1st Street     |
| ⊙ Elgin and Jones          | ○ Saint Luke's Church |
| ○ Jasper Drive             | ○ High Lakes Cafe     |
| ⊙ Downtown Oakridge        | ○ End of Cline Street |

occurs at WAC. Thus  $214 \mu\text{g}/\text{m}^3$  is chosen as the base year concentration used in the attainment demonstration described in Section 4.18.6.

Though the data is very limited, the relationship of winter-time measured values between WAC and Cline Street may also be used to confirm that the annual average at Cline Street probably does not exceed the annual arithmetic mean of  $50 \mu\text{g}/\text{m}^3$ :

$$37 \mu\text{g}/\text{m}^3 \times 1.2 = 44 \mu\text{g}/\text{m}^3$$

Chemical mass balance analysis was performed on samples taken at four sites, at both high concentrations and low concentrations. There were some anomalies, but in general the CMB showed roughly an 81:16 split between Residential Wood Combustion sources (RWC) and soil material at three of the four sites, with a 3 percent unknown. The exception was the site at the Dairy Queen located immediately adjacent to Highway 58. The results here were in the range of 60%:35%, residential wood combustion to soil material, with 5% unidentified. This is to be expected, since Highway 58 is the principal source of wintertime road dust.

#### 4.18.3.7 BACKGROUND CONCENTRATION

Background  $\text{PM}_{10}$  concentrations in the Oakridge area are also present during the 1991 baseline year. This level of  $\text{PM}_{10}$  concentration will have to be accounted for, since it is a part of the measured concentration, but there is little to be done to reduce it. Background concentration is determined from data gathered at a monitoring site operated by the U.S. Forest Service near the Three Sisters Wilderness area (USFS IMPROV Protocol Site, Region 6). This site offers a suitable surrogate for a nearby site outside the Oakridge area, since it occupies forest land on the west side of the Cascade Range, at approximately the same elevation, and it is relatively isolated from human populations. The IMPROV site is located approximately 45 miles north-northeast of Oakridge, 2 miles north of the Trail Bridge Reservoir. It utilizes both an integrating nephelometer and an air sampler to monitor numerous air quality parameters. Analysis of ambient data collected at this site indicates an average wintertime background level of  $15 \mu\text{g}/\text{m}^3$ . This value is subtracted from the design concentration for analysis of attainment, then added back to get the actual predicted air quality. (See Appendix III)



## 4.18.4 EMISSIONS INVENTORY (EI)

### 4.18.4.1 GENERAL

PM<sub>10</sub> Emissions are of finely divided solid or liquid material, other than uncombined water, with an aerodynamic diameter less than or equal to a nominal 10 micrometers, emitted into the ambient air as measured by the applicable reference method. An Emissions Inventory (EI) describes and quantifies PM<sub>10</sub> emissions from all contributing sources located within an area. Because emission levels in any area change from year to year, due to change in industrial output, work practices, population growth and other factors, an emission inventory is established for a specific base year to provide a way of measuring emission changes, which may then be factored into the attainment strategy. Since the highest observed ambient PM<sub>10</sub> concentrations in Oakridge occurred in 1991, that year was selected as the base year. The annual PM<sub>10</sub> emissions in 1991 were approximately 88 tons. As discussed here, the emissions are those which occurred during the 1991 base year.

PM<sub>10</sub> emissions in Oakridge vary by season, being higher in the winter. This is due primarily to the seasonal nature of wood heating, and the need for periodic road sanding for skid control. Other emissions, such as industrial and vehicle emissions, are relatively constant throughout the year, and are dependent on variables such as day-of-week, normal operating hours, and so forth.

As previously stated, the seasonal variations in emissions correspond with similar variations in the ambient PM<sub>10</sub> concentrations. Nephelometer data suggests woodstove emissions tend to increase during the evening, peak during the mid-evening, and decrease until morning, when stoves are re-lit. Daily ambient concentrations are further influenced by temperature inversions limiting smoke dispersion during evenings and nighttime. Appendix I illustrates the diurnal variation in nephelometer readings.

Emission sources of PM<sub>10</sub> for Oakridge fall into several categories, including stationary point and area sources, mobile sources, and fugitive sources.

### 4.18.4.2 STATIONARY POINT SOURCES

Point sources are those which typically discharge at one location, such as an industrial smokestack or process vent. Fugitive emissions associated with on-site processes or activities which are not emitted from a stack or vent are also included as point source emissions.

The only point source presently located within the Oakridge non-attainment area is the rock crushing operation at Fisher Land Co. located south of downtown and east of the Willamette City area, adjacent to the Willamette River. Not considered a significant emission source, this facility operates under a permit from LRAPA. Dust control

measures are currently enforced at the site as a part of its operating permit. Presently, emissions from the crusher are minimal. Also, operation is intermittent, with most of the emissions from this source occurring during summer and not contributing to wintertime non-attainment. Minor emissions result during the material handling process and by trucks hauling material from the site on unpaved haul roads.

This operation is currently utilizing reasonably available control technology (RACT). This includes water sprays at the crusher, and road watering on haul roads to control dust. A minor source, this plant emits less than one-ton of PM<sub>10</sub> per year.

#### 4.18.4.3 AREA SOURCES

Area sources are smaller and more numerous than industrial point sources, and typically operate without discharge permits. They are dispersed over a wide area, and their operation can vary seasonally and daily.

##### 4.18.4.3.1 Residential Wood Heating (RWH)

The Oakridge area heating season usually extends from October through March when woodstoves provide a substantial portion of home heating needs for Oakridge residents. In 1991 firewood was relatively easy and inexpensive to obtain for many residents, due to the area's timber resources. As indicated in Tables 4.1 and 4.2, woodstoves are also the major source of PM<sub>10</sub> emissions in Oakridge on an annual basis. Approximately 750 operating wood heating units are located in the Oakridge UGB, or about 63 percent of households (See Appendix IV, Emission Inventory), with approximately 85 percent of these used as a primary source of heat during the winter heating season. (See Appendix V, Oregon Lung Association Home Wood Heating Survey). For the purpose of this analysis, it is conservatively estimated that all operating woodstoves were uncertified in the 1991 base year.

In the base year, residential wood heating annually contributes approximately 55 tons, or 63% of PM<sub>10</sub> to the airshed. Sampling data, backed up with nephelometer readings, indicate these emissions are concentrated in the winter months, and increase substantially in the evenings as wood stove use increases. On a cold, worst-case day, the wood stove PM<sub>10</sub> emissions are approximately 750 pounds, or about 76% of the total daily PM<sub>10</sub> emissions. These emissions coincide with a period of time when ventilation is often reduced due to low wind speeds and local air stagnation conditions. The resultant ground level air quality impact of residential wood heating is further accentuated by relatively short wood stove chimneys and low stack temperatures, which result in low smoke dispersion during periods of air stagnation.

#### 4.18.4.3.2 Road Dust

- **Paved.** The second largest  $PM_{10}$  source in the Oakridge UGB, after woodstoves, is paved road dust. These emissions result primarily from soil carried onto surface street from unpaved streets and commercial driveways and parking lots, dirty snow, which drops off vehicles stopped at intersections and wintertime road sanding, along Highway 58. There are about 280 dry days during the year. Most of these occur during the summer months, but there are often dry periods during the winter months, during which fugitive dust emissions can make up a significant part of the total emission mix. During these intermittent dry periods, dust is re-entrained from paved roads by action of passing vehicles. These dry periods are often associated with the same meteorological conditions which produce air stagnations.

Paved road dust adds about 17.6 tons of  $PM_{10}$  annually, or about 20% of the annual emissions in the base-year. Most paved road dust is generated from city surface streets, and on the section of U.S. Highway 58 that traverses the length of the non-attainment area. This roadway is heavily traveled, and when temperatures drop below freezing and the road is icy or snowy, the Highway Division of the Oregon Department of Transportation applied grit to aid traction. The grit remained in place for several days, until it was cleaned up or blown to the shoulder of the road. On a worst-case day in the 1991 base year, paved road dust, including sanding, was almost 134 pounds, or about 13.5% of the daily  $PM_{10}$  emissions.

- **Unpaved.** Unpaved road dust is caused by direct action of vehicles on unpaved road surfaces (rubber, dirt, and crushed rock dust emissions) during dry weather. Approximately 10.6 tons in the base-year, or about 12% of total annual  $PM_{10}$  emissions are from unpaved roadways. These include city streets, alleyways, and unpaved commercial parking lots and driveways.  $PM_{10}$  emissions from unpaved road dust on any of the 280 dry days in the 1991 base year was approximately 75 pounds, or about 7.6% of the total daily emissions.

#### 4.18.4.3.3 Miscellaneous Area Sources

Several other area emission sources contribute to ambient  $PM_{10}$  levels, but play a negligible role in NAAQS exceedances:

- **Mobile sources** include particulate exhaust emissions from autos, trucks, and rail locomotives. Emissions from these sources continue year round, and are relatively minor with respect to NAAQS attainment. Auto and truck exhaust contributes approximately 2.3 tons per year of  $PM_{10}$ . Locomotive exhaust is less than 1 ton per year. Together, mobile sources constitute less than 3% of total  $PM_{10}$ .
- **Open field burning** does not occur during the winter wood heating season, and only very limited wintertime agricultural burning is conducted. This activity

generally occurs in the Willamette Valley agricultural regions over 50 miles from the Oakridge UGB.

- **Residential open burning (backyard burning)** can also contribute to particulate pollution levels, particularly on days of atmospheric stagnation. However, in March of 1992, the Oakridge City Council passed an ordinance limiting backyard open burning to the months of October and March through June, when atmospheric ventilation is generally better for smoke dispersion than during the middle part of the winter season. (See Appendix VI, Draft City Ordinance).
- **Smoke intrusions from logging slash burning** conducted in the general area of Oakridge have been documented. Smoke from slash burning is regulated by the Oregon Department of Forestry Smoke Management Plan, which is designed to protect non-attainment areas, including Oakridge, from slash burning smoke. As part of this plan, a Special Protection Zone has been established around Oakridge which restricts slash burning on days when wood stove use may be curtailed ("red days"). The Smoke Management Plan and Special Protection Zone provisions are included in the attainment demonstration and the SIP, primarily as a means to insure that slash smoke does not contribute to exceedances of the 24-hour NAAQS. (See Appendix VII, ODOF Summary Report, cover only, Special Protection Zone provisions).

#### 4.18.4.4 PRECURSOR EMISSIONS

Precursor emissions of  $PM_{10}$  are liquid or gaseous chemical emissions which may react with moisture or other chemicals in the air to create airborne particulate matter. Examples are sulfur and nitrogen oxide emissions which combine with moisture in the air to form particulate sulfates and nitrates. There are no sources of precursor emissions, and the nearest major stationary emission sources are nearly 35 air miles from Oakridge. The CMB analyses show less than 20% Sulfate and Nitrate present on the filters. Therefore, the likelihood of this type of reaction and subsequent airborne emissions is small.

#### 4.18.4.5 ANNUAL EMISSION SUMMARY

Based on the EI, the significant anthropogenic (human-caused) sources of  $PM_{10}$  emissions inside the non-attainment area are attributed primarily to residential wood combustion (RWC) and paved and unpaved road dust. Motor vehicle tailpipe emissions, industry, and open burning contribute lesser amounts to the total  $PM_{10}$ . 1991 was selected as the base year of the emissions inventory, since it corresponds to the highest ambient levels within the last several years.

Table 4.1 is a compilation of the emission factors and assumptions used in estimating the annual base year emissions in Oakridge:

**Table 4.1 Annual Emission Inventory Factors**

|                                    |  |
|------------------------------------|--|
| Industrial Sources                 | AP 42, rock crushing                         |
| Residential Wood Heating (uncert.) | AP 42, 15 g/kg, or 30 lbs/ton of wood burned |
| Paved Road Dust                    | AP 42, .0038 pounds/vehicle mile traveled    |
| Sanding                            | AP 42, 1.9 miles, 35 MPH                     |
| Unpaved Road Dust                  | AP 42, .53 pounds/vehicle mile traveled      |
| Open Burning                       | 5 lbs./ton of material burned                |
| Motor Vehicles                     | AP 42, .0001452 pounds/vehicle mile traveled |
| Railroad Locomotives               | AP 42, 25 lbs/10,000 gallons of diesel fuel  |

Applying these factors to the various source categories results in the total estimated emissions, shown in Table 4.2.

**TABLE 4.2 1991 Base Year Annual Emissions by Category, Tons per year PM<sub>10</sub>**

| <u>Category</u>          | <u>Tons/year</u> |
|--------------------------|------------------|
| Industrial Point Sources | <1.0             |
| Residential Wood Heating | 55.0             |
| Open Burning             | 0.3              |
| Paved Road Dust          | 17.6             |
| Unpaved Road Dust        | 10.6             |
| Mobile Sources           | 2.3              |
| Locomotives              | 1.0              |
| Total Base Year EI       | 87.8 tons/year   |

**4.18.4.6 WORST-CASE DAY**

Since the NAAQS of concern is the 24 hour PM<sub>10</sub> standard, and the pattern of emissions and air quality varies by season, the technical analysis should be based on daily emissions. In order to adequately assure that the NAAQS will be met under the worst meteorological circumstances, a "worst-case day" scenario must be projected. For this purpose, certain assumptions about each source category are made, as to their daily emissions during this hypothetical day. As it happens, there were a number of actual worst-case days in the baseline year, 1991, whose meteorology has been well documented, including wind speed and direction, temperatures at several

elevations above the ground, continuous record of smoke levels, as well as the measured air quality at the WAC site. Table 4.3 reflects the worst-case day emissions. Sections 5 and 6 will reference only these worst-case day emissions. The following assumptions were made for each source category to estimate what the worst-case day emissions were for the baseline year:

- **Industry.** Although the gravel plant normally does not operate during the winter months, it was conservatively assumed that it could, and that daily emissions would be constant. Thus the annual emissions, 1 ton per year were converted to pounds per day by multiplying by 2,000<sub>lbs/ton</sub> and dividing by 365<sub>days/year</sub> to get 5.5 pounds per day.
- **Wood Heating.** The first step is to determine the average daily emissions on a winter heating day. There are 180 heating days per year, and the assumption is that all of the RWC emissions occur during the heating season. Thus the annual RWC emissions, in tons per year are multiplied by 2,000<sub>lbs/ton</sub>, and divided by 180<sub>heating days/year</sub> to get 610 pounds on an average heating day. An adjustment factor is used, to account for higher usage during a "worst case" day, when meteorological conditions are most severe. It was determined to use a direct relationship between emissions increase, and the difference between the actual minimum temperature on a "worst case" day and the mean minimum daily temperature for the heating season. This relationship was derived during model runs for the Oakridge area. (See appendix VIII, Relationship between RWC emissions and temperature). This relationship results in about 1.65% increase in emissions for each 1 deg.° difference between the "worst case" day minimum temperature, and the mean minimum daily temperature during the heating season. The difference between actual minimum daily temperatures (20 deg.°) during the January, 1991 "worst case" episode, and the mean minimum for the heating season (33.25 deg.°) was 13.25 deg.°. Multiplying 1.65 by 13.25 yields 22% higher emissions on a worst case day. Multiplying 610 lb./day by 1.22 yields about 750 pounds of RWC PM<sub>10</sub> on a worst case day.
- **Paved Roads, Including Sanding.** The annual emissions are based on an average of 285 days per year with no precipitation. Assumed a dry day, with normal traffic. Multiply 17.6 TPY by 2,000 lb./ton, and divide by 285 dry days/year, to get 123.5 lb./day.
- **Unpaved Roads.** Assumed a dry day, average daily VMT, yields 74.3 lb./day.
- **Transportation and Other.** Assumed average daily VMT, and railroad operations, yields 18.2 lb./day.
- **Open Burning.** Assumed to be zero, in that the city ordinance would be in effect, and open burning would not be allowed.

**Table 4.3 Worst Case Day PM<sub>10</sub> Emissions, Baseline Year**

| Source Category          | Lbs/Day      | % Contribution  |
|--------------------------|--------------|-----------------|
| Industrial Point Sources | 5.5          | 0.6%            |
| Wood Heating             | 750.0        | 76.3%           |
| Paved Roads              | 123.5        | 12.6%           |
| Sanding                  | 8.6          | 0.9%            |
| Unpaved Roads            | 74.3         | 7.6%            |
| Open Burning             | 0.0          | 0.0%            |
| Transportation           | 18.2         | 1.9%            |
| Other                    | 3.0          | 0.3%            |
| <b>TOTAL</b>             | <b>983.1</b> | <b>100.2% *</b> |

\* .2% rounding error

## 4.18.5. ATTAINMENT YEAR REQUIREMENTS

### 4.18.5.1 METHODOLOGY FOR ATTAINMENT DEMONSTRATION

Attainment with the NAAQS can be demonstrated using one of two EPA approved methodologies: Computer (dispersion) modeling to predict future air quality as control measures are applied, or, where one or two evenly distributed area source of emissions is responsible for non-attainment, receptor-type computer modeling coupled with proportional, or "rollback," modeling.

In rollback modeling, the assumption is made that emissions and particulate concentrates have a straight-line, or proportional, relationship. As the one rises or declines, the other follows proportionally. Thus, to demonstrate reductions of particulate concentrations, one simply reduces, or "rolls back," emissions.

To justify the use of the receptor model/rollback methodology, emissions must 1) result primarily from one or two source categories, 2) be uniformly distributed throughout the airshed, and 3) the air monitoring network must be spatially and temporally representative, showing impacts at the highest site from the predominant sources. The requirements are described in an EPA memorandum (see Appendix IX, Guidelines for Isolated Areas), which states:

"...the area should be relatively small, characterized by uniform area wide emissions of one or two source categories, and geographically isolated from other PM<sub>10</sub> source areas. Examples are...small air-sheds where the only significant emission sources are residential wood combustion and/or road anti-skid materials..."

The fact that woodstove emissions are the primary source of ambient PM<sub>10</sub> concentrations in Oakridge is demonstrated both by the seasonal nature of emissions, which match exceedances, and by the visual observation that, in winter, wood smoke can be seen to settle over the city in the late afternoon.

Further, Chemical Mass Balance analysis, which was used to determine the chemical nature of material deposited on sampling filters, has indicated that on average, carbon from wood stove smoke comprises approximately 81% of the ambient concentration. The balance, approximately 16%, consists of compounds typical of road dust, including sanding, together with about 3% of unidentified compounds. (See Appendix II, Saturation Studies and Chemical Mass Balance Table). The analysis also indicates that these two emission sources are more or less evenly distributed throughout the airshed.

As indicated in Section 3 on ambient air quality, the single WAC site provides data every day during the winter heating season, thus providing good measurement of 24-hour values. The WAC site is a short distance from the Cline Street high site used in the saturation studies.



Section 4, Emissions Inventory, discusses the fact that RWC emissions are uniformly distributed throughout the non-attainment area. Also road dust from paved and unpaved roads are relatively uniform. Road sanding occurs chiefly along Highway 58, which runs the length of the non-attainment area. The strong correlation between the ambient levels at the WAC site and those at Cline Street, and the generally uniform contribution of RWC and road dust on the saturation samples suggest that the proportional effect at WAC of rolling back emissions would also be observed at Cline Street. On this basis it is concluded that the rollback of emissions reductions from woodstoves and road dust adequately demonstrate that sufficient air quality benefits would occur throughout the non-attainment area to meet the PM<sub>10</sub> NAAQS.

#### 4.18.5.2 APPROACH

According to NAAQS, PM<sub>10</sub> concentrations at any point in the Oakridge UGB must not be expected to exceed a 24-hour average value of 150 µg/m<sup>3</sup> more than once a year during any three-year period. To achieve attainment at or below this level, it is first necessary to determine the 4th highest 24-hour concentration in base year. This is discussed in Section 4.18.3. Next would be to estimate how high 24-hour particulate concentrations will be in Oakridge in 2000, the year of attainment, without controls and with anticipated growth or decline of emissions from the various source categories. This "worst case" day concentration, which is called the attainment year design value, or design concentration, constitutes the highest level of exceedance to be expected in the attainment year. Once established, it can be compared to the NAAQS value to determine how much air quality within the Oakridge area must be improved to achieve and maintain compliance. From that, a determination can be made as to how much emissions from the predominant sources must be proportionately "rolled back" before the attainment year, to demonstrate attainment by the attainment year, 2000. Next, emission increases and decreases are projected for 3 years beyond the attainment date to show maintenance of the PM<sub>10</sub> NAAQS as the community develops. Finally, the selected control measures must be identified and sufficient emission reduction credit given to achieve the needed "rollback" with some margin of safety.

##### 4.18.5.2.1 Base Year Emissions

A "worst case day" scenario assumes maximum emissions occurring during worst-case meteorological conditions. For assumed emission conditions on a worst case day see Section 4.18.4.6.

##### 4.18.5.2.2 Projected Attainment Year Emissions--No Controls

According to Lane Council of Governments and the Oregon Center for Population Research & Census, the number of dwellings in Oakridge has increased by about .53 % between 1990 and 1995. This growth in housing follows a flat period, during

which the population decreased significantly due to mill closures and lost employment. This housing growth factor is consistent with stable population, or small increases. Population growth does not occur uniformly. It is assumed for the purpose of projection, that over the next decade Oakridge population will grow at a modest 0.75% a year, which translates into a growth of 6.8% for the nine years, 1991 to 2000, and about 2.25% for the three years after that. It is reasonable to assume that, for calculating attainment year emissions under this scenario, certain dwelling and population-sensitive source categories such as residential wood combustion, paved road dust and transportation will change, while others, such as industry and unpaved road dust will not. Attainment year emissions are calculated for each source category in the emission inventory, as follows:

*Base Year emission X ( +/- % )growth factor for each source category = attainment year emission for that category. Add attainment year emissions from all inventoried source categories to get total.*

The following assumptions are made to project attainment year emissions:

- **Industry.** The City has acquired the abandoned Bald Knob industrial site, and is planning to make it an industrial park. Any major source would have to provide at least a 1:1 emission offset for PM<sub>10</sub> under New Source Review rules. Applicable emission standards for non-major sources would include a PSEL, which would incorporate highest and best practicable treatment of emissions. New non-major sources would be allowed emissions only up to the available growth increment.
- **Wood Heating.** Projection of attainment year RWC emissions is calculated as a percentage change from baseline year emissions. The calculation is based on two assumptions. The first is that new dwellings with wood heat will be equipped with certified stoves. This is a conservative estimate in that base year estimates are that 63% of existing households were heated with wood. Also, public preference during the replacement program is that a significant percentage of home owners would opt for pellet stoves.

$$.53\%_{(\text{dwelling permits/yr.})} \times .66_{(\text{ratio of emission factors of certified stoves/uncert. stoves, .20/.30 g/kg})} = .35\%/yr$$

The second assumption is that about 20 existing uncertified stove replacements, or about 2.66% turnover, will occur each year over and above the city's replacement program. The latter assumption is a projection of the rate of replacements which have occurred since 1990. It is further assumed that all replacements will be certified stoves. Emission reductions of uncertified-to-certified replacements are about .33, using the inverse ratio of emission factors cited above.

$$-2.66\% \times .33 = -.88\%/Yr.$$

$$-.88\% + .35\% = -.53\%/Yr.$$

- **Paved Road Dust, including Sanding.** Assume that paved road dust and transportation sources will increase faster than the population growth, at about 1%/year.
- **Unpaved Road Dust.** Unpaved road dust will remain constant, as paving will occur as new roads are constructed, and local traffic on unpaved roads will not increase.
- **Open Burning.** Assume the open burning ban between November and February will remain in effect.

Annual growth rates for each source category are multiplied by 9 years, to calculate total growth (or decrease) in worst-case day emissions for each significant source category in the attainment year, 2000.

Percent contribution of each source category for base year, interim year, 1997 and attainment year are calculated by dividing the total worst-case day emissions into emissions for each category for both years.

Base and Attainment year worst-case day emissions are summarized in Table 5.1.

**Table 5.1 Emissions for Base, Interim and Attainment Years--No Controls**

| Source               | WCD EI<br>1991<br>lbs/day | Growth<br>%/Yr | Growth<br>%<br>91- 97 | WCD EI<br>1997<br>lbs/day | Growth<br>%<br>91-00 | WCD EI<br>2000<br>lbs/day |
|----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------------|---------------------------|
| Industry             | 5.5                       | 0.0%           | 0.0%                  | 5.5                       | 0.0%                 | 5.5                       |
| RWC                  | 750.0                     | -0.5%          | -3.2%                 | 726.0                     | -4.8%                | 714.2                     |
| Paved Road Dust,     | 123.5                     | 1.0%           | 6.0%                  | 130.9                     | 9.0%                 | 134.6                     |
| Sanding              | 8.6                       | 1.0%           | 6.0%                  | 9.1                       | 9.0%                 | 9.4                       |
| Unpaved Road<br>Dust | 74.3                      | 0.0%           | 0.0%                  | 74.3                      | 0.0%                 | 74.3                      |
| Open Burning         | 0.0                       | 0.0%           | 0.0%                  | 0.0                       | 0.0%                 | 0.0                       |
| Transportation       | 18.2                      | 1.0%           | 6.0%                  | 19.3                      | 9.0%                 | 19.8                      |
| Other                | 3.0                       | 0.8%           | 4.5%                  | 3.1                       | 6.8%                 | 3.2                       |
| <b>TOTAL</b>         | <b>983.1</b>              |                |                       | <b>968.2</b>              |                      | <b>961.8</b>              |

#### 4.18.5.2.3 Design Concentrations for Attainment Year--No Controls

The proportionate contributions, in  $\mu\text{g}/\text{m}^3$  from each source category for both the base and attainment years are calculated by first applying their respective base-year % emission contributions to the base-year design concentration (minus background, to get only local contributions), times the growth factor for each. The attainment year design concentration (from local sources only) is the sum of the source categories' contributions, plus background, thus:

$$\text{Base year proportionate concentrations by source category} \times \text{growth (of that source)} = \text{years 1997, 2000 proportionate concentrations. Sum of year 2000 prop. conc.} = \text{years 1997, 2000 design concentration}$$

These values can be used to determine the percentage reduction in emissions necessary for attainment, and the air quality impact of each of the control strategies, discussed in Section 4.18.6.

The base, interim and attainment year design concentration projections are summarized in Table 5.2. As discussed in Section 3 on Ambient Air Quality, these projections use 214  $\mu\text{g}/\text{m}^3$  (less 15 $\mu\text{g}/\text{m}^3$  background concentration = 199  $\mu\text{g}/\text{m}^3$ ) as the 1991 baseline year ambient  $\text{PM}_{10}$  design concentration. When all sources are totaled the projected attainment year design concentration with no control is 209.5  $\mu\text{g}/\text{m}^3$ .

Table 5.2 Contributions of Local Sources--Baseline, Interim and Attainment Years; Projected Attainment Year  $\text{PM}_{10}$  Design Concentration--No Controls

| Sources        | 1991<br>% Contribution | 1991<br>$\mu\text{g}/\text{m}^3$ | 1997<br>$\mu\text{g}/\text{m}^3$ | 2000<br>% Contribution | 2000<br>$\mu\text{g}/\text{m}^3$ |
|----------------|------------------------|----------------------------------|----------------------------------|------------------------|----------------------------------|
| Industry       | 0.6%                   | 1.2                              | 1.1                              | 0.6%                   | 1.1                              |
| RWC            | 76.3%                  | 159.4                            | 53.3                             | 74.4%                  | 151.8                            |
| Paved Roads    | 12.6%                  | 26.3                             | 27.0                             | 14.0%                  | 27.3                             |
| Sanding        | 0.9%                   | 1.8                              | 2.5                              | 0.9%                   | 2.8                              |
| Unpaved Roads  | 7.6%                   | 15.8                             | 15.8                             | 7.7%                   | 15.8                             |
| Transportation | 1.9%                   | 3.9                              | 4.1                              | 2.1%                   | 4.2                              |
| Other          | 0.3%                   | 0.6                              | 0.6                              | 0.3%                   | 0.7                              |
| LOCAL          | 100.0%                 | 209.0                            | 204.4                            | 100%                   | 203.8                            |
| BACKGROUND     |                        | 5.0                              | 5.0                              |                        | 5.0                              |
| TOTAL          |                        | 214.0                            | 209.4                            |                        | 208.8                            |

#### 4.18.5.3 Calculating Necessary Emission Reductions

To calculate the emission reductions needed to achieve compliance with NAAQS, we first subtract the ambient standard of 150  $\mu\text{g}/\text{m}^3$  from the projected attainment year design concentration:

$$208.8 - 150.0 = 58.8 \mu\text{g}/\text{m}^3$$

This value represents the reduction in PM<sub>10</sub> concentration needed by the year 2000 to achieve compliance. Reductions must be made from local sources. Expressed as percentage, the total reduction needed is:

$$58.8 \mu\text{g}/\text{m}^3 / 203.8 \mu\text{g}/\text{m}^3 = 28.9\% \text{ reduction needed}$$

To achieve attainment, local emissions in the year 2000 must be at least 28.9% less than the projected worst-case day emissions. This calculates to a minimum reduction of:

$$28.9\% \text{ of } 960 \text{ lb/day} = 277 \text{ lb/day reduction from local sources}$$

To add support to the emission inventory proportional rollback technique described above, the same calculations can be performed using the results of the Chemical Mass Balance analysis. Thus, of the 214  $\mu\text{g}/\text{m}^3$  of PM<sub>10</sub> recorded at the Cline Street site: 81.6 percent, or 164.4  $\mu\text{g}/\text{m}^3$  are attributed to Residential Wood Combustion; 15.4 percent or 30.6  $\mu\text{g}/\text{m}^3$  are attributed to dust; and the remainder, 3 percent, is unidentified. Using the same emissions growth calculations, as summarized in Table 5.3, the reductions needed are 236 lb/day. There is very close agreement between the rollback calculations using proportional emissions from each source category, and using proportional contributions from CMB.

Table 5.3 Projected Concentrations for Attainment year (CMB Derived)

| Sources    | 1991 Source Contribution | 1991 $\mu\text{g}/\text{m}^3$ | 1997 $\mu\text{g}/\text{m}^3$ | 2000 source Contribution | 2000 $\mu\text{g}/\text{m}^3$ |
|------------|--------------------------|-------------------------------|-------------------------------|--------------------------|-------------------------------|
| RWC        | 81.6%                    | 170.3                         | 165.0                         | 79.8%                    | 162.4                         |
| Dust       | 15.4%                    | 32.2                          | 33.7                          | 16.9%                    | 34.4                          |
| Other      | 3.0%                     | 6.3                           | 6.6                           | 3.3%                     | 6.7                           |
| Local      | 100.0%                   | 209.0                         | 205.3                         | 100.0%                   | 203.5                         |
| Background |                          | 5.0                           | 5.0                           |                          | 5.0                           |
| total      |                          | 214.0                         | 210.3                         |                          | 208.5                         |

In the same manner as before, the necessary emission reductions are calculated:

|                            |   |                                 |
|----------------------------|---|---------------------------------|
| Improvement needed:        | $208.5 \mu\text{g}/\text{m}^3 - 150 \mu\text{g}/\text{m}^3$     | $= 58.5 \mu\text{g}/\text{m}^3$ |
| % reduction needed:        | $58.5 \mu\text{g}/\text{m}^3 \div 203.5 \mu\text{g}/\text{m}^3$ | $= 28.7\%$                      |
| Emission reduction needed: | $28.7\% \times 960 \text{ lb/day}$                              | $= 275 \text{ lb/day}$          |

## 4.18.6. CONTROL MEASURES

### 4.18.6.1 GENERAL

The control measures outlined in this section were developed through review and discussion by the Oakridge Citizen's Clean Air Advisory Committee, city manager, city council, mayor and LRAPA. They are calculated to reduce emissions sufficiently to bring the Oakridge area into compliance with the NAAQS. The emission reductions, which primarily affect the 24-hour NAAQS (woodstove and road dust control measures), represent rollback, or straight-line proportional reductions. They show how the selected control measures will reduce the 'peaks' associated with exceedances of the 24-hour standard.

The control measures meet the 1990 CAAA requirement to incorporate Reasonably Available Control Measures (RACM) to sources which contribute significantly to non-attainment of the  $PM_{10}$  NAAQS. The RACM in this SIP specifically apply to residential wood heating, and fugitive dust emissions from paved and unpaved streets. Also included are estimates of costs, sources of funding, other resources and commitments for implementation.

The following assumptions are made:

- On a worst-case day, emissions from woodstoves and road dust are the most significant contributors to the ambient particulate concentration, and together comprise about 97 percent of all emissions.
- On a worst-case day, woodstove emissions are by far the most predominant, comprising approximately 76 percent of the local  $PM_{10}$  emissions.
- Road dust comprises a smaller proportion, about 21 percent of the total  $PM_{10}$  emission. Road dust is slightly less evenly distributed. However, this difference is not significant enough to seriously affect the rollback calculations.
- There is close agreement between the proportionate contributions as shown by the emissions inventory and the Chemical Mass Balance analysis at four sites. The rollback demonstration will be made using both sets of data.
- The relationship of woodstove and road dust emissions, together, to ambient air quality is essentially a linear or 'straight-line' relationship, and reductions in predicted  $PM_{10}$  concentrations at the monitoring sites are directly proportional to reductions of  $PM_{10}$  emissions from the significant source categories.

## 4.18.6.2 WOODSTOVE EMISSION CONTROL MEASURES

### 4.18.6.2.1 Accelerated Woodstove Replacement

This control measure is central to achieving attainment, and will enhance both long- and short-term compliance. The program consists of economic incentives for residents to replace old, high polluting woodstoves with alternative heating systems with lower emission rates. These include electric furnaces and heat pumps, oil, gas, pellet stoves, or EPA certified low-emission woodstoves.

The program, which was initiated in 1993, was funded by the U.S. EPA, together with support from the Oregon Department of Environmental Quality and LRAPA. As presently structured, the program provides up to \$2,500.00 per low- or moderate-income household for installation of approved alternative heat sources, either as no-interest loans or outright grants. Participants must certify, in writing, that they will dispose of their old stoves, and not utilize non-approved alternatives in the future.

Emission reductions from this control measure are calculated based on the number of woodstoves replaced, and what type of heating system replaces them. As of July 1, 1994, the incentive program replaced approximately 115 woodstoves. Results show 46 residents opting for EPA certified cordwood stoves, 48 opting for pellet stoves, 13 for heat pumps or electric furnaces, 4 for propane gas furnaces, and 4 for oil furnaces. From this information, emission reductions are calculated at 68 percent per replaced unit (See Appendix X, Final Report, Oakridge Wood Heating Demonstration Project).

The replacement program, as of July, 1996, has replaced an additional 15 uncertified stoves, for a total of 130, resulting in about 12 percent continuous emission reduction of RWC  $PM_{10}$ , with the added benefit that these reductions will lower the annual  $PM_{10}$  concentrations as well. On a worst-case day, this represents a 86 lb/day emission reduction.

Costs for the program include the actual cost of replacement units (a maximum of \$2500 each), plus a fee for administering the program, which is administered by the local city government. This cost is partially offset by the fact that some of the replacements were implemented through the use of no-interest loans to the homeowners, with the repayment funds to be used to buy back more stoves. It is expected that, as funds are returned to the city as repayments, they will be used for additional replacements, until the funds are fully expended. This control measure is one of the RACM's for residential wood heating.

### 4.18.6.2.2 Aggressive Voluntary Wood Burning Curtailment

Since 1989 an advisory program has provided a daily wood burning advisory for Oakridge. The program is operated by LRAPA, in cooperation with the City of Oakridge



and local news media. The advisory, determined daily by LRAPA staff during the months of November through February, is based on measured air quality, expressed as the standard Air Pollution Index (API) and forecast meteorological conditions. It is widely broadcast on radio and television each day, and in the regional newspaper.

The advisory operates using a "red-yellow-green" system. A "green" advisory is posted when the API is less than 63, and good smoke dispersion conditions are forecast. "Yellow" advisories are posted when the API is greater than 63, less than 75, and the forecast is for marginal smoke dispersion conditions. Under this advisory, residents are advised to burn wood sparingly, and only if alternatives are unavailable. "Red" advisories are posted when the API is greater than 75, and the forecast is for marginal or poor smoke dispersion conditions. A red advisory requests that residents abstain from wood burning unless they have no alternative heat source.

The no burning "red" advisory was issued on 7 occasions in January 1991. Compliance was marginal, as it has been on subsequent occasions as well. Compliance has fallen off especially when a "no burning" red advisory extends beyond one day. However, an "enhancement" outreach program will be implemented that will include additional public education and an in-town representative boosting the voluntary compliance rate. The program will focus on residents who routinely operate woodstoves in a manner which produces excess smoke, or burn contrary to the published voluntary wood heating advisory. LRAPA has completed an agreement with a local (Oakridge) contractor to provide the following services:

- Publish public information articles in the local newspaper regarding gathering/seasoning firewood.
- Participate in the local Oakridge Health Fair held each spring.
- Survey the local area for smoky chimneys, recording addresses of habitual abusers.
- Send clean wood burning information to the list of habitual abusers throughout the heating season.
- Conduct educational in-home visits to habitual abusers.
- Conduct drive-by compliance surveys on green, yellow, and red days, using pre-established survey routes.
- Coordinate with the city to use cable television access for daily RWC advisories.
- Provide plastic tarps to residents for covering wood piles.

Additionally, the contractor will advise residents about woodstove replacement, weatherization, and fuel moisture monitoring programs presently available.

EPA has allowed emission reduction credit for these kinds of outreach programs, coupled with voluntary curtailment programs, provided they are very active, and that compliance can be verified by ongoing surveys. Implementation of an aggressive voluntary curtailment program, coupled with the outreach effort as outlined above, will result in at least a 25 percent reduction in RWC emissions on a worst-case day during a "red" no-burn advisory. This represents about 157 lbs. on that day. Cost of this voluntary program falls principally on LRAPA and is estimated at \$7,000/year. It is part of the annual LRAPA budget. (See Appendix XI, Workplan for the enhanced outreach program.)

#### 4.18.6.2.3 Mandatory Wood Burning Curtailment

By State law, and with one exception, residential wood heating is exempt from DEQ or LRAPA air quality regulations. It can only be regulated by city ordinance. The exception is that, if a city does not implement an approved curtailment program, OAR 340-34-150 to 340-34-175 gives the state the authority to do so. Accordingly, Oakridge has developed and is scheduled to adopt a city-wide mandatory wood heating curtailment ordinance which will be implemented upon determination by EPA, after the 1997-1998 heating season, that milestones for the other control measures are not being met and it appears the area will not otherwise reach attainment by December 31, 2000. The determination by EPA would be made only after consultation with the City of Oakridge and LRAPA, to determine whether interim corrective measures would be appropriate. The city has the general authority under state law to enact and enforce ordinances. It is expected that if mandatory curtailment is needed, the city would contract with, or delegate to LRAPA, the implementation. (See Appendix XII. Draft ordinance, wood heating curtailment.)

Determination to activate the mandatory program will be based on notification by EPA, after consultation with the City of Oakridge and LRAPA, that the implementation of the SIP is insufficient to reach attainment by the attainment year. This notice will be given if necessary, after EPA evaluation of compliance with the voluntary curtailment program, wood stove replacement program, other control measures, and overall emission reductions realized since the baseline year.

If the control measures have been implemented and emission reductions projected by this plan have occurred, the mandatory curtailment program will be deferred, and the voluntary curtailment program continued on a year-to-year basis. Ambient air quality data will also be evaluated each year. Once the attainment date is reached, and provided attainment has been achieved, mandatory curtailment will become a contingency measure in the maintenance plan, triggered if there is a violation of the NAAQS.

Should it become necessary, mandatory curtailment would result in reductions of between 300 and 500 lb./day, or between 50 percent and 70 percent of RWC during air stagnation, when exceedances of the 24-hour NAAQS might be recorded.

The cost for developing and administering a mandatory curtailment program is based principally on estimates from other localities operating similar programs. Annual costs are estimated at \$30,000/year over current program costs, primarily for added field staff and enforcement procedures. Should mandatory curtailment become necessary, some funding would be sought from the City, and some would need to be budgeted by LRAPA. It is likely that some funding now used for the voluntary program would be used for the mandatory program. Mandatory curtailment is a RACM for residential wood heating. If the city or LRAPA do not implement the program after it is deemed necessary, DEQ is authorized to implement the program.

#### 4.18.6.3 PAVED ROAD DUST CONTROL MEASURES

The second largest  $PM_{10}$  emission source in Oakridge is road dust from paved city streets, including surface streets and through traffic on the section of U.S. Highway 58 that traverses the length of the non-attainment area. A number of RACM's were considered, such as routine sweeping and flushing, but were deemed too expensive, ineffective, or posed some water runoff issues, due to the proximity of the Willamette River.

##### 4.18.6.3.1 De-Icing Modifications

Wintertime dust from paved roads will decrease, however, from reductions in trackout and entrainment due to use of chemical de-icing material along Highway 58. A number of alternatives to traditional road sanding have been studied in Oregon and other areas. (See Appendix XIII, Snow and Ice Control Chemicals Progress). RACM analyses on alternatives discussed below suggest dust emission reductions from 50 percent (washed grit) to 100 percent (non-residue deicing chemicals) can be expected. Alternate road sanding materials, periodic cleanup and chemical de-icers are considered RACM for fugitive dust emissions from paved roads and streets. Specific measures are discussed below.

Sanding and maintenance of U.S. Highway 58 through Oakridge is the responsibility of the Oregon Department of Transportation, Highway Division, Region 3. The Citizen's Advisory Committee agreed to promote and support efforts by the Division to reduce emissions from sanding, including:

- **Alternative Sanding Materials** - The traction sanding material used in the base year was predominantly washed, crushed, 'bar-run' river rock specified as 'quarter-ten' crushed rock. This material is reasonably hard, with much of the fine material removed. On occasion, softer crushed cinders were used when the normal harder rock, or the equipment used to apply it, was unavailable.

In 1994-95, the Oregon Department of Transportation, Engineering Services Section, experimented with a chemical de-icing compound, calcium magnesium acetate

(CMA), that would completely eliminate the use of sanding material within the city limits of Oakridge. CMA has been specified for use in Oakridge since 1995. The material is applied either in pellet form or dissolved in water, prior to temperature drop and road icing. It effectively inhibits ice formation down to temperatures normally encountered in Oakridge, and eventually is washed off the roadway without residual particulate. No additional cleanup is necessary, and good traction control is achieved in most instances. CMA is considered by DEQ to be non-toxic to humans, fish, and other animals when used properly, and reduces the formation of road ice such that road sanding is unnecessary.

It is not assumed that CMA eliminates all wintertime road dust from de-icing. Mud and sand "tracked out" from driveways and "tracked in" from outside the city limits also contribute to the total road dust load. The precise amount of this material is unknown, but is estimated to provide approximately 25 percent of the total road dust contribution. Accordingly, the use of CMA is not considered to reduce road sanding emissions to zero, but rather by a factor of 75 percent.

The strategy is for the highway division to continue use of CMA, and to record the amount applied in Oakridge each winter season. For the purpose of the attainment demonstration, 75 percent emission reductions are assigned to this control measure.

Information supplied by the Oregon Department of Transportation Highway Division indicate that, over the long run, the cost of using CMA is comparable to that of road sanding. De-icing and winter maintenance is an ODOT budgeted item.

#### **4.18.6.4 PAVING UNPAVED STREETS**

Prior to the base year, 1991, according to the emissions inventory, there were about 2.4 miles of unpaved streets in Oakridge. Since then, based on city records, virtually all unpaved roads have been paved, along with numerous unpaved commercial driveways and parking lots. About .8 miles were paved in the Summer of 1991 (after the worst-case day stagnation episodes in January), and about .5 miles have been paved since then. It is assumed that the paving was performed on streets which bear the highest vehicle traffic. Conservatively, the paving results in an estimated 75 percent net emission reduction from unpaved streets. This is about 56 lbs/day reduction. VMT on these streets, now paved, will increase in time, and accounts for some of the 9 percent additional paved road emissions for the attainment year covered in the growth scenario. Street paving is RACM for unpaved streets.

#### **4.18.6.5 OTHER CONTROL MEASURES**

- Open Burning - On March 19, 1992, the Oakridge City Council amended its open burning ordinance #689 to allow open backyard burning only during the months of October, March, April, and May. This eliminates burning during wintertime periods

of maximum atmospheric stagnation when burning is more likely to contribute to exceedances of the 24-hour standard. Thus, open burning is a minor factor in short-term PM<sub>10</sub> non-attainment. No credit is taken for the worst-case day, because it is assumed open burning would be prohibited under worst-case day conditions. Although not part of this SIP, the open burning restrictions are mentioned as providing additional cushion.

- **Slash Burning** - A strong public perception exists in Oakridge that smoke intrusions from slash burning, which are highly visible and odorous, are a significant part of the non-attainment problem. While slash smoke has not directly been conclusively shown to contribute to exceedances of the Oakridge NAAQS, the fact that smoke intrusions do occur reduces the willingness of residents to comply with voluntary woodstove curtailment programs and to participate in the woodstove replacement program.

The Oregon Department of Forestry is responsible for administering the slash burning portion of the state's Smoke Management Plan, designed to protect certain areas from the effects of slash smoke, including Oakridge. An added provision of this plan is the creation of Special Protection Zones (SPZ) around non-attainment areas. Slash burning within the SPZ is restricted on "red" woodstove burning advisory days.

The Smoke Management plan, as administered by the Oregon Department of Forestry, is considered RACM for prescribed burning, and will continue to treat Oakridge as a fully protected non-attainment area warranting inclusion in a Special Protection Zone, as long as the city is designated as a non-attainment area. The present SPZ prohibits slash burning within approximately a 20-mile radius during woodstove "red" days, and requires rapid mop-up of residual burning material on air stagnation days.

- **Supplemental monitoring** - In order to assure NAAQS are met throughout the Oakridge area, periodic supplemental monitoring projects will be conducted. These projects will be scheduled upon measurement of 24-hour values above 120 ug/M<sup>3</sup> at WAC.

#### 4.18.6.6 SUMMARY OF RACM EMISSION REDUCTIONS

Worst-case day emission reduction credits are summarized in Table 6.1 showing reductions from all sources, including the enhanced voluntary curtailment program, the woodstove replacement program, and road paving measures. Similar calculations, using CMB-derived source contribution percentages, show agreement between the two analyses. In both analyses total emission reductions exceed the targets with about an 8 percent margin.

**Table 6.1 Credits for Each Attainment Strategy Affected Sources--Attainment Year**

| Strategy by Source Category    | Lb/Day by Source Category   | % Reduction by Source Category | Lb/Day Reduction by Source Category | Lb/Day Remaining by Source Category |
|--------------------------------|-----------------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Residential Wood Combustion    | 714                         | 34%                            | 243                                 | 471                                 |
| City Replacement Program       | 714                         | 12%                            | 86                                  | 628                                 |
| Enhanced Curtailment           | 628                         | 25%                            | 157                                 | 471                                 |
| Road Sanding                   | 9                           | 75%                            | 7                                   | 2                                   |
| Unpaved Roads                  | 74                          | 75%                            | 56                                  | 19                                  |
| Total Reductions from Column 4 | 306 lb/day, 32% reduction   |                                |                                     |                                     |
| Total Needed                   | 277 lb/day, 28.9% reduction |                                |                                     |                                     |
| Shortage/Overage               | -29                         |                                |                                     |                                     |

**4.18.6.7 AIR QUALITY IMPACT - WAC AND CLINE STREET**

Using the projected uncontrolled attainment year concentration from Table 5.2, and rolling back the 32 percent reductions from all control measures in Table 6.1, an estimate of air quality benefit at the Cline Street site can be made. Attainment is demonstrated at 142  $\mu\text{g}/\text{m}^3$ , with a small margin of safety. With all the conservative assumptions, it is probable that a larger margin actually exists. Table 6.2 shows the calculated air quality values at WAC and Cline Street. The estimated design value on a worst-case day in the attainment year, with no controls, at WAC is 169  $\mu\text{g}/\text{m}^3$ . The same 32 percent rollback would yield attainment at 115  $\mu\text{g}/\text{m}^3$ .

**Table 6.2 Air Quality Impact, All Control Measures**

| Location | 2000-- $\mu\text{g}/\text{m}^3$<br>No Controls | Percent Reduction | 2000-- $\mu\text{g}/\text{m}^3$<br>All Controls |
|----------|--|-------------------|---|
| Cline    | 208.8  | 32%               | 142   |
| WAC      | 167  | 32%               | 115   |

Air quality will be continuously monitored at WAC. Periodic saturation studies will evaluate relationship between WAC and other sites. Saturation studies will be scheduled whenever 24 hour WAC measurements exceed 120 $\mu\text{g}/\text{m}^3$ .

#### 4.18.6.8 PROGRESS REPORTS - MILESTONES, REASONABLE FURTHER PROGRESS

The CAAA of 1990 requires that non-attainment areas establish and meet milestones showing reasonable progress in reaching attainment. Milestones will be established for 1996 and 1998, as follows:

##### 4.18.6.8.1 Milestone I--June 30, 1996, and Annually

###### Tasks To Be Completed:

- Annual LRAPA evaluation of the effectiveness of the aggressive enhancement of the voluntary curtailment program through compliance surveys. Maintain or increase public education program elements.
- To the extent that funding remains available, continue Oakridge-operated buyback program to replace conventional wood heating units in low income households.
- ODOT-Hwy. Div. implementation of alternative road sanding program, for following winter season, using either CMA or other alternative.
- Annual LRAPA evaluation of air quality data, including saturation studies approximately every 3 years, to determine effectiveness of the emission control strategies. Report the prospects of delaying or implementing mandatory curtailment measures to the Oakridge City Council.
- Using city records, LRAPA evaluation of growth indicators assumed in attainment demonstration, including population, woodstove replacement outside the city-operated replacement program.
- City of Oakridge adopts an ordinance for mandatory curtailment, with an effective date triggered by an EPA determination, after consultation with the City of Oakridge and LRAPA that milestones are not being met and that attainment cannot be reached before the attainment date of December 31, 2000.
- City of Oakridge and LRAPA implement mandatory curtailment upon the effective date (EPA notification of inadequate implementation).
- Supplemental monitoring to confirm relationship between WAC and other sites in southeast quadrant of Oakridge, upon measurement of 24-concentration of 120 mg/M<sup>3</sup> or higher at the WAC site.

**4.18.6.8.2 Milestone II--June 30, 1999**

**Tasks To Be Completed:**

- If mandatory curtailment is needed, report on compliance and effectiveness.
- If air quality is within NAAQS, prepare to develop a maintenance plan.

**4.18.6.9 SUMMARY OF EMISSION REDUCTION PLAN**

Strategies of the Emission Reduction Plan, who implements them, and when they are implemented are summarized in Table 6.3:

**Table 6.3 Summary of Emission Reduction Plan Implementation**

| <b>Control Strategy</b>                               | <b>Who Implements</b>                       | <b>When</b>         |
|---|---|---------------------|
| Aggressive Woodstove Changeover                       | City of Oakridge and ODEQ                   | Ongoing             |
| Aggressive Voluntary RWC Curtailment                  | LRAPA and City of Oakridge                  | Ongoing             |
| Alternative Paved Road De-icing and Dust Suppression, | State Highway Division and City of Oakridge | Fall, 1993, Ongoing |
| Paving Unpaved Roads                                  | City of Oakridge                            | 1991, Ongoing       |
| Special Protection Zone for Slash Burning             | Oregon Dept. of Forestry                    | Ongoing             |
| Adoption of Mandatory Curtailment                     | City of Oakridge                            | August, 1996        |

**4.18.6.10. CONTINGENCY MEASURES**

Section 172(C)(9) of the 1990 Clean Air Act Amendments requires that SIP's include contingency measures for significant sources of PM<sub>10</sub>. Contingency measures are to take effect automatically, without further administrative action, if the area fails to meet its RFP milestones or fails to attain the PM<sub>10</sub> NAAQS by the applicable attainment date. Contingency measures are triggered by notification by EPA that the area has failed to adequately implement the SIP to achieve attainment by the attainment date, meet its RFP commitments, or by publication in the Federal Register that the area has not attained the PM<sub>10</sub> NAAQS by the attainment date--in this case, December 31, 2000.

The following elements are included as contingency measures:



#### **4.18.6.10.1 Mandatory Curtailment of Residential Wood Combustion**

If the NAAQS are not met by the attainment date, the mandatory RWC curtailment program as outlined in Section 6 will be automatically implemented. If attainment is achieved, the mandatory program will remain in force, with a pending effective date as a contingency measure. State statute provides state backup authority to implement mandatory curtailment, should the city or LRAPA fail to do so.

Emission reductions from a mandatory curtailment program will run from 50 percent to 75 percent on a worst-case day.

#### **4.18.6.10.2 Removal of Uncertified Woodstoves at Time of Resale of Residences**

OAR 340-34 requires that if a PM<sub>10</sub> non-attainment area fails to achieve attainment by the attainment date, any uncertified woodstoves installed in a residence within the non-attainment area must be removed upon resale to a new owner.

Emission reductions from this provision depend upon the housing turnover in the area.

#### **4.18.6.11 RESOURCES AND COMMITMENTS**

Each of the control measures discussed above requires certain resource and activity commitments from various agencies involved in implementing them. The following summary lists the sources of funding for each control measure and, as appropriate, commitments from implementing agencies to carry out their respective roles.

##### **4.18.6.11.1 Woodstoves**

Funding for the non-certified woodstove changeover operated by the city has largely been expended. The residual funds remaining in the program will continue to be used for additional changeovers until exhausted.

The outreach program is funded by an annual grant from DEQ to LRAPA and other agencies implementing PM<sub>10</sub> attainment plans. About \$5,000 is dedicated directly to outreach, while another \$2,000 funds the daily burning advisories. As long as the grant is awarded, the outreach program will continue in its present form. If grant funds are curtailed, alternative funding will be provided through negotiated agreement between the City of Oakridge and LRAPA.

The mandatory curtailment program, if it is needed, will be delegated by the city ordinance to LRAPA. It is expected that some of the costs will be borne by the LRAPA budget. Funding now used for the outreach program, and any other supplemental grants or awards, will be diverted to mandatory curtailment.

#### **4.18.6.11.2 Alternative De-Icing Practices**

This is a state Highway Division program, funded from state highway funds. Commitments have been made to work with the alternatives to find the most appropriate option. (See Appendix XIV, Letter from ODOT District 5).

#### **4.18.6.11.3 Paving Unpaved Streets**

Paving projects are part of the city's annual budget. In 1991 the city used much of its share of county road funding to pave virtually all unpaved streets and alleys in the city. The city has an ongoing paving and maintenance program funded through annual budget appropriations. The city has passed an ordinance requiring all new commercial driveways to be paved.

#### **4.18.6.11.4 Slash Burning**

The Oregon Department of Forestry has responsibility, under its Smoke Management Plan, for the Special Protection Zones in Oregon. The administration of the Oakridge SPZ will be funded by ODF.

## **4.18.7 MAINTENANCE AFTER ATTAINMENT, AND CONFORMITY**

### **4.18.7.1 GENERAL MAINTENANCE PROVISIONS**

Clean Air Act Amendments require that SIP's include provisions to maintain the NAAQS, once they are attained, for a period of three years. These maintenance scenarios take into consideration population growth, potential industrial development, and technological/regulatory developments. While it is difficult to estimate emission trends years ahead, strategies can be developed that provide for long-term control of emissions from various source categories.

#### **4.18.7.1.1 General Outlook**

The Oakridge area has historically experienced a "boom and bust" population growth pattern, following the fortunes of the timber industry. Cutbacks in local timber employment, the timber industry in general, and reductions in force due to reductions in budget cuts at the federal level, have impacted population growth in recent years. However, indications are now that population decline has stopped, and there may be a very modest population growth, as indicated by an uptick in building permits and low rental vacancy rates. Retirees and others seeking lower living costs, recreational opportunities and a favorable climate are moving into the area. This trend may be indeterminate with regard to long-term growth patterns; however, it is assumed there will be some long-term growth, as the Northwest in general is experiencing a growth spurt. It is assumed that the population growth will be about .75 percent for the foreseeable future. Actual growth will vary year by year, as the general economy, tourist trade and other factors change.

Using straight-line projections in the same manner as used for estimating worst-case day, attainment year, no-control scenario,  $PM_{10}$  emissions which are affected by population and transportation are expected to continue to lower gradually, overall, as wood use decreases and uncertified stoves continue to be replaced. This projection includes the anticipated increases in mobile sources and fugitive dust from paved roads that come with population and accompanying traffic increases.

#### **4.18.7.2 INDUSTRIAL POINT SOURCE MAINTENANCE MEASURES**

The city continues to encourage small businesses to locate to the area, and has reserved industrial sites for future development. Several small manufacturing operations have taken advantage of the favorable location and available work force to locate in the former Pope and Talbot/Bald Knob mill site, now under development as an industrial park.

Section 189 (a)(1) of the 1990 CAAA requires States to develop and submit a SIP that incorporates preconstruction permitting requirements for new or modified major stationary sources (New Source Review, or NSR). For moderate PM<sub>10</sub> non-attainment areas, the term "major stationary source" means any stationary source which directly emits, or has the potential to emit, 100 tons or more of PM<sub>10</sub>, or PM<sub>10</sub> precursors, per year.

LRAPA's NSR program meets federal requirements and applies to sources with potential to emit more than "significant" quantities of air contaminants, a rate for PM<sub>10</sub> defined as 15 tons/year (Title 38, LRAPA Rules & Regulations). New Source Review requirements ensure that air quality standards are not exceeded as a result of new industrial point sources or modifications to existing sources which may emit significant quantities of air contaminants. Permits for proposed new or modified PM<sub>10</sub> emission sources are issued only when it is determined that the source or modifications will produce a net air quality benefit. Since there are presently no significant industrial sources in Oakridge, there is little opportunity to obtain industrial offsets necessary to show net air quality benefit, other than for a new major industrial source to fund the replacement of a sufficient number of uncertified woodstoves to offset new PM<sub>10</sub> emissions. Non-major sources also must obtain permits. They would not be required to meet the offset requirement, and would be allowed to use growth increments available at the time of permitting. If no growth increments are available, new non-major sources would either not be permitted, or would have to obtain offsets, just as major sources; or a SIP revision with additional emissions reductions would have to be implemented.

As discussed below, growth increments are projected to be available for limited non-major industrial growth. These projected growth increments would increase, if additional maintenance measures were taken to further reduce emissions. One feasible avenue would be for the city of Oakridge to pursue additional sources of funding its woodstove replacement program. Another strategy would be to bring natural gas to the community. This would be a significant undertaking, including participation by state agencies and the gas company to address the economic feasibility. Any such programs to further reduce existing PM<sub>10</sub> emission below the projected levels have potential for producing significantly greater cushion for industrial growth.

#### 4.18.7.3 AREA SOURCE MAINTENANCE MEASURES

Over the three-year period following the attainment year, the total numbers of area sources, primarily woodstoves, are expected to increase slightly, but per-unit emissions will continue to decrease, as turnover reduces the number of uncertified stoves in the community. As woodstove emissions are projected to decrease, in-town traffic is expected to increase, producing some additional paved street dust. Vehicle exhaust emissions should remain stable as higher percentages of lower-emission vehicles become part of the vehicle mix. The net emissions from all area sources are projected to decrease.

Three measures will ensure that area source emissions do not escalate beyond these projections, and adversely impact local air quality:

- The Voluntary RWC Curtailment Program will continue to issue a voluntary curtailment advisory to reduce or cease RWC when air stagnation conditions are indicated. Even with many of the older stoves replaced with lower-emission alternatives, without the voluntary curtailment program, it is possible that the PM<sub>10</sub> levels could exceed the NAAQS.

Beginning in 1999, a mandatory RWC curtailment program will be implemented if EPA notifies the city, after consultation with the city and LRAPA that the attainment strategies of buy-backs and a voluntary RWC curtailment program, combined with road dust reductions and other measures outlined in the demonstration, are not adequate to meet the NAAQS. If it is not necessary to implement the mandatory program to attain NAAQS, it is expected that the program will remain in readiness, in case it is needed.

- The Highway Division is committed to continue dust control measures from wintertime sanding. Additional modifications may be made to this program over time as additional study results in more efficient and cost-effective ways to control emissions from this category.
- Continuation of the Special Protection Zone for slash burning will continue as long as the mandatory wood heating curtailment is in effect.

The maintenance strategy control measures are outlined in Table 7.1:

**Table 7.1 Maintenance Control Measures**

| STRATEGY  | WHO IMPLEMENTS                          | WHEN  |
|---|---|---|
| Continuation of NSR for Major Industrial Sources                                  | LRAPA                                   | Ongoing, as long as Oakridge is a non-attainment area |
| Continuation of Aggressive Voluntary RWC Curtailment and Public Education Program | LRAPA                                   | Ongoing, unless replaced by mandatory                 |
| Mandatory Curtailment of RWC  | LRAPA & City of Oakridge                | If 1998 Milestone or attainment not met.              |
| Continuation of Rapid Cleanup/Alternative materials for Road De-icing             | Oregon State Highway Division and LRAPA | Ongoing   |
| Continuation of SPZ for Slash Burning   | Oregon Department of Forestry           | To continue as long as mandatory curtailment          |

Table 7.2 summarizes the emissions increases and decreases, by source category, for the three-year period after attainment. There is about a 33 pound per day growth cushion available for non-major industrial sources. To the extent additional emission reduction measures are taken, this cushion will increase accordingly.

**Table 7.2 Summary of Emissions After Attainment, 2003**

| Source Category        | lb/Day, 2000 | Percent Inc/Dec 3 Yrs, 2000-2003 | lb/Day Inc/Dec, 2003 | lb/Day, 2003 |
|------------------------|--------------|----------------------------------|----------------------|--------------|
| Industry               | 5.5          |                                  |                      | 5.5          |
| Wood stoves            | 471.0        | -1.6%                            | -7.5                 | 463.5        |
| Paved Roads, & Sanding | 136.2        | 3.0%                             | 4.1                  | 140.0        |
| Unpaved Roads          | 19.0         | 0.0%                             | 0                    | 19.0         |
| Transportation         | 19.8         | 0.0%                             | 0                    | 19.8         |
| Other                  | 3.2          | 2.25%                            | 0.2                  | 3.3          |
| Total                  | 655.0        |                                  | -3.2                 | 652.0        |
| Needed for Maintenance | 667.0        |                                  |                      | 667.0        |
| Growth Cushion         | 12.0         |                                  |                      | 15.0         |

#### 4.18.7.4 CONFORMITY

The 1990 Clean Air Act Amendments require assurance that federal transportation systems and projects will not interfere with strategies to attain and maintain air quality standards. A specific PM<sub>10</sub> emissions "budget" is established in this plan for Oakridge, to be used for conformity purposes. The fugitive dust and transportation source categories account for the transportation-related emissions in Oakridge. Emissions have been estimated for the 1991 base year, the attainment year 2000, and the 3-year maintenance year 2003.

New emissions associated with construction in Oakridge of regionally significant transportation projects must stay within this established budget.

Current estimates from ODOT are that, within the Oakridge non-attainment area, there are no regionally significant transportation projects subject to the conformity requirements on the planning horizon of ODOT. Therefore, for conformity purposes, the

emissions budget for transportation sources, including paved roads, sanding, unpaved roads and tailpipe emissions, will be the emission estimates for the attainment year 2000 and the maintenance year 2003. Table 7.3 summarizes the transportation PM<sub>10</sub> emissions budget.

Table 7.3 Emissions Budget, Transportation Conformity

| Year | Milestone        | Budget,<br>pounds/day |
|------|------------------|-----------------------|
| 2000 | Attainment Year  | 175.0                 |
| 2003 | Maintenance Year | 178.8                 |



## **4.18.8 PUBLIC PARTICIPATION**

### **4.18.8.1 PUBLIC PROCESS**

The citizens of Oakridge have contributed to this process through numerous public meetings, including proposing, evaluating, and selecting various control strategies. They have provided valuable input on the most suitable plan for Oakridge, and many have already taken part in the grant/loan incentive program to retire older woodstoves. Others have contributed through their efforts to observe the voluntary wood burning curtailment advisory, and following good wood burning practices.

### **4.18.8.2 CITIZEN'S AIR QUALITY COMMITTEE**

The Citizens' Air Quality Committee is a selected group of civil, business, and industry leaders in Oakridge who have worked with LRAPA, the Oregon DEQ, and the citizens of Oakridge to guide the development of this document. Their efforts have included evaluating alternative control strategies, working with DEQ to secure funding for the incentive program, and providing ongoing support to the city council in the regulatory development process. (See Appendix XV, Summary of meeting dates).

### **4.18.8.3 OAKRIDGE CITY COUNCIL**

Involvement of the Oakridge City Council dates from the earliest phases of SIP development. Air quality and, later, NAAQS non-attainment issues were discussed at city council meetings beginning in 1988. This involvement continued as the council was briefed on the activities of the citizen's committee from its inception.

The council will propose ordinances essential to the implementation of the SIP, including provisions which curtail open burning during the wood heating season, and implement the mandatory wood heating curtailment plan. The council has assisted in locating funding for the accelerated change-out plan through the application for CDBG grants, and continues to be extremely supportive of the efforts of LRAPA, ODEQ, and the Citizen's Air Quality Committee.

### **4.18.8.4 PUBLIC HEARINGS**

A public hearing was held in Oakridge on July 18, 1996. A summary of testimony is contained in Appendix XVI. As a result of the public hearing, the Oakridge SIP was adopted by the LRAPA Board on August 13, 1996. Minutes of that action are contained in Appendix XVI.

Changes to the proposed SIP as a result of public comment are as follows:

Comments and suggestions were received from EPA in a letter dated July 17, 1996. Two comments are contained in the body of the letter, and several more technical comments are in a separate document, marked "Enclosure A." A letter from DEQ, dated July 16, 1996, expressed concurrence with EPA comments. (See Appendix XV)

#### Comments from Body of Letter

1. EPA/DEQ COMMENT: The draft plan lacked an adopted city ordinance, enacting the mandatory woodstove curtailment program, as a fallback measure, and as a contingency.

LRAPA RESPONSE: The city has scheduled adoption of the ordinance on August 15, 1996. The draft ordinance is the same as that proposed in Appendix XII, with the additional sections on effective date, and lowering the action level to  $120 \mu\text{g}/\text{m}^3$ .

2. EPA/DEQ COMMENT: The draft plan lacked a clear statement from ODOT to reduce sanding and use the substitute de-icer for skid control during icy periods in the winter.

LRAPA RESPONSE: See letter sent by District Manager, dated July 29, 1996, committing to continued use of chemical de-icer in Oakridge.

#### Technical Comments from Enclosure A

3. EPA/DEQ COMMENT: Section 4.18.3.7, Background Concentrations, should include background monitoring data as an appendix.

LRAPA RESPONSE: Concur with comment. Summary of background monitoring data added as an appendix.

4. EPA/DEQ COMMENT: Section 4.18.4, Appendix IV, Emissions Inventory, note on appendix cover sheet indicates EI still under revision.

LRAPA RESPONSE: Deleted note. EI in appendix matches EI used in analysis.

5. EPA/DEQ COMMENT: Section 4.18.4, Appendix IV, Emissions Inventory, clarify that woodstoves in base year are uncertified.

LRAPA RESPONSE: Clarification in text of plan. See 4.18.4.3.1

6. EPA/DEQ COMMENT: Section 4.18.5.2.2, Table 5.1, error in calculation of worst-case day for road dust, sanding.

LRAPA RESPONSE: Calculation corrected.

7. EPA/DEQ COMMENT: Section 4.18.5.2.2, Table 5.1, break out sanding from road dust.

LRAPA RESPONSE: Sanding and road dust categories segregated.

8. EPA/DEQ COMMENT: Section 4.18.5.2.3, Table 5.2, calculated emission in '91, '97 and '00 don't match the values in the text.

LRAPA RESPONSE: Typo corrected and recalculation from growth percentages to match text.

9. EPA/DEQ COMMENT: Section 4.18.6.3.1, De-icing modifications, revise to reflect final strategy.

LRAPA RESPONSE: Revisions added to show use of chemical de-icer.

10. EPA/DEQ COMMENT: Section 4.18.6.3.1, De-icing modifications, document 50% credit for rapid cleanup.

LRAPA RESPONSE: Deleted reference to rapid cleanup as not needed, since sanding will not be used.

11. EPA/DEQ COMMENT: Section 4.18.6.5, Other control measures, open burning should not be included as enforceable SIP strategy, since no reduction credit is taken.

LRAPA RESPONSE: Concur. Open burning is mentioned as a means to increase cushion, but is not included as enforceable SIP control measure.

12. EPA/DEQ COMMENT: Section 4.18.6.6, Table 6.1, clarify numbers in columns by labeling base and attainment years.

LRAPA RESPONSE: All data is for attainment year. Heading on table changed to reflect that.

13. EPA/DEQ COMMENT: Section 4.18.6.6, Table 6.1, change "Road Paving" to "Unpaved Roads".

LRAPA RESPONSE: Concur. Change made.

14. EPA/DEQ COMMENT: Section 4.18.6.7, Air Quality Impact, explain air quality impact, using rollback calculation.

LRAPA RESPONSE: Added explanation that applying the same emission reduction percentage to the air quality design value yields a value below the NAAQS, with a small margin at Cline Street, and a larger margin at WAC.

15. EPA/DEQ COMMENT: Section 4.18.6.7, Air Quality Impact, restate "Sampling will be scheduled..."

LRAPA RESPONSE: Restated, "Supplemental monitoring will be scheduled..."

Other conforming and non-substantive editorial changes have been made, and are not indicated here.

#### 4.18.8.5 MEDIA

The local newspaper, the Dead Mountain Echo, has not only published notifications of pending meetings, but has provided valuable assistance in the area of public education by publishing articles relating to air quality and the efforts of the community to promote clean air. Area television and radio stations, located primarily in the Eugene/Springfield area, announce the Oakridge voluntary wood heating advisory daily during the wood burning season. The Eugene Register-Guard newspaper publishes daily air quality advisories for Oakridge, in addition to articles concerning air quality.

## 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, and pursuant to the statutory authority of ORS 183 and 468A, the LRAPA Board of Directors is proposing:

To amend Oregon's State Implementation Plan (SIP) by adopting a PM<sub>10</sub> Control Plan for Oakridge PM<sub>10</sub> Nonattainment Area.

### EXPLANATION

Ambient air quality within the Oakridge urban growth area has violated the 24-hour National Ambient Air Quality Standards (NAAQS) for particulate matter less than 10 microns in diameter (PM<sub>10</sub>). As a result, Oakridge has been designated by the Environmental Protection Agency (EPA) as a moderate PM<sub>10</sub> nonattainment area. The Clean Air Act of 1990 requires that PM<sub>10</sub> control strategies be developed and submitted to EPA for approval and that the strategies, once implemented, will demonstrate that air quality will attain the NAAQS. The attainment date is six years after designation. For Oakridge, that date is December 31, 2000.

The sources of particulate which primarily cause standards to be violated in Oakridge include: smoke from residential wood combustion in the wintertime; and suspended fine soils from road dust, including when sand is applied for traction when roads become icy in the winter. The proposed control measures address those two major contributors to PM<sub>10</sub> in Oakridge.

### WHO IS AFFECTED:

1. Persons living within the Oakridge urban growth area who operate a wood heating devices during the winter months;
2. Oregon Department of Transportation, Highway Division;
3. City of Oakridge which will do the public outreach and adopt a woodstove curtailment ordinance; and
4. LRAPA which will implement the woodstove curtailment program.

### PUBLIC HEARING:

Public hearing on the above plan adoption will be held before an Oakridge city councilor acting as hearings officer for the LRAPA Board of Directors:

Location: Oakridge City Hall  
48324 East First  
Oakridge, Oregon

Date: Thursday, July 18, 1996

Time: 7:00 p.m.

Copies of the proposed Oakridge PM<sub>10</sub> SIP and attachments, as well as Statements of Need and Fiscal Impact, are available for review until July 18, 1996 at:

Oakridge City Hall  
38324 East First  
Oakridge, Oregon 97463

LRAPA office  
225 North 5th, Suite 501  
Springfield, Oregon 97477

The public may comment on the proposed regulations by calling the Oakridge city manager's office at (541) 782-2258 or the LRAPA business office at (541) 726-2514; or written comment may be submitted until July 17, 1996, to the Oakridge City Council or to the LRAPA Board of Directors at the above addresses.

*To Be Published: Thursday, June 13, 1996*

## NOTICE OF PROPOSED SIP ADOPTION HEARING

(Statement of Need and Fiscal Impact Accompanies this Form)

AGENCY: Lane Regional Air Pollution Authority and  
Department of Environmental Quality

The above named agency gives notice of hearing.

### HEARING TO BE HELD:

Date: July 18, 1996

Time: 7:00 p.m.

Location: Oakridge City Hall  
48318 East 1st  
Oakridge, Oregon

Hearings Officer: Terry Callahan (503) 726-2514  
Rule Coordinator: Susan Greco (503) 229-5213

Pursuant to the statutory authority of ORS 183 and 468A, the following action is proposed:

AMEND: Oregon's State Implementation Plan by adopting PM10 Control Plan for Oakridge PM10 Nonattainment Area

Prior Notice Given

### SUMMARY:

Ambient air quality within the Oakridge urban growth area has violated the 24-hour National Ambient Air Quality Standards (NAAQS) for particulate matter less than 10 microns in diameter (PM10). As a result, Oakridge has been designated by the Environmental Protection Agency (EPA) as a moderate PM10 nonattainment area. The Clean Air Act of 1990 requires that PM10 control strategies be developed and submitted to EPA for approval and that the strategies, once implemented, will demonstrate that air quality will attain the NAAQS. The attainment date is six years after designation. For Oakridge, that date is December 31, 2000.

The sources of particulate which primarily cause standards to be violated in Oakridge include: smoke from residential wood combustion in the wintertime; and suspended fine soils from road dust, particularly when sand is applied for traction when roads become icy in the winter. The proposed control measures address those two major contributors to PM10 in Oakridge.


Notice of Proposed SIP Adoption Hearing  
Adoption of Oakridge PM10 SIP  
Public Hearing July 18, 1996

-2-

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments received by July 17, 1996 will also be considered. Written comments should be sent to, and copies of the proposal rulemaking may be obtained from:

**AGENCY:** Lane Regional Air Pollution Authority  
**ADDRESS:** 225 North 5th, Suite 501  
Springfield, OR 97477

**ATTN:** Donald R. Arkell, Director  
**PHONE:** (541) 726-2514

  
Signature

  
Date



## FISCAL IMPACT

1. Public. The cost to comply with wood burning curtailment is estimated at \$2 to \$5 per day, per wood-burning home, assuming the optional heat source is more expensive to operate. On a worst-case day, when air stagnation and low temperatures combine to create poor air quality, households with uncertified woodstoves will be asked to curtail burning for the voluntary program. This would be about 25 percent of the base year wood-burning households of 750, or about 188 households. So it could cost between \$376 and \$940 per day for the citizens of Oakridge to curtail burning. As older stoves are changed out, the number of affected households is reduced, and the cost reduced, accordingly. The replacement program, though initially more expensive at about \$2,500 per household, provides a more permanent and continuous improvement in air quality in Oakridge and helps avoid the need for a mandatory curtailment program which, within a few years, would cost more than the initial cost of the replacement program. Assuming five or six no-burn days per year, a mandatory curtailment program, if needed, is estimated to cost between \$30,000 and \$50,000 per year.
2. State Agencies. Initially, the Highway Division would be required to invest in application equipment. Currently on-going costs of liquid de-icer and sanding are thought to be comparable.
3. Local Agencies. LRAPA, which will be issuing the daily wood-burning advisories, and the City of Oakridge, which will be performing most of the public information, would incur costs estimated at \$15,000 per year. If mandatory curtailment is necessary, LRAPA will incur costs up to \$50,000 per year for enforcement.
4. Business and Industry. There should be a benefit to local retail stores which sell home heating appliances and/or hearth products which are eligible to be used as replacements for uncertified woodstoves. Remodeling and renovation contractors should also see increased business due to replacement of old stoves.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for

1. PM<sub>10</sub> Control Strategy for the Oakridge PM<sub>10</sub> Nonattainment Area.

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

Ambient air quality in the City of Oakridge, Oregon has exceeded the 24-hour national ambient air quality health standard for respirable particulate (PM<sub>10</sub>) twelve times since 1990. As a result, Oakridge has been designated by the Environmental Protection Agency as a moderate PM<sub>10</sub> Nonattainment Area. The Lane Regional Air Pollution Authority (LRAPA) has primary responsibility for air quality programs in Lane County. The Clean Air Act requires LRAPA to develop an emission control strategy which will reduce PM<sub>10</sub> emissions and demonstrate compliance with standards by dates specified in the Clean Air Act. The Oakridge Attainment Plan contains specific Reasonably Available Control Measures (RACM) designed to reduce PM<sub>10</sub> emissions from significant emission source categories within the nonattainment area boundary. The control strategy has been designed to assure attainment with the national ambient air quality health standard for PM<sub>10</sub> (24-hour average), and meet the requirements of the Clean Air Act.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

Yes  No

- a. If yes, identify existing program/rule/activity:

Generally, proposed PM<sub>10</sub> control measures for residential woodsmoke, soil dust, and prescribed burning in Oakridge under the Oregon Smoke Management Plan, do not affect DEQ programs or activities that are considered land use programs. However, should new industry locate in Oakridge it may be subject to ACDP and Title V air permitting requirements. The air contaminant discharge permit program has been identified as a DEQ activity affecting landuse.

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes X No \_\_\_\_\_ :

Under current procedures, local government and the Department, or in this case LRAPA, is required to review and approve a landuse compatibility statement before an air permit is issued.

c. If no, apply the following criteria to the proposed rules.

Not Applicable

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

Gregory A. Gre  
Division

Robert J. Gre  
Intergovernmental Coord.

9/18/96  
Date

## Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.

The following questions should be clearly answered, so that a decision regarding the stringency of a proposed rulemaking action can be supported and defended:

Note: If a federal rule is relaxed, the same questions should be asked in arriving at a determination of whether to continue the existing more stringent state rule.

1. *Are there federal requirements that are applicable to this situation? If so, exactly what are they?*

Yes, federal requirements do apply. For all areas designated by the Environmental Protection Agency as nonattainment for  $PM_{10}$ , the Clean Air Act Amendments of 1990 require that states develop an emission control strategy which will reduce  $PM_{10}$  emissions and demonstrate compliance with National Ambient Air Quality Standards (NAAQS) by the applicable Clean Air Act deadline.

2. *Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?*

The applicable federal requirements are both performance and technology based. Federal guidance suggests specific technical requirements for air quality analysis and emission control strategies. However the most stringent (governing) requirement is performance based. The Clean Air Act requires a nonattainment area to comply with air quality standards by a specific deadline. If attainment can not be demonstrated, increasingly restrictive control measures are required.

3. *Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?*

The requirements of the Clean Air Act are specifically applicable to Oregon. Oregon has demonstrated some of the highest  $PM_{10}$  levels in the country, placing Oregonians at risk. The Clean Air Act requirements and process for  $PM_{10}$  standards compliance is appropriate and applicable to emission sources in Oregon, and will provide direct benefit to Oregon citizens.

4. *Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?*

The proposed requirements will provide clear direction for the public and future regulated industry to comply in a cost effective way.

5. *Is there a timing issue which might justify changing the time frame for implementation of federal requirements?*

Federal requirements state that control measures should be implemented and attainment achieved as expeditiously as practicable. The proposed requirements are consistent with this goal.

6. *Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?*

The Oakridge PM<sub>10</sub> Control Plan does contain a reasonable margin for future growth.

7. *Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)*

The proposed control requirements focus most heavily on those emission source categories which most significantly contribute to the nonattainment problem.

8. *Would others face increased costs if a more stringent rule is not enacted?*

No

9. *Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?*

No

10. *Is demonstrated technology available to comply with the proposed requirement?*

Yes

11. *Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?*

The proposed requirements will both mitigate existing pollution problems and contribute to pollution prevention.

LANE REGIONAL

AIR POLLUTION AUTHORITY




(541) 726-2514 • FAX (541) 726-1205  
225 North 5th, Suite 501  
Springfield, OR 97477-4671

Donald R. Arkell, Director

## MEMORANDUM

TO: Interested Persons

FROM: Donald R. Arkell, Director 

DATE: June 5, 1996

SUBJ: Proposed Oakridge PM10 Control Plan, Explanation and Summary

RECEIVED  
JUN 19 1996

AIR QUALITY DIVISION  
Dept. Environmental Quality

## SUMMARY OF PROPOSED ACTION

The Lane Regional Air Pollution Authority Board of Directors is proposing to adopt revisions to the Oregon State Implementation Plan which contain PM10 control strategies for the Oakridge PM10 nonattainment area. This proposed action would be taken under authority of: ORS 468.A.100; ORS 183, authority created by Governor Roberts designating LRAPA as the planning agency for PM10 in Lane County; and LRAPA Title 14.

## BACKGROUND AND PROBLEM STATEMENT

Ambient air quality within the Oakridge urban growth area, with a population of 3,100 people, has violated the 24-hour National Ambient Air Quality Standards (NAAQS) for particulate matter less than 10 microns in diameter (PM10). Oakridge has been designated by the Environmental Protection Agency (EPA) as a moderate PM10 nonattainment area because of the air quality standard violations. Exposure to high levels of PM10 in the air is of concern because of health effects in humans, such as decreased respiratory efficiency, aggravation of existing respiratory and cardio-vascular disease, damage to lung tissue and increased risk of lung disease. The NAAQS are established to protect the most sensitive persons, including the elderly, children and those with chronic heart or lung disease.

The sources of particulate which primarily cause standards to be violated in Oakridge include: smoke from residential wood combustion in the wintertime; and suspended fine soils from road dust, particularly when sand is applied for traction when roads become icy in the winter. As part of the analysis and identification of contributing

sources, a chemical mass balance analysis was performed on samples taken from selected sites within the City of Oakridge. Generally, the contribution of woodstove smoke and road dust to PM10 is about 82 percent and 15 percent, respectively, with about 3 percent unidentified. A notable exception to this is along Highway 58, where road dust is a more important constituent, with a wood smoke to road dust ratio of about 65:35. Particulate from industrial sources, motor vehicles, locomotives, and slash burning are present but are not significant in winter.

Violations of the standard may occur in the wintertime during periods of air stagnation, when there is little or no air movement and temperature inversions set in. These periods are usually cold, which increases the demand for residential heating and may cause moisture to freeze on paved roadways, resulting in the need for sanding.

## PROCEDURE

The Clean Air Act of 1990 requires that PM10 control strategies be developed and submitted to EPA for approval and that the strategies, once implemented, will demonstrate that air quality will attain the NAAQS. The attainment date is six years after designation. For Oakridge, that date is December 31, 2000.

Over the last four years, the Oakridge Clean Air Committee has been reviewing optional control measures. The committee has made its recommendations, which are reflected in the proposed control strategies.

## SUMMARY OF PROPOSED CONTROL STRATEGIES

The proposed control measures address the two major contributors to PM10 in Oakridge: residential wood heating and road dust.

### 1. Residential Wood Heating Measures

The principal means of achieving the needed PM10 reductions in Oakridge, from residential wood heating, is twofold:

- A. The voluntary wood-burning curtailment program will be accompanied and enhanced by an aggressive public education program and compliance surveillance to increase compliance with curtailment of wood burning on designated no-burn days.



- B. An uncertified woodstove replacement demonstration program for low and middle income households. Accelerating the replacement of old woodstoves for alternative home heating options which may include electric heat pumps, pellet stoves, propane or oil stoves, or certified cord-wood stoves. A target reduction credit of 25 percent of woodstove emissions has been set for the aggressive voluntary curtailment program. The program has been successfully implemented for the last two years. The City of Oakridge managed a demonstration program to replace approximately 130 uncertified stoves. This program is on-going as long as the funds hold out.

The Clean Air Act requires that Reasonably Available Control Measures (RACM), including mandatory woodstove curtailment, be instituted in areas where woodstove emissions are significant. RACM must be instituted within four years after designation, or January 9, 1998. Mandatory curtailment is a fallback strategy, enacted by city ordinance. Prior to the attainment date, periodic evaluation will be made by LRAPA and the city and reported to EPA on success of meeting milestones in the plan and air quality improvement. The ordinance would go into effect if EPA finds that the milestones are not met and that air quality standards will not be met by the attainment date. If the ordinance is not needed to attain the standard by the attainment date, it will become a contingency measure, should Oakridge air quality once again exceed the PM10 NAAQS.

Funding sources for the replacement program are limited. The city has been very successful in implementing the replacement program and rolling over repaid from loans to retrofit additional woodstoves.

## 2. Road Dust Measures

The city of Oakridge has essentially paved its unpaved streets since the baseline year, resulting in about a 75 percent reduction in unpaved road dust. The reduction is taken as a credit for attainment purposes.

The Oregon Department of Transportation, Highway Division, has committed to use a de-icing substitute for sand. In areas where substitutes have been used, substantial reductions of dust have been achieved. The Highway Division would assess Highway 58 during periods of freezing weather when moisture on the road turns to ice. This constitutes most of the road dust which contributes to non-attainment. A target reduction from this source category is 75 percent of road sanding emissions.

Overall, approximately 31 percent total reduction of particulate should result in a successful demonstration of attainment.

## CONTINGENCY

If Oakridge fails to attain the standard by the required attainment date of December 31, 2000, a contingency plan will be implemented. The area would be redesignated as a serious nonattainment area, and additional control measures would be adopted as part of a revised SIP. Contingency measures include: mandatory curtailment; and extension of special protection zones for slash burning. These measures must all be included in the current attainment plan adoption, so that they are in place to be employed if they are needed.

## FISCAL IMPACT

1. Public. The cost to comply with wood burning curtailment is estimated at \$2 to \$5 per day, per wood-burning home, assuming the optional heat source is more expensive to operate. On a worst-case day, when air stagnation and low temperatures combine to create poor air quality, households with uncertified woodstoves will be asked to curtail burning for the voluntary program. This would be about 25 percent of the base year wood-burning households of 750, or about 188 households. So it could cost between \$376 and \$940 per day for the citizens of Oakridge to curtail burning. As older stoves are changed out, the number of affected households is reduced, and the cost reduced, accordingly. The replacement program, through initially more expensive at about \$2,500 per household, provides a more permanent and continuous improvement in air quality in Oakridge and helps avoid the need for a mandatory curtailment program which, within a few years, would cost more than the initial cost of the replacement program. Assuming five or six no-burn days per year, a mandatory curtailment program, if needed, is estimated to cost between \$30,000 and \$50,000 per year.
2. State Agencies. Initially, the Highway Division would be required to invest in application equipment. Currently on-going costs of liquid de-icer and sanding are thought to be comparable.
3. Local Agencies. LRAPA, which will be issuing the daily wood-burning advisories, and the City of Oakridge, which will be performing most of the public information, would incur costs estimated at \$15,000 per year. If mandatory curtailment is necessary, LRAPA will incur costs up to \$50,000 per year for enforcement.

4. Business and Industry. There should be a benefit to local retail stores which sell home heating appliances and/or hearth products which are eligible to be used as replacements for uncertified woodstoves. Remodeling and renovation contractors should also see increased business due to replacement of old stoves.

## PROCESS

Public hearing is scheduled for Thursday, July 18, 7:00 p.m., at the Oakridge City Hall. Following the public hearing, the LRAPA Board of Directors will review the hearing record, and is scheduled to approve the plan at its Tuesday, August 13, 1996 meeting, scheduled for 12:15 p.m. in the Springfield City Council Chamber. Once approved, with any amendments added pursuant to public comments, the plan will be forwarded to EQC for final adoption by the state and submittal to EPA for approval.

DRA/mjd

## MEMORANDUM

TO: Record of Adoption, Oakridge PM10 SIP  
FROM: Don Arkell  
DATE: July 18, 1996  
SUBJ: Record of Public Hearing

Place: Oakridge City Hall  
Council Chambers  
Time: 7:00 p.m.  
Date: July 18, 1996

Hearings Official: Terry Callahan

LRAPA Staff Present: Don Arkell, Kim Metzler, Merrie Dinteman

Callahan explained the reason for public hearing and said this public hearing would be closed this evening, but the record would remain open until July 26 to receive any further written testimony. He said notice for this hearing had been published on June 13 in both the Oakridge Dead Mountain Echo and the Eugene Register Guard. He then asked Arkell to present a brief overview of the plan.

Arkell explained that LRAPA had worked with citizens of Oakridge on the proposed plan and that some elements have already been implemented and are underway. The Clean Air Act requires that areas in violation of a National Ambient Air Quality Standards develop control measures to reduce air pollution levels to within the standards. A lot technical work was done in Oakridge to identify the major sources of the wintertime particular emissions, and the plan contains a set of control measures which are calculated to result in Oakridge reliably (year after year) meeting the federal standards.

There are two major sources of fine particulate (PM10) in Oakridge which are addressed by the attainment strategies in the plan.

1. Residential wood combustion is the biggest source of PM10 in Oakridge, and much of the plan deals with wood burning within the city.
  - A. Voluntary curtailment program (green/yellow/red advisories). Also there is an individual in the city who performs an outreach program to educate public and help people burn wood cleaner. As a result of those

efforts and some reduction of use of wood for heat and better burning practices, that strategy is working pretty well.

- B. City-sponsored replacement program for low- and moderate-income people is responsible for a 14% reduction in emissions of wood smoke within the city. About 130 stoves have been replaced under that program.
  - C. As a fallback measure, if those strategies don't get compliance, the city will adopt an ordinance making the home wood heating curtailment program mandatory. The city council is scheduled to consider a proposal for that within the next month or so.
2. The second source of dirt is road dust (both paved and unpaved).
- A. The city's program for paving unpaved roads has achieved a sizeable reduction in road dust.
  - B. There is also a commitment from ODOT to use non-dusty deicers during the wintertime for skid control. The sandy traction control substances have been a small but significant source of dust in the wintertime.

The combination of these things is calculated to create conditions under which air quality standards will be met. The plan should meet with state and federal approval. But it is just barely enough. Any other measures taken by the city or citizens will increase the cushion and would be helpful.

#### PUBLIC HEARING:

Callahan opened the public hearing at 7:15 p.m., asking if anyone present wished to speak in favor of the proposed plan. No one spoke. Callahan then asked if anyone present wished to speak in opposition to the proposed plan. No one spoke. Callahan then asked if anyone present wished to make any statements, in general. Again, no one spoke. Callahan closed the public hearing at 7:16 p.m. Callahan then reminded those present that the record will remain open to receive further written testimony until July 26. The Oakridge PM10 SIP will be presented to the LRAPA Board of Directors at its August 13 meeting with a request for adoption. After adoption by the LRAPA board, the SIP will be forwarded to EQC for review and approval. Once EQC has approved the SIP, it will be submitted to EPA for final approval.

DISCUSSION:

Mayor Culbertson stated that the council was not being asked to approve the plan but was being asked to recommend that the LRAPA board adopt it.

Councilman Hampton, who was involved in development of the plan, stated that if the federal PM10 standard is not attained with the strategies outlined above, the home wood heating curtailment program will be made mandatory. That would require that the city provide for enforcement of a mandatory program. Hampton went on to say that it is the citizens of Oakridge who will determine whether or not a mandatory program is instituted, according to whether they comply with the voluntary home wood heating advisories. Arkell said it would be necessary for the city council to adopt a mandatory wood heating curtailment ordinance as a contingency, to take effect immediately if the area fails to reach attainment or falls out of attainment after the year 2000. He said LRAPA is responsible for documenting that the area is meeting the milestones in the plan. He stressed that, if the city fails to adopt the contingency ordinance, the state has authority to move in and implement that in Oakridge. Culbertson said an ordinance was being drawn up and would be presented in the next month. City Manager Mike McAlvage stated that staff had received a draft ordinance from legal counsel, and the council would see it the following week.

Hampton stressed the very narrow margin between attainment and nonattainment created by this plan, stating that he does not want to see the citizens of Oakridge just barely meet the requirements because it could limit what is done in other areas. He said that must be kept in mind in discussions about development of an industrial park. Air pollution caused by any new industrial sources could cause the area to fall back into nonattainment unless the citizens of Oakridge do everything they can to reduce levels of fine particulate emissions. Culbertson agreed, stating that the council would have to decide whether it would allow wood heating devices in any new residential development in Oakridge, for the same reason.

Councilwoman Trenary stated she had heard that there is some controversy regarding the alternate deicers, as regards possible adverse effects on the quality of the water table. Arkell responded that the deicer being used by ODOT is relatively benign and will not harm water quality. It has been used in other communities and has been used in Oakridge since last year.

ACTION: Councilman Hampton MOVED approval of recommendation that the LRAPA board adopt the SIP revision for Oakridge. Councilman Callahan SECONDED. The motion PASSED BY UNANIMOUS VOTE.

Hampton thanked Arkell for his efforts in developing the plan. He said local councils are never thrilled to have government agencies come in and tell them what we can do, but he has found Arkell to be very patient and very good to work with. He added that he is sorry that Arkell is leaving LRAPA.

Culbertson added that LRAPA is a county-level agency which exists to help cities meet federal and state standards, and they have given the city of Oakridge a lot of help.

Hampton agreed and commented that this is the last local air program in Oregon--the rest being handled by the state. He said in his opinion, the closer government control is, the better it works.

ORDINANCE NO. 815

AN ORDINANCE CONCERNING THE USE OF  
SOLID FUEL SPACE HEATING DEVICES DURING  
AIR POLLUTION EPISODES.

The City Council of the City of Oakridge finds that the degradation of air quality has an effect upon the health, safety and welfare of the citizens of Oakridge. To minimize the adverse effects of such degradation there is a need to regulate the use of solid fuel space heating devices during air pollution episodes.

THE CITY OF OAKRIDGE ORDAINS AS FOLLOWS:

Section 1. As used in this ordinance, the following words and phrases mean:

City administrator: The City of Oakridge city administrator or designee, including, if the city so designates, LRAPA.

LRAPA: Lane Regional Air Pollution Authority, a regional air quality control authority established under the provisions of, and with authority and powers derived from, Oregon Revised Statutes 468A.100 et seq.

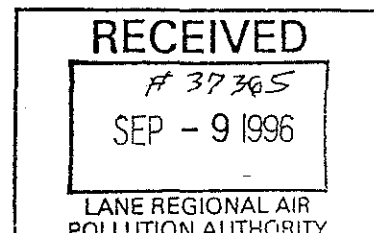
Pellet stove: An enclosed solid fuel space heating device designed and operated to burn manufactured solid fuel and having an air-to-fuel ratio greater than 35-1 as determined by the federal test method described in 40 CFR Part 60.534.

Person: Any individual, partnership, corporation, association, governmental subdivision or public or private organization of any character.

Person in charge of property: An agent, occupant, lessee, tenant, contract purchaser, or other person having possession or control of property.

PM10: Solid or liquid particulate matter (excluding uncombined water) with an aerodynamic diameter less than or equal to 10 micrometers.

Sole source of heat: A solid fuel space heating device which constitutes the only source of heating in a private residence. A solid fuel space heating device shall not be considered to be the sole source of heat if the private residence is equipped with any permanently installed furnace or heating system utilizing oil, natural gas, electricity or propane.





Red advisory: A 24-hour period beginning at 4:00 p.m. when PM10 levels are forecast by LRAPA to be greater than or equal to 120 micrograms per cubic meter within the Oakridge acknowledged general plan urban growth boundary.

Visible emissions: The reduction in transmission of light or the obscuring of the view of an object in the background caused by the air pollutants emitted by the heating device. This does not include the visual distortion caused by the heated air emitted by the heating device.

Section 2. Prohibitions:

(1) No person in charge of property during a Red Advisory shall operate or allow to be operated a solid fuel space heating device which emits visible emissions into the air outside of the building housing the device, unless the person has been granted an exemption to use the device by the city administrator.

Section 3. Exemptions: Notwithstanding section 2 of this ordinance, a person in charge of property may operate a solid fuel space heating device during a Red Advisory if that person has previously obtained one of the following exemptions from the city administrator:

(a) Sole source of heat exemption. A person in charge of property who signs a sworn statement that their solid fuel space heating device is the sole source of heat for their residence. This exemption shall expire on July 1 of each year and must be renewed annually. This exemption shall not be allowed after three years after the effective date of this ordinance.

(b) Economic exemption. Persons in charge of property who satisfy criteria established under the Low Income Energy Assistance Program as administered by the State of Oregon Housing and Community Services Department and as established by the United States Department of Energy. This exemption shall expire on July 1 of each year and must be renewed annually thereafter.


Section 4. Enforcement: In addition to, and not in lieu of any other enforcement mechanism authorized by law, the city administrator is authorized to designate LRAPA to enforce and administer the provisions of this ordinance, including LRAPA's use of administrative and hearing procedures adopted by LRAPA in its duly promulgated regulations.

Section 5. Effective Date: This ordinance shall become effective on or after January 1, 1998, only upon notification by EPA, after consultation with the city and LRAPA, that the National Ambient Air Quality Standards for PM10 (PM10 NAAQS)

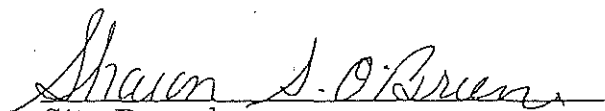
promulgated in 1987 cannot be attained by December 31, 2000, or that milestones in the Oakridge PM10 attainment plan are not implemented. After December 31, 2000 this ordinance shall become effective as a contingency measure, upon notification by EPA that the PM10 NAAQS have been exceeded.

Passed by the Council this 15 day of AUGUST 1996.

Approved by the Mayor this 15 day of AUGUST 1996.

  
\_\_\_\_\_  
Mayor- RICHARD W. CULBERTSON

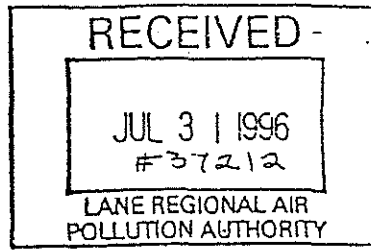
ATTEST:

  
\_\_\_\_\_  
City Recorder-SHARON S. O'BRIEN

AYES: 5

NAYS: 0

Oregon



DEPARTMENT OF  
TRANSPORTATION

July 29, 1996

District 5

Don Arkell  
Lane Regional Air Authority  
225 N. 5th St.  
Suite 501  
Springfield, OR 97477

FILE CODE:

RE: Anti-icing Chemicals vs. Sanding Material Use  
City of Oakridge  
Willamette Highway

Dear Mr. Arkell:

This letter is to confirm our intentions of using anti-icing chemicals within the City of Oakridge instead of sanding material. We have essentially eliminated the use of sanding material along the Willamette Highway within the City of Oakridge. We have replaced the sanding material with an anti-icing chemical known as Calcium Magnesium Acetate (CMA). We plan to continue the use of CMA into the future. For more information about our operations, please let me know.

Sincerely,

Terry R. Thames, PE  
District Manager

TT



3620 Gateway  
Springfield, OR 97477  
(541) 726-2552  
FAX (541) 726-2509

# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item I  
October 11, 1996 Meeting

**Title:**

Temporary Rules Regarding Clarification of Tank Vessel Per Trip Fees and Oil Spill Contingency Planning Requirements.

**Summary:**

These temporary rule changes will allow small, self-propelled tank vessels to operate within Oregon waters under an appropriate fee. When the original fees were established by rule, self-propelled tank vessels consisted of oceangoing vessels making coastwise trips. The rules and associated fees set at that time did not contemplate the operation of small, river service self propelled tank vessels which operate entirely within Oregon's waters. These vessels carry much smaller amounts of petroleum and should not be subjected to the same per trip fee as the larger oceangoing vessels.

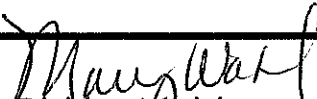
These temporary rule changes also allow for the cross border movement of spill response equipment to offer assistance to neighboring jurisdictions. In 1996 Oregon, Washington, California, Alaska and British Columbia developed a Mutual Aid Agreement that would allow participants to meet temporarily reduced equipment standards in order to allow their response contractors to be available for mutual aid to other jurisdictions. This pre-approval of the release of private response equipment is set with a minimum of conditions beyond the establishment of requirements for resident equipment which would always remain available for immediate access within the State.

**Department Recommendation:**

It is recommended that the Commission adopt the temporary rules as proposed to establish a separate, distinct fee for self-propelled tank vessels smaller than 300 gross tons operating on Oregon waters. This fee should be set at \$28.

It is recommended that the Commission adopt the temporary rules as proposed to allow for the cross border movement of spill control and cleanup equipment in response to a mutual aid request from the Unified Command of a neighboring jurisdiction.

  
Report Author

  
Division Administrator

Director 

September 16, 1996 †Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon  
Department of Environmental Quality

Memorandum

Date: September 24, 1996

**To:** Environmental Quality Commission  
**From:** Langdon Marsh, Director  
**Subject:** Agenda Item I, EQC Meeting October 10-11, 1996

**Statement of Purpose**

These temporary rule changes allow small, self propelled tank vessels to operate within Oregon waters under an appropriate fee and also allow for the cross border movement of spill response equipment to offer assistance to neighboring jurisdictions.

**Background**

Fee Policy Issues:

Senate Bill 242, passed in 1991, granted the Environmental Quality Commission the authority to collect fees to recover the costs of reviewing plans and conducting inspections, exercises, training and activities related to oil spill prevention and response. Fees on all cargo vessels and all non self-propelled tank vessels were established in statute 468B.405. The Environmental Quality Commission established by rule a schedule of fees applicable to offshore facilities, onshore facilities, and self-propelled tank vessels. These fees were established at \$3000 annually for the facilities and \$650 per trip for the self-propelled tank vessels.

When these fees were established, self-propelled tank vessels operating in Oregon waters all consisted of oceangoing vessels making coastwise trips. These trips consisted of an entry in to Oregon waters at the entrance to the Columbia River, discharge of petroleum at a facility located along the Columbia or lower Willamette River, and departure of the vessel from Oregon waters. The rule and fees associated with it did not contemplate the operation of small river service self-propelled tank vessels that operate entirely within the confines of Oregon waters. Such vessels, carrying small amounts of petroleum, would be required to pay the \$650 per trip fee assessed to large self-propelled tank vessels carrying much greater quantities of oil. Application of the \$650 per trip fee for these vessels is neither warranted nor appropriate and this temporary rule making establishes a per trip fee of \$28, comparable to the non self-propelled tank vessels.

Cross Border Equipment Movement (Mutual Aid):

Oregon, along with other West Coast states and British Columbia, set response standards and required that certain oil facilities and commercial vessels (plan holders) prepare plans to implement these standards. Response experience has shown that during some spills, it may be necessary to

Memo To: Environmental Quality Commission  
**Agenda Item I, EQC Meeting Page 2**

transfer response equipment owned by private contractors from one state to another. In July 1994, DEQ began negotiations with Alaska, British Columbia, Washington, and California to develop specified conditions whereby certain plan holders may be allowed to meet temporarily reduced equipment standards so their response contractors may be available for mutual aid to other jurisdictions. Releasing these plan holders from their planning standards, and the subsequent movement of their response contractor's equipment, places the plan holders out of compliance with their state approved response plan.

The four states and province recommended that mutual aid policies in each jurisdiction should pre-approve the release of private response equipment with a minimum of conditions beyond establishing requirements for resident equipment. This resident equipment would always remain available for immediate access within the state. This was formalized in a Spring 1996 Mutual Aid Agreement and signed by the spill prevention and response agencies of Alaska, British Columbia, Washington, and California.

On advice from the Attorney General's office, Oregon did not sign on to this agreement for three reasons. (1) There is a lack of express DEQ authority to waive response time requirements in approved contingency plans. DEQ's actions per the mutual aid agreement without state law authority could be questioned if an oil spill occurred in Oregon waters while equipment was elsewhere and adequate response could not be made. (2) The state statute and regulations are ambiguous on whether plan holders would be protected from liability. This liability could undercut accommodation of mutual aid requests by the plan holder's response contractor. (3) Under ORS 190.430 and 190.490 the Attorney General must review and approve interstate and international cooperative agreements for form as well as substantive compliance with enabling law.

The temporary rule provides DEQ with express authority to waive response time requirements in response to mutual aid requests from other states.

**Authority of the Commission with Respect to the Issue**

Fee Policy Issues: The Commission is granted the authority to establish by rule a schedule of fees to be assessed on offshore facilities, onshore facilities, and on self propelled tank vessels by ORS 468B.405.

**Cross Border Equipment Movement (Mutual Aid):**

The Commission is granted the authority to adopt by rule standards for the preparation of contingency plans for facilities and covered vessels by ORS 468B.350.

### **Alternatives and Evaluation**

#### Fee Policy Issues:

The Department and EQC could do nothing. This will create confusion over the appropriate fees to be submitted and force DEQ to treat our regulated community inconsistently. Furthermore, this temporary rule has been commended by the Columbia River Steamship Operators as an example of DEQ's willingness to work with industry and establish fees appropriate to risk.

#### Cross Border Equipment Movement (Mutual Aid):

DEQ could ignore West Coast States/British Columbia Mutual Aid Agreement and instruct plan holders that sending equipment to other jurisdictions violates Oregon law. This would keep Oregon from benefiting from equipment stored in adjacent states subject to the Mutual Aid Agreement.

### **Summary of Public Input Opportunity**

An advisory committee has not been involved in the development of the temporary rules. When permanent rules are proposed, the rules will be developed with the aid of an advisory committee. Interested parties have been contacted and are supportive of this temporary rule.

### **Conclusions**

#### Fee Policy Issues:

The temporary rules as proposed will establish an appropriate, distinct fee for self-propelled tank vessels smaller than 300 gross tons operating on Oregon waters. This fee should be set at \$28.

#### Cross Border Equipment Movement (Mutual Aid):

The temporary rules as proposed will allow for the cross border movement of spill control and cleanup equipment in response to a mutual aid request from the Unified Command of a neighboring jurisdiction.

### **Intended Future Actions**

#### Fee Policy Issues:

Memo To: Environmental Quality Commission  
**Agenda Item I, EQC Meeting Page 4**

The Department of Environmental Quality will commence collection of \$28 per trip from all self-propelled tank vessels operating on Oregon waters.

**Cross Border Equipment Movement (Mutual Aid):**

The Department of Environmental Quality will become signatory to the West Coast States British Columbia Oil Spill Task Force Mutual Aid Memorandum of Agreement. The Department will notify all affected parties of this provision in Oregon Administrative Rules Chapter 340 Division 47.

**Department Recommendation**

It is recommended that the Commission adopt the rule amendments as presented in Attachment A of this Staff report.

**Attachments**

- A. OAR 340-47 Rule (Amendments) Proposed for Adoption
- B. Statement of Need and Emergency Justification


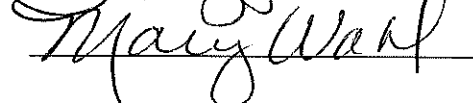
**Reference Documents (available upon request)**

States/British Columbia Oil Spill Task Force Mutual Aid Memorandum of Agreement

Approved:

Section:

Division:

Report Prepared By: Paul Slyman

Phone: 229-5977

Date Prepared: September 24, 1996



Rule changes to OAR 340-47

The underlined portion of text represent proposed additions to the rule. The ~~strikethrough~~ portion of text represents proposed deletions to the rule.

## DEFINITIONS

340-47-010

As used in these regulations unless otherwise required by context:

- (7) "Covered vessel" means a tank vessel, self-propelled tank vessel, cargo vessel, or passenger vessel ~~of 300 tons or more~~. For the purposes of this chapter:
- (a) "Cargo vessel" means a self-propelled ship in commerce, other than a tank vessel or a passenger vessel, of 300 or more gross tons. "Cargo vessel" does not include a vessel used solely for commercial fish harvesting;
  - (b) "Passenger vessel" means a ship of 300 or more gross tons carrying passengers for compensation; and
  - (c) "Tank vessel" means a ship that is constructed or adopted to carry, or that carries, oil in bulk as cargo or cargo residue. "Tank vessel" does not include:
    - (A) A vessel carrying oil in drums, barrels, or other packages;
    - (B) A vessel carrying or storing oil as fuel for that vessel; or
    - (C) 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.

## PROGRAM ADMINISTRATION AND COMPLIANCE FEES

340-47-035

- (2) All self propelled tank vessels ~~required to develop oil spill prevention and emergency response plans under ORS 468B.345~~ of 300 gross tons or more shall be assessed a per trip fee of \$650. All self-propelled tank vessels under 300 gross tons shall be assessed a per trip fee of \$28. The fee shall be remitted to the Department within thirty (30) days of conclusion of each trip.

## EQUIPMENT MUTUAL AID

### 340-47-240 (New Section)

- (1) The Department may preapprove the transfer of equipment, materials, or personnel by a plan holder to another plan holder or person, when necessary to assist in response to an oil discharge.
- (2) The Department's preapproval may include:
  - (A) Waiver of response times specified in a plan;
  - (B) Conditions specified by the Department regarding, but not limited to, notification to the Department, return or replacement of equipment, materials, or personnel, and measures necessary to prevent or reduce the potential for discharges during the period of reduced response capability.
- (3) Preapproval under this rule shall not require plan modification or update.

**STATEMENT OF NEED AND JUSTIFICATION OF TEMPORARY RULE**  
Before the Environmental Quality Commission

|  |   |                            |
|--|---|----------------------------|
| In the matter of the amendment of OAR        | ) | Statutory Authority,       |
| 340-47 establishing a distinct fee for self- | ) | Statement of Need,         |
| propelled tank vessels operating on Oregon   | ) | Principal Documents Relied |
| waters and cross border movement of spill    | ) | Upon and Justification     |
| cleanup equipment in response to requests of | ) | of Temporary Rule          |
| of mutual aid from the Unified Command of    | ) |                            |
| neighboring jurisdictions.                   |   |                            |

1.     **Citation of statutory authority:**  
      ORS 468B.300 - 500; OAR 340-47; ORS 468.020

2.     **Need for the rule:**  
These rule changes allow small, self propelled tank vessels to operate within Oregon waters under an appropriate fee. These rule changes also allow for the cross border movement of spill cleanup equipment to offer assistance to neighboring jurisdictions.

The adoption of this temporary rule will treat small tank vessels (under 300 gross tons) separately from large tank vessels for fee purposes. Under the present rules, which did not contemplate the operation of small tank vessels operating entirely within the confines of the Columbia and Willamette Rivers, all self propelled tank vessels are assessed a \$650 per trip fee for entry into Oregon waters. These rule changes will assess a \$28 fee on small tank vessels. This \$28 fee is identical to the fee assessed on non self-propelled tank vessels (tank barges).

The temporary rule will also provide DEQ with express authority to waive response time requirements in response to equipment mutual aid requests from other states. This will allow response contractors to move equipment and personnel to neighboring jurisdictions to clean up spills. This authority will allow Oregon to become signatory to the West Coast States/British Columbia Oil Spill Task Force Mutual Aid Agreement, which allows equipment sharing among adopting states. Oregon will benefit from this temporary rulemaking and subsequent signing of the Mutual Aid Agreement as equipment from other states will then be available to respond to spills in Oregon.

3.     **Documents relied upon:**  
      ORS 468B.300 - 500; OAR 340-47  
      West Coast States/British Columbia Oil Spill Task Force Mutual Aid Agreement

Documents are available for public review during regular business hours 8 a.m. to 5 p.m., Monday through Friday, at the Spill Prevention and Management Section of the Department of Environmental Quality, 515 SW Broadway, Portland, Oregon, 97204.

4. **Justification of temporary rule:**

The Department finds that following the permanent rulemaking process will result in serious prejudice to the public interest because it will cause the following special consequences:


a) Oregon will remain unable to sign the West Coast States/British Columbia Oil Spill Task Force Mutual Aid Agreement. This will preclude equipment from neighboring jurisdictions responding to large oil spills in Oregon waters.

b) Small tank vessels will remain inoperable because of the \$650 per trip fee, and their service will not be available to the maritime industry.

Adoption of this temporary rule mitigates these consequences and benefits Oregon's environment and small tank vessel operators. Interested parties have been contacted and are supportive of this temporary rule. The Department will conduct a permanent rulemaking prior to the expiration of the temporary rule.

5. **Housing cost impact statement:**

As required by ORS 183.530 et seq., this rule will have no effect on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling on that parcel.

 9/26/96  
Date

  
Signature

## Environmental Quality Commission

- Rule Adoption Item  
 Action Item  
 Information Item

Agenda Item J  
October 11, 1996 Meeting

**Title:**

Temporary Rule Adoption to Lift the Clear Lake Watershed Moratorium by Amending Oregon Administrative Rules (OAR) 340-41-270, OAR 340-71-400(2), and OAR 340-71-460

**Summary:**

This action would lift the 13 year old moratorium on construction of new on-site sewage disposal systems in the Clear Lake watershed. The moratorium was instituted to protect the water quality in Collard Lake and Clear Lake, located near the City of Florence. Clear Lake is the drinking water source for area residents. Under the terms of the existing rule, the Department could only lift the moratorium upon approval of a plan which included adopted ordinances, agreements, and contracts to insure that water quality would be protected. Although there have been some initial steps taken, there is still considerable controversy and disagreement among local residents as to what constitutes an acceptable plan. A lawsuit was filed against the Department in 1989 by several property owners, with the lawsuit due to go to trial this summer. The judge for the lawsuit made it clear that the moratorium had gone on too long. The action proposed in this agenda item is necessary under the terms of the settlement agreement and judge's order which resolved the lawsuit.

**Department Recommendation:**

The Department recommends that the necessary rules be amended that will have the effect of lifting the moratorium in the Clear Lake watershed.

*Barbara A. Buxton*  
Report Author

*Jim Greenwood*  
Division Administrator


Director

*Barbara Noel*

State of Oregon  
Department of Environmental Quality

Memorandum

Date: October 11, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director   
Subject: Agenda Item J, Temporary Rule Adoption to Lift the Clear Lake Watershed Moratorium by Amending Oregon Administrative Rules (OAR) 340-41-270, OAR 340-71-400(2), and OAR 340-71-460, EQC Meeting on October 11, 1996

**Statement of Purpose**

The Department has a moratorium banning new on-site systems in the Clear Lake watershed, located near Florence. The moratorium has been in place since 1983. The purpose of this action is to lift the moratorium.

**Background**

The Clear Lake watershed is located just north of Florence, in Lane County. Heceta Water District draws its raw water from Clear Lake, and sells drinking water to the City of Florence among other customers. Collard Lake, also in the watershed, discharges into Clear Lake. In response to studies done by Lane County showing levels of nutrients in Collard Lake that were of concern, the Department imposed an on-site system moratorium in 1983. The purpose of the moratorium was to prevent the growth of algae in the lakes, which would cause an expensive water treatment plant to be built and a bad taste to the drinking water. The initial pollutant of concern was nitrate.

Upon further study, the Department determined that phosphorous was the limiting nutrient in the lakes, not nitrogen. Therefore, in 1990 the Commission maintained the moratorium, but added a Total Maximum Daily Load (TMDL) for phosphorous and other requirements. There were no documented water quality standards violations. Rather, this TMDL was for the purpose of preventing pollution and adverse impact on the drinking water supply for the area.

There have been numerous and lengthy efforts to reach an agreement that is acceptable to all or most of the interested parties, including a mediation effort in 1993-4. Agreement was reached on a conceptual plan for protecting the watershed, and was approved by Lane County and the other participants in the mediation effort. In addition, the plan was approved by the City of Florence and by the Department. The plan is not legally binding, however. The 1994 plan included the following major elements:

- Limited additional development on lots already in existence, and a ban on further partitions.

- Provision of sewers around Collard Lake to serve both existing homes (currently on septic tanks) and new homes.
- Stringent measures relating to sediment control and the use of fertilizers in the watershed.
- Extension of the Florence Urban Growth Boundary to include the watershed.

The 1994 plan was aimed at the two major sources of phosphorous, septic tanks and nonpoint sources such as sediment and fertilizer. The plan has not been implemented, although a start has been made on the county sediment ordinances and the Urban Growth Boundary extension, and the City has indicated a willingness to extend sewers in about five years.

The 1994 plan was a difficult compromise agreement, and it is not clear that there is still support for it. There has been substantial controversy on each of the major provisions of the plan, and it is not clear if any of them will be implemented in the short term. However, the Department continues to believe it was the most realistic path towards protecting the lakes while still allowing some development. All other suggestions put forward by various parties appear to be either not protective or not legal or clearly not implementable.

A number of affected property owners filed a lawsuit in 1989 against the Department and Heceta Water District. The lawsuit was held in abeyance during the mediation effort, however with the slow pace of implementation the lawsuit was reactivated and was due to go to trial this summer. Under the supervision of federal judge Thomas Coffin, the Department entered into settlement discussions with the plaintiffs (property owners) in July, 1996 and reached agreement. One of the elements in the agreement was that the Department would recommend to the Commission that the moratorium be lifted within 90 days.

The other key elements of the court-supervised settlement relating to protecting water quality are:

- The plaintiff's attorney will be appearing with the Department before the Lane County Commissioners to voice support for protective stormwater and erosion control ordinances for the Clear Lake area. In addition, all plaintiffs agree to not oppose the ordinances.
- New on-site systems must fully comply with Department rules. The Department will conduct the site evaluations, which includes setting requirements for the construction of the system.
- The plaintiffs agree to voluntarily connect to a sewer, when available.

The moratorium banning new on-site systems is also stated in OAR 340-71-460, which will need to be amended. In addition, OAR 340-71-400(2) should be amended to define the Clear Lake

watershed boundaries. See Attachment 5 for a further discussion of why these changes are needed.

### **Authority of the Commission with Respect to the Issue**

The Commission has the authority to amend administrative rules relating to water quality, under Oregon Revised Statutes (ORS) 183.335, 454.625, 468.020, 468B.010, and 468B.020.

### **Alternatives and Evaluation**

There are three alternatives:

1. **Lift the moratorium.** Judge Coffin made it clear that he would have lifted the moratorium if the case had gone to trial. There will likely be an adverse impact on both Collard Lake and Clear Lake over time if the moratorium is lifted, from increased nutrients and algae. IF the City of Florence does provide sewers to the Collard Lake area as currently planned (in about five years), and IF Lane County approves the sediment control measures recommended in the near future, then the lakes may not be seriously impacted in the long term. In order to lift the moratorium, it will be necessary that OAR 340-41-270, sections 5 through 10 be deleted. The Department recommends that the TMDL remain in place (sections 1 through 4 of the rule). In addition, OAR 340-71-400(2) and OAR 340-71-460 should be amended to reflect the lifting of the moratorium.
2. **Leave the moratorium in place.** The judge's order says that after October 15, 1996, if the moratorium is still in place it will constitute a "takings" under law. What that means is that the Department would be liable for additional damage claims by property owners, and would likely end up in additional litigation.
3. **Explore rule-making to require that sewers be installed.** Oregon Revised Statutes (ORS) 468B.020 gives broad authority for the Department to prevent new pollution and abate existing pollution. The Commission has never required the installation of sewers under the authority of ORS 468B.020, however it may be possible to do so under this broad authority. Ordering sewers to be built is an extreme measure that the Commission has rarely taken in the past. The Department recommends that this action only be taken if water quality is seriously degraded, and local entities are not taking effective measures to preserve water quality.



## **Summary of Public Input Opportunity**

There was no opportunity for public input. However, the Department intends to initiate normal rule-making to make the lifting of the moratorium permanent. Rule-making does allow for public input.

## **Conclusions**

Despite years of effort to find a balanced solution to protecting the watershed, no agreement that is generally acceptable has been reached. The 1994 mediated agreement does form the framework for protecting the watershed and allowing some development. However, key elements of that agreement are still being debated and progress has been slow.

It is likely that some degradation of water quality will occur with the lifting of the moratorium and resulting additional development. However, given the current legal status of lengthy moratoriums and the lawsuit settlement reached, staff believes that the Commission has little choice other than to lift the moratorium. The Department will continue to monitor the water quality status of the lakes, and may return to the Commission for further action if water quality degrades.

## **Intended Future Actions**

The Department intends to appear and testify in favor of protective ordinances proposed by Lane County. Those ordinances are expected to be discussed by the Lane County Commissioners in October, 1996. The Department will also initiate rule-making to permanently lift the moratorium, prior to expiration of this temporary rule.

## **Department Recommendation**

The Department recommends that OAR 340-41-270 be amended, and sections 5 through 10 be deleted. OAR 340-71-460(6) should be deleted. OAR 340-71-400(2) should be modified to delete the reference to OAR 340-71-460(6) and to add a metes and bounds description of the Clear Lake watershed.

## Attachments

Attachment A - Copies of OAR 340-41-270, OAR 340-71-400, and OAR 340-71-460

Attachment B - Copies of proposed modified rules for OAR 340-41-270, OAR 340-71-400, and OAR 340-71-460

Attachment C - Copy of Judge Thomas Coffin's order

Attachment D - Statement of Need and Emergency Justification

Attachment E - Discussion of Division 71 Rule Revisions

Approved:

Section: *Barbara A. Burton*  
Division: *She Greenwood*

Report Prepared By: Barbara Burton

Phone: (503) 378-8240, extension 264

Date Prepared: July 19, 1996

**ATTACHMENT A**

**EXISTING RULES**

**OAR 340-41-270, OAR 340-71-400, AND OAR 340-71-460**

**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 340, DIVISION 41 — DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Special Policies and Guidelines**

**340-41-270** In order to preserve the existing high quality water in Clear Lake north of Florence for use as a public water supply source requiring only minimal filtration, it is the policy of the Environmental Quality Commission to protect the Clear Lake watershed including both surface and groundwaters, from existing and potential contamination sources with the following requirements:

(1) The total phosphorus maximum annual loading discharged into Clear Lake shall not exceed 241 pounds per year from all sources.

(2) The total phosphorus maximum annual loading for the Clear Lake watershed shall be deemed exceeded if the median concentration of total phosphorus from samples collected in the epilimnion between May 1 and September 30 exceed nine micrograms per liter during two consecutive years.

(3) Of the total phosphorus loading of 241 pounds per year specified in section (1) of this rule, 192 pounds per year shall be considered current background and Department reserve and shall not be available to other sources.

(4) The total phosphorus maximum annual loading discharged into Collard Lake shall not exceed 123 pounds per year.

(5) Lane County or any other jurisdiction shall not issue permits allowing connection of development in the Clear Lake watershed to a sewerage facility and the Department or its contract agent shall not issue on-site sewage system construction-installation permits or favorable site evaluation reports for on-site sewage systems within the Clear Lake watershed until a plan is submitted to and approved by the Department showing how total phosphorus loadings limitations required by this rule will be

achieved and maintained. The plan shall include, but not be limited to, the following:

(a) Projected phosphorus loadings for existing development and future planned development within the Clear Lake watershed. Technical bases for the projections shall be cited. The plan shall include phosphorus loadings from storm runoff during and after construction, on-site sewage disposal systems and other management activities in the watershed including, but not limited to, forest harvesting;

(b) Adopted ordinances as necessary to carry out the provisions of the plan;

(c) Agreements, contracts and other information as needed to show how and what entity will effectively implement each provision of the plan.

(6) The plan required by section (5) of this rule shall address necessary controls to reduce phosphorus loadings into Collard Lake to levels less than 60 pounds per year. The Department may approve a plan with annual loadings greater than 60 pounds per year, but only if the plan demonstrates that controls necessary to achieve less than 60 pounds per year are unreasonable and overly burdensome.

(7) If the plan required by section (5) of this rule proposes that Clear Lake and/or Collard Lake loading limits be increased from levels established in section (1) and/or section (4) of this rule, the plan shall include the social and economic justification for such increases as required by Oregon Administrative Rule (OAR) 340-41-026. The justification shall show the costs of achieving the loading limits established in this rule as well as the economic and social benefits of increasing the loads. The Commission shall not approve any plan that will not achieve a lake loading limit for Collard Lake of 140 pounds or less of phosphorus per year. The Commission shall not approve any plan that will not achieve a lake loading limit for Clear Lake of 251 pounds or less of phosphorus per year.

(8) No construction of a sewerage facility to serve the Clear Lake watershed or a portion thereof shall begin until or unless:

(a) The facilities plan report and engineering plans and specifications have been approved in writing by the Department;

(b) It is constructed and operated by a municipality with authority for the operation and maintenance of sewerage facilities;

(c) Before construction starts, the responsible municipality shall demonstrate that it has a reliable source of funding to assure proper construction, operation, maintenance, and replacement of the required sewerage facilities.

(9) No on-site sewage system construction-installation permits, favorable site evaluation reports, or sanitary sewer connection permits shall be issued until a plan for monitoring the water quality of Clear Lake is submitted to and approved by the Department. The plan shall include contracts or memorandums of agreement that assure that the monitoring will be conducted.

(10) Unless it is demonstrated that stormwater runoff treatment and control systems are not necessary to meet the total maximum annual loading for total phosphorus, any off-site or on-site control facilities for stormwater quality control necessary to comply with this rule shall be under the control of a municipality.

**340-71-400 GEOGRAPHIC AREA SPECIAL CONSIDERATIONS.**

- (1) River Road — Santa Clara Area, Lane County:
  - (a) Within the areas set forth in subsection (b) of this section the Agent may issue either construction permits for new subsurface sewage disposal systems or favorable reports of evaluation of site suitability to construct systems under the following circumstances:
    - (A) The system complies with all rules in effect at the time the permit is issued; and
    - (B) The system will not in itself contribute, or in combination with other new sources after April 18, 1980, contribute more than sixteen and seven-tenths (16.7) pounds nitrate-nitrogen per acre per year to the local groundwater. The applicant shall assure compliance with this condition by showing his ownership or control of adequate land through easements or equivalent.
  - (b) Subsection (a) of this section shall apply to all of the following area generally known as River Road — Santa Clara, and defined by the boundary submitted by the Board of County Commissioners for Lane County, which is bounded on the south by the City of Eugene, on the west by the Southern Pacific Railroad, on the north by Beacon Drive, and on the east by the Willamette River, and containing all or portions of T16S, R4W, Sections 33, 34, 35, 36; T17S, R4W, Sections 1, 2, 3, 4, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25; and T17S, R1E, Sections 6, 7, 18, Willamette Meridian;

- (c) This rule is subject to modification or repeal by the Commission on an area-by-area basis upon petition by the appropriate local agency or agencies. Such petition either shall provide reasonable evidence that development using subsurface sewage disposal systems will not cause unacceptable degradation of groundwater quality or surface water quality or shall provide equally adequate evidence that degradation of groundwater or surface water quality will not occur as a result of such modification or repeal;
  - (d) Subsections (a) and (b) of this section shall not apply to any construction permit application based on a favorable report of evaluation of site suitability issued by the Agent pursuant to ORS 454.755(1)(b), where such report was issued prior to the effective date of this rule.
- (2) General North Florence Aquifer, North Florence Dunal Aquifer Area, Lane County:
- (a) Within the area set forth in subsection (2)(b) of this rule, the agent may issue construction permits for new on-site sewage disposal systems or favorable reports of evaluation of site suitability to construct individual or community on-site sewage disposal systems under the following circumstances:
    - (A) The lot and proposed system shall comply with all rules in effect at the time the permit or favorable report of site suitability is issued; or
    - (B) The lot and proposed system complies with paragraph 2(a)(A) of this rule, except for the projected daily sewage loading rates, and the system in combination with all other previously approved systems owned or legally controlled by the applicant shall be projected by the Department to contribute to the local groundwater not more than fifty-eight (58) pounds nitrate-nitrogen  $\text{NO}_3\text{-N}$  per year per acre owned or controlled by the applicant.
  - (b) Subsection (2)(a) of this rule shall apply to all of the following area hereby known as the General North Florence Aquifer of the North Florence Dunal Area and is defined by the hydrologic boundaries identified in the June 1982, 208 North Florence Dunal Aquifer Study, which is the area bounded on the west by the Pacific Ocean; on the southwest and south by the Siuslaw River; on the east by the North Fork of the Siuslaw River and the ridge line at the approximate elevation of four hundred (400) feet above mean sea level directly east of Munsel Lake, Clear Lake and Collard Lake; and on the north by Mercer Lake, Mercer Creek, Sutton Lake and Sutton Creek; and containing all or

portions of T17S, R12W, Sections 27, 28, 33, 34, 35, 36, and T18S, T12W, sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27; W.M., Lane County, except that portion defined as the Clear Lake Watershed more particularly described by OAR 340-71-460(6)(f).

### 340-71-460 MORATORIUM AREAS

- (1) Whenever the Commission finds that construction of subsurface or alternative sewage disposal systems should be limited or prohibited in an area, it shall issue an order limiting or prohibiting such construction.
- (2) The order shall be issued only after public hearing for which more than thirty (30) days' notice is given.
- (3) The order shall be a rule of this division which contains a general description of the moratorium area. A more detailed description of the area, if needed, shall be an appendix to these rules.
- (4) No permit or site evaluation report shall be issued for construction of a new or expanded system which would violate any order of the Commission issued pursuant to ORS 454.685.
- (5) **Criteria For Establishing Moratoriums:** In issuing an order under this section the Commission shall consider the factors contained in ORS 454.685(2).
- (6) **Specific Moratorium Areas:** Pursuant to ORS 454.685, the Agent shall not issue sewage system construction-installation permits or approved site evaluation reports within the boundaries of the following areas of the state:

Lane County - Clear Lake Watershed of the North Florence Dunal Aquifer Area, as follows: The area hereby known as the Clear Lake Watershed of the North Florence Dunal Aquifer Area defined by the hydrologic boundaries identified in the June 1982, **208 North Florence Dunal Aquifer Study** which is the area beginning at a point known as Tank One, located in Section One,



Township 18 South, Range 12 West, of the Willamette Meridian, Lane County, Oregon:

Run thence S. 67° 50' 51.5" E. 97.80 ft. to the True Point of Beginning;  
Run thence S. 05° 40' 43.0" W. 1960.62 ft. to a point;  
Run thence S. 04° 58' 45.4" W. 1301.91 ft. to a point;  
Run thence S. 52° 44' 01.0" W. 231.21 ft. to a point;  
Run thence S. 15° 20' 45.4" W. 774.62 ft. to a point;  
Run thence S. 31° 44' 14.0" W. 520.89 ft. to a point;  
Run thence S. 00° 24' 43.9" W. 834.02 ft. to a point;  
Run thence S. 07° 49' 01.8" W. 1191.07 ft. to a point;  
Run thence S. 50° 26' 06.3" W. 731.61 ft. to a point;  
Run thence S. 02° 51' 10.5" W. 301.37 ft. to a point;  
Run thence S. 36° 37' 58.2" W. 918.41 ft. to a point;  
Run thence S. 47° 12' 26.3" W. 1321.86 ft. to a point;  
Run thence S. 72° 58' 54.2" W. 498.84 ft. to a point;  
Run thence S. 85° 44' 21.3" W. 955.64 ft. to a point;  
Which is N. 11° 39' 16.9" W. 5434.90 ft. from a point known as Green Two (located in Section 13 in said Township and Range);  
Run thence N. 58° 09' 44.1" W. 1630.28 ft. to a point;  
Run thence N. 25° 23' 10.1" W. 1978.00 ft. to a point;  
Run thence N. 16° 34' 21.0" W. 1731.95 ft. to a point;  
Run thence N. 06° 13' 18.0" W. 747.40 ft. to a point;  
Run thence N. 03° 50' 32.8" E. 671.51 ft. to a point;  
Run thence N. 59° 33' 18.9" E. 1117.02 ft. to a point;  
Run thence N. 59° 50' 06.0" E. 2894.56 ft. to a point;  
Run thence N. 48° 28' 40.0" E. 897.56 ft. to a point;  
Run thence N. 31° 29' 50.7" E. 920.64 ft. to a point;  
Run thence N. 19° 46' 39.6" E. 1524.95 ft. to a point;  
Run thence S. 76° 05' 37.1" E. 748.95 ft. to a point;  
Run thence S. 57° 33' 30.2" E. 445.53 ft. to a point;  
Run thence S. 78° 27' 44.9" E. 394.98 ft. to a point;  
Run thence S. 61° 55' 39.0" E. 323.00 ft. to a point;  
Run thence N. 89° 04' 46.8" E. 249.03 ft. to a point;  
Run thence S. 67° 43' 17.4" E. 245.31 ft. to a point;  
Run thence S. 79° 55' 09.8" E. 45.71 ft. to a point;  
Run thence S. 83° 59' 27.6" E. 95.52 ft. to a point;  
Run thence N. 42° 02' 57.2" E. 68.68 ft. to a point;  
Run thence S. 80° 41' 24.2" E. 61.81 ft. to a point;  
Run thence S. 10° 47' 03.5" E. 128.27 ft. to the True Point of Beginning; and containing all or portions of T17S, R12W, Sections 35 and 36; and T18S, R12W, Sections 1, 2, 11 and 12; W.M., Lane County.

## **ATTACHMENT B**

### **PROPOSED MODIFIED RULES**

**OAR 340-41-270, OAR 340-71-400, AND OAR 340-71-460**

**[Note - there are two sets of these rules. The first set shows the existing rules with the changes marked. The second set is a “clean” copy of the rules with the proposed modifications included]**

## Special Policies and Guidelines

**340-41-270** In order to preserve the existing high quality water in Clear Lake north of Florence for use as a public water supply source requiring only minimal filtration, it is the policy of the Environmental Quality Commission to protect the Clear Lake watershed including both surface and groundwaters, from existing and potential contamination sources with the following requirements:

(1) The total phosphorus maximum annual loading discharged into Clear Lake shall not exceed 241 pounds per year from all sources.

(2) The total phosphorus maximum annual loading for the Clear Lake watershed shall be deemed exceeded if the median concentration of total phosphorus from samples collected in the epilimnion between May 1 and September 30 exceed nine micrograms per liter during two consecutive years.

(3) Of the total phosphorus loading of 241 pounds per year specified in section (1) of this rule, 192 pounds per year shall be considered current background and Department reserve and shall not be available to other sources.

(4) The total phosphorus maximum annual loading discharged into Collard Lake shall not exceed 123 pounds per year.

~~(5) Lane County or any other jurisdiction shall not issue permits allowing connection of development in the Clear Lake watershed to a sewerage facility and the Department or its contract agent shall not issue on-site sewage system construction installation permits or favorable site evaluation reports for on-site sewage systems within the Clear Lake watershed until a plan is submitted to and approved by the Department showing how total phosphorus loadings limitations required by this rule will be achieved and maintained. The plan shall include, but not be limited to, the following:~~

~~(a) Projected phosphorus loadings for existing development and future planned development within the Clear Lake watershed. Technical bases for the projections shall be cited. The plan shall include phosphorus loadings from storm runoff during and after construction, on-site sewage disposal systems and other management activities in the watershed including, but not limited to, forest harvesting;~~

~~(b) Adopted ordinances as necessary to carry out the provisions of the plan;~~

~~(c) Agreements, contracts and other information as needed to show how and what entity will effectively implement each provision of the plan.~~

~~(6) The plan required by section (5) of this rule shall address necessary controls to reduce phosphorus loadings into Collard Lake to levels less than 60 pounds per year. The Department may approve a plan with annual loadings greater than 60 pounds per year, but only if the plan demonstrates that controls necessary to achieve less than 60 pounds per year are unreasonable and overly burdensome.~~

~~(7) If the plan required by section (5) of this rule proposes that Clear Lake and/or Collard Lake loading limits be increased from levels established in section (1) and/or section (4) of this rule, the plan shall include the social and economic justification for such increases as required by Oregon Administrative Rule (OAR) 340-41-026. The justification shall show the costs of achieving the loading limits established in this rule as well as the economic and social benefits of increasing the loads. The Commission shall not approve any plan that will not achieve a lake loading limit for Collard Lake of 140 pounds or less of phosphorus per~~

year. The Commission shall not approve any plan that will not achieve a lake loading limit for Clear Lake of 251 pounds or less of phosphorus per year.

— (8) No construction of a sewerage facility to serve the Clear Lake watershed or a portion thereof shall begin until or unless:

— (a) The facilities plan report and engineering plans and specifications have been approved in writing by the Department;

— (b) It is constructed and operated by a municipality with authority for the operation and maintenance of sewerage facilities;

— (c) Before construction starts, the responsible municipality shall demonstrate that it has a reliable source of funding to assure proper construction, operation, maintenance, and replacement of the required sewerage facilities.

— (9) No on-site sewage system construction installation permits, favorable site evaluation reports, or sanitary sewer connection permits shall be issued until a plan for monitoring the water quality of Clear Lake is submitted to and approved by the Department. The plan shall include contracts or memorandums of agreement that assure that the monitoring will be conducted.

— (10) Unless it is demonstrated that stormwater runoff treatment and control systems are not necessary to meet the total maximum annual loading for total phosphorus, any off-site or on-site control facilities for stormwater quality control necessary to comply with this rule shall be under the control of a municipality.

— Stat. Auth.: ORS 183.335, 454.625, 468.020, ~~468.705 & 468.710~~, 468B.010 and 468B.020.

Stat. Implemented: ORS 454.685

Hist.: DEQ 3-1983, f. & ef. 4-18-83; DEQ 44-1990, f. & cert. ef. 12-19-90

**340-71-400**

**Geographic Area Special Considerations.**

(1) River Road — Santa Clara Area, Lane County:

(a) Within the areas set forth in subsection (b) of this section the Agent may issue either construction permits for new subsurface sewage disposal systems or favorable reports of evaluation of site suitability to construct systems under the following circumstances:

(A) The system complies with all rules in effect at the time the permit is issued; and

(B) The system will not in itself contribute, or in combination with other new sources after April 18, 1980, contribute more than sixteen and seven-tenths (16.7) pounds nitrate-nitrogen per acre per year to the local groundwater. The applicant shall assure compliance with this condition by showing his ownership or control of adequate land through easements or equivalent.

(b) Subsection (a) of this section shall apply to all of the following area generally known as River Road — Santa Clara, and defined by the boundary submitted by the Board of County Commissioners for Lane County, which is bounded on the south by the City of Eugene, on the west by the Southern Pacific Railroad, on the north by Beacon Drive, and on the east by the Willamette River, and containing all or portions of T16S, R4W, Sections 33, 34, 35, 36; T17S, R4W, Sections 1, 2, 3, 4, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25; and T17S, R1E, Sections 6, 7, 18, Willamette Meridian;

(c) This rule is subject to modification or repeal by the Commission on an area-by-area basis upon petition by the appropriate local agency or agencies. Such petition either shall provide reasonable evidence that development using subsurface sewage disposal systems will not cause unacceptable degradation of groundwater quality or surface water quality or shall provide equally adequate evidence that degradation of groundwater or surface water quality will not occur as a result of such modification or repeal;

(d) Subsections (a) and (b) of this section shall not apply to any construction permit application based on a favorable report of evaluation of site suitability issued by the Agent pursuant to ORS 454.755(1)(b), where such report was issued prior to the effective date of this rule.

(2) General North Florence Aquifer, North Florence Dunal Aquifer Area, Lane County:

(a) Within the area set forth in subsection (2)(b) of this rule, the agent may issue construction permits for new on-site sewage disposal systems or favorable reports of evaluation of site suitability to construct individual or community on-site sewage disposal systems under the following circumstances:

(A) The lot and proposed system shall comply with all rules in effect at the time the permit or favorable report of site suitability is issued; or

(B) The lot and proposed system complies with paragraph 2(a)(A) of this rule, except for the projected daily sewage loading rates, and the system in combination with all other previously approved systems owned or legally controlled by the applicant shall be projected by the Department to contribute to the local groundwater not more than fifty-eight (58) pounds nitrate-nitrogen  $\text{NO}_3\text{-N}$  per year per acre owned or controlled by the applicant.

(b) Subsection (2)(a) of this rule shall apply to all of the following area hereby known as the General North Florence Aquifer of the North Florence Dunal Area and is defined by the hydrologic boundaries identified in the June 1982, 208 North Florence Dunal Aquifer Study, which is the area bounded on the west by the Pacific Ocean; on the southwest and south by the Siuslaw River; on the east by the North Fork of the Siuslaw River and the ridge line at the approximate elevation of four hundred (400) feet above mean sea level directly east of Munsel Lake, Clear Lake and Collard Lake; and on the north by Mercer Lake, Mercer Creek, Sutton Lake and Sutton Creek; and containing all or portions of T17S, R12W, Sections 27, 28, 33, 34, 35, 36, and T18S, T12W, sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27; W.M., Lane County, except that portion defined as the Clear Lake Watershed more particularly described by ~~QAR-340-71-460(6)(f)~~ Township 18 South, Range 12 West, of the Willamette Meridian, Lane County, Oregon:

Run thence S. 67° 50' 51.5" E. 97.80 ft. to the True Point of Beginning; Run thence S. 05° 40' 43.0" W. 1960.62 ft. to a point; Run thence S. 04° 58' 45.4" E. 1301.91 ft. to a point; Run thence S. 52° 44' 01.0" W. 231.21 ft. to a point; Run thence S. 15° 20' 45.4" E. 774.62 ft. to a point; Run thence S. 31° 44' 14.0" W. 520.89 ft. to a point; Run thence S. 00° 24' 43.9" W. 834.02 ft. to a point; Run thence S. 07° 49' 01.8" W. 1191.07 ft. to a point; Run thence S. 50° 26' 06.3" W. 731.61 ft. to a point; Run thence S. 02° 51' 10.5" W. 301.37 ft. to a point; Run thence 36° 37' 58.2" W. 918.41 ft. to a point; Run thence S. 47° 12' 26.3" W. 1321.86 ft. to a point; Run thence S. 72° 58' 54.2" W. 498.84 ft. to a point; Run thence S. 85° 44' 21.3" W. 955.64 ft. to a point; Which is N. 11° 39' 16.9" W. 5434.90 ft. from a point known as Green Two (located in Section 13 in said Township and Range); Run thence N. 58° 09' 44.1" W. 1630.28 ft. to a point; Run thence N. 25° 23' 10.1" W. 1978.00 ft. to a point; Run thence N. 16° 34' 21.0" W. 1731.95 ft. to a point; Run thence N. 06° 13' 18.0" W. 747.40 ft. to a point; Run thence N. 03° 50' 32.8" E. 671.51 ft. to a point; Run thence N. 59° 33' 18.9" E. 1117.02 ft. to a point; Run thence N. 59° 50' 06.0" E. 1894.56 ft. to a point; Run thence N. 48° 28' 40.0" E. 897.56 ft. to a point; Run thence N. 31° 29' 50.7" E. 920.64 ft. to a point; Run thence N. 19° 46' 39.6" E. 1524.95 to a point; Run thence S. 76° 05' 37.1" E. 748.95 ft. to a point; Run thence S. 57° 33' 30.2" E. 445.53 ft. to a point; Run thence S. 78° 27' 44.9" E. 394.98 ft. to a point; Run thence S. 61° 55' 39.0" E. 323.00 ft. to a point; Run thence N. 89° 04' 46.8" E. 249.03 ft. to a point; Run thence S. 67° 43' 17.4" E. 245.31 ft. to a point; Run thence S. 79° 55' 09.8" E. 45.71 ft. to a point; Run thence S. 83° 59' 27.6" E. 95.52 ft. to a point; Run thence N. 42° 02' 57.2" E. 68.68 ft. to a point; Run thence S. 80° 41' 24.2" E. 61.81 ft. to a point; Run thence S. 10° 47' 03.5" E. 128.27 ft. to the True Point of Beginning; and containing all or portions of T17S, R12W, Sections 35 and 36; and T18S, R12W, Sections 1, 2, 11 and 12; W.M., Lane County.

(3) Lands Overlaying the Alsea Dunal Aquifer:

(a) Within the area set forth in subsection (3)(c) of this rule, the Agent may issue a construction permit for a new on-site sewage disposal system or a favorable report of evaluation of site suitability to construct a single on-site system on lots that were lots of record prior to January 1, 1981; or on lots in partitions or subdivisions that have received preliminary planning, zoning, and on-site sewage disposal approval prior to January 1,

1981, providing one of the following can be met:

(A) At the time the permit or favorable report of site suitability is issued the lot complies with OAR 340-71-100 through 340-71-360 and OAR 340-71-410 through 340-71-520; or

(B) The lot is found through site evaluation not to comply with OAR 340-71-100 through 340-71-360 and OAR 340-71-410 through 340-71-520, but does meet all of the following conditions when a pressurized seepage bed is utilized:

(i) Groundwater levels shall not be closer than four (4) feet from the ground surface or closer than three (3) feet from the bottom of the seepage bed;

(ii) The seepage bed shall be constructed in accordance with OAR 340-71-275(4) and (5);

(iii) The seepage bed shall be sized on the basis of two hundred (200) square feet of bottom area per one hundred fifty (150) gallons projected daily sewage flow;

(iv) Projected daily sewage flows shall be limited to not more than three hundred seventy-five (375) gallons per lot, except those lots which have a certificate of favorable site evaluation which provides for a larger flow;

(v) All setbacks identified in **Table 1** can be met, except that lots of record prior to May 1, 1973, shall maintain a minimum fifty (50) feet separation to surface public waters;

(vi) Sufficient area exists on the lot to install a seepage bed and a replacement seepage bed. The area reserved for replacement may be waived pursuant to the exception in OAR 340-71-150(4)(a)(B).

(C) The lot is found through site evaluation not to comply with OAR 340-71-100 through 340-71-360 and OAR 340-71-410 through 340-71-520, but does meet all of the following conditions when a conventional sand filter without a bottom is utilized:

(i) Groundwater levels shall not be closer than one (1) foot from the ground surface and not closer than one (1) foot from the bottom of the sand filter;

(ii) Sewage flows shall be limited to not more than three hundred seventy-five (375) gallons per day per lot, except those lots which have a certificate of favorable site evaluation which provides for a larger flow;

(iii) The sand filter shall be sized at one (1) square foot of bottom area for each gallon of projected daily sewage flow;

(iv) The conventional sand filter without a bottom shall be constructed in accordance with OAR 340-71-295(3);

(v) All setbacks identified in **Table 1** can be met, except that lots of record prior to May 1, 1973, shall maintain a minimum fifty (50) feet separation to surface public waters;

(vi) Sufficient area exists on the lot to install a bottomless conventional sand filter and a replacement bottomless conventional sand filter. The area for replacement may be waived pursuant to the exception contained in OAR 340-71-150(4)(a)(B).

(b) Within the area set forth in subsection (3)(c) of this rule, for lots created on or after January 1, 1981, and/or when the on-site system will serve a commercial facility, the Agent may issue a construction permit for a new on-site sewage disposal system or a favorable report of evaluation of site suitability if it is determined that all rules of the Commission can be met;

(c) The Alsea Dunal Aquifer is defined as all the land bounded on the East by Highway 101, the Pacific Ocean on the West, and from Driftwood Beach Wayside South

to the southern tip of the Alsea Bay Spit;

(d) If the results of groundwater monitoring in the Alsea Dunal Aquifer indicate unacceptable levels of degradation or if it appears necessary or desirable to pursue development of the aquifer as a source of drinking water, sewage collection and off-site treatment and disposal facilities shall be installed unless further study demonstrates that such facilities are not necessary or effective to protect the beneficial use.

(4) Christmas Valley Townsite, Lake County:

(a) Within the area set forth in subsection (4)(b) of this rule, the agent may consider the shallow groundwater table, if present, in the same manner as a temporary water table when preparing and/or issuing site evaluation reports and construction-installation permits;

(b) The Christmas Valley Townsite is defined as all land within the Christmas Valley Townsite plat located within Sections 9, 10, 11, 14, 15 and 16 of Township 27 South, Range 17 East, Willamette Meridian, in Lake County.

(5) Clatsop Plains Aquifer, Clatsop County: The Clatsop Plains Groundwater Protection Plan, prepared by R.W. Beck and Associates and adopted by Clatsop County, provides a basis for continued use of on-site sewage disposal systems while protecting the quality of groundwater for future water supplies. For the plan to be successful, the following components must be accomplished:

(a) By not later than January 1, 1983, Clatsop County shall identify and set aside aquifer reserve areas for future water supply development containing a minimum of two and one half (2-1/2) square miles. The reserve areas shall be controlled so that the potential for groundwater contamination from nitrogen and other possible pollutants is kept to a minimum;

(b) The Agent may issue construction installation permits for new on-site sewage disposal systems or favorable reports of site evaluation to construct on-site systems, within the area generally known as the Clatsop Plains, which is bounded by the Columbia River to the North; the Pacific Ocean to the west; the Necanicum River, Neawanna Creek, and County Road 157 on the south; and the Carnahan Ditch-Skipanon River and the foothills of the Coast Range to the east, providing:

(A) The lot or parcel was created in compliance with the appropriate comprehensive plan for Gearhart (adopted by County Ordinance 80-3), Seaside (adopted by County Ordinance 80-10), Warrenton (adopted by County Ordinance 82-15), or the Clatsop County plan adopted through Ordinance No. 79-10; and either

(B) The lot or parcel does not violate any rule of this Division; or

(C) Lot or parcel does not violate the Department's Water Quality Management Plan or any rule of this Division, except the projected maximum sewage loading rate would exceed the ratio of four hundred fifty (450) gallons per one-half (1/2) acre per day. The on-site system shall be either a sand filter system or a pressurized distribution system with a design sewage flow not to exceed four hundred fifty (450) gallons per day; or

(D) The Department may approve the use of standard on-site systems to serve single family dwellings within planned developments or clustered-lot subdivisions providing:

(i) The planned development or clustered-lot subdivision is not located within Gearhart, Seaside, Warrenton, or their urban growth boundaries; and

(ii) The lots do not violate any rule of this Division, except the projected maximum sewage loading rate may exceed the ratio of four hundred fifty (450) gallons per acre per



day; and

(iii) The Department is provided satisfactory evidence through a detailed groundwater study that the use of standard systems will not constitute a greater threat to groundwater quality than would occur with the use of sand filter systems or pressurized distribution systems.

(6) Within areas east of the Cascade Range where the annual precipitation does not exceed twenty (20) inches, and after evaluating the site, the Agent may issue a construction-installation permit authorizing installation of a standard system to serve a single family dwelling, provided the requirements in subsections (6)(a) and (b) of this rule are met:

(a) Minimum Site Criteria:

(A) The property is ten (10) acres or larger in size. The minimum parcel size considered under this rule is designated by the County, but in no event shall it be less than ten (10) acres;

(B) The slope gradient does not exceed thirty (30) percent;

(C) The soils are diggable with a backhoe to a depth of at least twenty-four (24) inches;

(D) The site is found to comply with the provisions of OAR 340-71-220(1)(b,e,f,g,h, and i).

(b) Minimum Construction Requirements:

(A) The system shall contain not less than two hundred twenty-five (225) linear feet of disposal trench for projected sewage flows not exceeding four hundred fifty (450) gallons per day. Larger sewage flows shall be sized on the basis of seventy-five (75) linear feet per each one hundred fifty (150) gallons of projected flow;

(B) The system shall be constructed and backfilled in compliance with OAR 340-71-220: sections (3), (4), (5), (7), (8), (9), (10), and (11) of this rule.

(c) At the discretion and request of the owner or the owner's authorized representative, a single application may be submitted to the Agent for both a site evaluation report and a construction-installation permit. The application would include the sum of the fees for both activities, pursuant to OAR 340-71-140(1)(a)(A) and OAR 340-71-140(1)(b)(A)(i), as well as the following:

(A) Favorable land use compatibility statement from the appropriate land use authority signifying that the proposed land use is compatible with the Land Conservation and Development Commission acknowledged comprehensive plan or complies with the statewide planning goals;

(B) Property development plan acceptable to the Agent showing the location of existing and proposed improvements, including the locations of the dwelling and sewage disposal system;

(C) All other exhibits the Agent finds are necessary to complete the application.

(d) The Agent may waive the pre-cover inspection for a system installed pursuant to this section, provided the system installer submits the following information to the Agent at the time construction of the system is complete:

(A) A detailed and accurate as-built plan of the constructed system; and

(B) A list of all material used in the construction of the system; and

(C) A written certification (on a form acceptable to the Department) that the

construction was in accordance with the permit and rules of the Commission.

(7) Within areas east of the Cascade Range where the annual precipitation does not exceed twenty (20) inches, the Agent may issue a construction-installation permit authorizing installation of a standard system to serve a single family dwelling, provided the requirements in subsections (7)(a) and (b) of this rule are met. The Agent may waive the site evaluation for a single family dwelling provided:

(a) Minimum Site Criteria:

(A) The property is eighty (80) acres or larger in size. The minimum parcel size considered under this rule is designated by the County, but in no event shall it be less than eighty (80) acres;

(B) The separation distance between the proposed on-site system and the nearest dwelling, other than that being served by the proposed system, is at least one-quarter mile;

(C) The nearest property line to the proposed system is at least 100 feet, the nearest domestic water source is at least 200 feet, and the nearest surface public water is at least 200 feet; and

(D) In the opinion of the Agent, sufficient topographical and soils information, including but not limited to slope, terrain, landform, and rock outcrops, is submitted with the application to determine the property can be approved for on-site sewage disposal in conformance with the purpose of these rules as stated in OAR 340-71-110.

(b) Minimum Construction Requirements:

(A) Sizing requirements of **Tables 4 and 5** shall be followed as closely as possible. In any case, the system shall contain not less than two hundred twenty-five (225) linear feet of disposal trench for projected sewage flows not exceeding four hundred fifty (450) gallons per day. Larger sewage flows shall be sized on the basis of seventy-five (75) linear feet per each one hundred fifty (150) gallons of projected flow;

(B) The system shall be constructed and backfilled as closely as possible to the requirements contained in OAR 340-71-220.

(c) At the request of the owner or the owner's authorized representative, a single application may be submitted to the Agent for both a site evaluation report and a construction-installation permit. The application would include the fee for a site evaluation, pursuant to OAR 340-71-140, as well as the following:

(A) Favorable land use compatibility statement from the appropriate land use authority signifying that the proposed land use is compatible with the Land Conservation and Development Commission acknowledged comprehensive plan or complies with the statewide planning goals;

(B) Property development plan acceptable to the Agent showing the location of existing and proposed improvements, including the locations of the dwelling and sewage disposal system;

(C) All other exhibits the Agent finds are necessary to complete the application;

(D) If the decision is made to waive the site evaluation, the fee will be transferred to the permit.

(d) The Agent may waive the pre-cover inspection for a system installed pursuant to this section, provided the system installer submits the following information to the Agent at the time construction of the system is complete:

(A) A detailed and accurate as-built plan of the constructed system; and

(B) A list of all material used in the construction of the system; and  
(C) A written certification (on a form acceptable to the Department) that the construction was in accordance with the permit and rules of the Commission.

(e) The conditions for OAR 340-71-400(7) shall be set forth in an addendum to the memorandum of agreement (contract) between the County and the Department.

Stat. Author.: ORS 183.335, 454.625, 468.020, 468B.010 and 468B.020.

Stat. Impl.: ORS 454.610, 454.615

### 340-71-460

#### Moratorium Areas

(1) Whenever the Commission finds that construction of subsurface or alternative sewage disposal systems should be limited or prohibited in an area, it shall issue an order limiting or prohibiting such construction.

(2) The order shall be issued only after public hearing for which more than thirty (30) days' notice is given.

(3) The order shall be a rule of this division which contains a general description of the moratorium area. A more detailed description of the area, if needed, shall be an appendix to these rules.

(4) No permit or site evaluation report shall be issued for construction of a new or expanded system which would violate any order of the Commission issued pursuant to ORS 454.685.

(5) Criteria For Establishing Moratoriums: In issuing an order under this section the Commission shall consider the factors contained in ORS 454.685(2).

~~(6) Specific Moratorium Areas: Pursuant to ORS 454.685, the Agent shall not issue sewage system construction installation permits or approved site evaluation reports within the boundaries of the following areas of the state:~~

~~Lane County—Clear Lake Watershed of the North Florence Dunal Aquifer Area, as follows: The area hereby known as the Clear Lake Watershed of the North Florence Dunal Aquifer Area defined by the hydrologic boundaries identified in the June 1982, 208 North Florence Dunal Aquifer Study which is the area beginning at a point known as Tank One, located in Section One, Township 18 South, Range 12 West, of the Willamette Meridian, Lane County, Oregon:~~

~~Run thence S. 67° 50' 51.5" E. 97.80 ft. to the True Point of Beginning; Run thence S. 05° 40' 43.0" W. 1960.62 ft. to a point; Run thence S. 04° 58' 45.4" W. 1301.91 ft. to a point; Run thence S. 52° 44' 01.0" W. 231.21 ft. to a point; Run thence S. 15° 20' 45.4" W. 774.62 ft. to a point; Run thence S. 31° 44' 14.0" W. 520.89 ft. to a point; Run thence S. 00° 24' 43.9" W. 834.02 ft. to a point; Run thence S. 07° 49' 01.8" W. 1191.07 ft. to a point; Run thence S. 50° 26' 06.3" W. 731.61 ft. to a point; Run thence S. 02° 51' 10.5" W. 301.37 ft. to a point; Run thence S. 36° 37' 58.2" W. 918.41 ft. to a point; Run thence S. 47° 12' 26.3" W. 1321.86 ft. to a point; Run thence S. 72° 58' 54.2" W. 498.84 ft. to a point; Run thence S. 85° 44' 21.3" W. 955.64 ft. to a point; Which is N. 11° 39' 16.9" W. 5434.90 ft. from a point known as Green Two (located in Section 13 in said Township and Range);~~

Run thence N. 58° 09' 44.1" W. 1630.28 ft. to a point; Run thence N. 25° 23' 10.1" W. 1978.00 ft. to a point; Run thence N. 16° 34' 21.0" W. 1731.95 ft. to a point; Run thence N. 06° 13' 18.0" W. 747.40 ft. to a point; Run thence N. 03° 50' 32.8" E. 671.51 ft. to a point; Run thence N. 59° 33' 18.9" E. 1117.02 ft. to a point; Run thence N. 59° 50' 06.0" E. 2894.56 ft. to a point; Run thence N. 48° 28' 40.0" E. 897.56 ft. to a point; Run thence N. 31° 29' 50.7" E. 920.64 ft. to a point; Run thence N. 19° 46' 39.6" E. 1524.95 ft. to a point; Run thence S. 76° 05' 37.1" E. 748.95 ft. to a point; Run thence S. 57° 33' 30.2" E. 445.53 ft. to a point; Run thence S. 78° 27' 44.9" E. 394.98 ft. to a point; Run thence S. 61° 55' 39.0" E. 323.00 ft. to a point; Run thence N. 89° 04' 46.8" E. 249.03 ft. to a point; Run thence S. 67° 43' 17.4" E. 245.31 ft. to a point; Run thence S. 79° 55' 09.8" E. 45.71 ft. to a point; Run thence S. 83° 59' 27.6" E. 95.52 ft. to a point; Run thence N. 42° 02' 57.2" E. 68.68 ft. to a point; Run thence S. 80° 41' 24.2" E. 61.81 ft. to a point; Run thence S. 10° 47' 03.5" E. 128.27 ft. to the True Point of beginning; and containing all or portions of T17S, R12W, Sections 35 and 36; and T18S, R12W, Sections 1, 2, 11 and 12; W.M., Lane County.

Stat. Author.: ORS 183.335, 454.625, 468.020, 468B.010 and 468B.020.

Stat. Impl.: ORS 454.685

### **Special Policies and Guidelines**

**340-41-270** In order to preserve the existing high quality water in Clear Lake north of Florence for use as a public water supply source requiring only minimal filtration, it is the policy of the Environmental Quality Commission to protect the Clear Lake watershed including both surface and groundwaters, from existing and potential contamination sources with the following requirements:

(1) The total phosphorus maximum annual loading discharged into Clear Lake shall not exceed 241 pounds per year from all sources.

(2) The total phosphorus maximum annual loading for the Clear Lake watershed shall be deemed exceeded if the median concentration of total phosphorus from samples collected in the epilimnion between May 1 and September 30 exceed nine micrograms per liter during two consecutive years.

(3) Of the total phosphorus loading of 241 pounds per year specified in section (1) of this rule, 192 pounds per year shall be considered current background and Department reserve and shall not be available to other sources.

(4) The total phosphorus maximum annual loading discharged into Collard Lake shall not exceed 123 pounds per year.

Stat. Auth.: ORS 183.335, 454.625, 468.020,, 468B.010 and 468B.020.

Stat. Implemented: ORS 454.685

Hist.: DEQ 3-1983, f. & ef. 4-18-83; DEQ 44-1990, f. & cert. ef. 12-19-90

**340-71-400**

**Geographic Area Special Considerations.**

(1) River Road — Santa Clara Area, Lane County:

(a) Within the areas set forth in subsection (b) of this section the Agent may issue either construction permits for new subsurface sewage disposal systems or favorable reports of evaluation of site suitability to construct systems under the following circumstances:

(A) The system complies with all rules in effect at the time the permit is issued; and

(B) The system will not in itself contribute, or in combination with other new sources after April 18, 1980, contribute more than sixteen and seven-tenths (16.7) pounds nitrate-nitrogen per acre per year to the local groundwater. The applicant shall assure compliance with this condition by showing his ownership or control of adequate land through easements or equivalent.

(b) Subsection (a) of this section shall apply to all of the following area generally known as River Road — Santa Clara, and defined by the boundary submitted by the Board of County Commissioners for Lane County, which is bounded on the south by the City of Eugene, on the west by the Southern Pacific Railroad, on the north by Beacon Drive, and on the east by the Willamette River, and containing all or portions of T16S, R4W, Sections 33, 34, 35, 36; T17S, R4W, Sections 1, 2, 3, 4, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25; and T17S, R1E, Sections 6, 7, 18, Willamette Meridian;

(c) This rule is subject to modification or repeal by the Commission on an area-by-area basis upon petition by the appropriate local agency or agencies. Such petition either shall provide reasonable evidence that development using subsurface sewage disposal systems will not cause unacceptable degradation of groundwater quality or surface water quality or shall provide equally adequate evidence that degradation of groundwater or surface water quality will not occur as a result of such modification or repeal;

(d) Subsections (a) and (b) of this section shall not apply to any construction permit application based on a favorable report of evaluation of site suitability issued by the Agent pursuant to ORS 454.755(1)(b), where such report was issued prior to the effective date of this rule.

(2) General North Florence Aquifer, North Florence Dunal Aquifer Area, Lane County:

(a) Within the area set forth in subsection (2)(b) of this rule, the agent may issue construction permits for new on-site sewage disposal systems or favorable reports of evaluation of site suitability to construct individual or community on-site sewage disposal systems under the following circumstances:

(A) The lot and proposed system shall comply with all rules in effect at the time the permit or favorable report of site suitability is issued; or

(B) The lot and proposed system complies with paragraph 2(a)(A) of this rule, except for the projected daily sewage loading rates, and the system in combination with all other previously approved systems owned or legally controlled by the applicant shall be projected by the Department to contribute to the local groundwater not more than fifty-eight (58) pounds nitrate-nitrogen  $\text{NO}_3\text{-N}$  per year per acre owned or controlled by the applicant.

(b) Subsection (2)(a) of this rule shall apply to all of the following area hereby known as the General North Florence Aquifer of the North Florence Dunal Area and is defined by the hydrologic boundaries identified in the June 1982, 208 North Florence Dunal Aquifer Study, which is the area bounded on the west by the Pacific Ocean; on the southwest and south by the Siuslaw River; on the east by the North Fork of the Siuslaw River and the ridge line at the approximate elevation of four hundred (400) feet above mean sea level directly east of Munsel Lake, Clear Lake and Collard Lake; and on the north by Mercer Lake, Mercer Creek, Sutton Lake and Sutton Creek; and containing all or portions of T17S, R12W, Sections 27, 28, 33, 34, 35, 36, and T18S, T12W, sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27; W.M., Lane County, except that portion defined as the Clear Lake Watershed more particularly described by Township 18 South, Range 12 West, of the Willamette Meridian, Lane County, Oregon:

Run thence S. 67° 50' 51.5" E. 97.80 ft. to the True Point of Beginning; Run thence S. 05° 40' 43.0" W. 1960.62 ft. to a point; Run thence S. 04° 58' 45.4" E. 1301.91 ft. to a point; Run thence S. 52° 44' 01.0" W. 231.21 ft. to a point; Run thence S. 15° 20' 45.4" E. 774.62 ft. to a point; Run thence S. 31° 44' 14.0" W. 520.89 ft. to a point; Run thence S. 00° 24' 43.9" W. 834.02 ft. to a point; Run thence S. 07° 49' 01.8" W. 1191.07 ft. to a point; Run thence S. 50° 26' 06.3" W. 731.61 ft. to a point; Run thence S. 02° 51' 10.5" W. 301.37 ft. to a point; Run thence 36° 37' 58.2" W. 918.41 ft. to a point; Run thence S. 47° 12' 26.3" W. 1321.86 ft. to a point; Run thence S. 72° 58' 54.2" W. 498.84 ft. to a point; Run thence S. 85° 44' 21.3" W. 955.64 ft. to a point; Which is N. 11° 39' 16.9" W. 5434.90 ft. from a point known as Green Two (located in Section 13 in said Township and Range); Run thence N. 58° 09' 44.1" W. 1630.28 ft. to a point; Run thence N. 25° 23' 10.1" W. 1978.00 ft. to a point; Run thence N. 16° 34' 21.0" W. 1731.95 ft. to a point; Run thence N. 06° 13' 18.0" W. 747.40 ft. to a point; Run thence N. 03° 50' 32.8" E. 671.51 ft. to a point; Run thence N. 59° 33' 18.9" E. 1117.02 ft. to a point; Run thence N. 59° 50' 06.0" E. 1894.56 ft. to a point; Run thence N. 48° 28' 40.0" E. 897.56 ft. to a point; Run thence N. 31° 29' 50.7" E. 920.64 ft. to a point; Run thence N. 19° 46' 39.6" E. 1524.95 to a point; Run thence S. 76° 05' 37.1" E. 748.95 ft. to a point; Run thence S. 57° 33' 30.2" E. 445.53 ft. to a point; Run thence S. 78° 27' 44.9" E. 394.98 ft. to a point; Run thence S. 61° 55' 39.0" E. 323.00 ft. to a point; Run thence N. 89° 04' 46.8" E. 249.03 ft. to a point; Run thence S. 67° 43' 17.4" E. 245.31 ft. to a point; Run thence S. 79° 55' 09.8" E. 45.71 ft. to a point; Run thence S. 83° 59' 27.6" E. 95.52 ft. to a point; Run thence N. 42° 02' 57.2" E. 68.68 ft. to a point; Run thence S. 80° 41' 24.2" E. 61.81 ft. to a point; Run thence S. 10° 47' 03.5" E. 128.27 ft. to the True Point of Beginning; and containing all or portions of T17S, R12W, Sections 35 and 36; and T18S, R12W, Sections 1, 2, 11 and 12; W.M., Lane County.

(3) Lands Overlaying the Alsea Dunal Aquifer:

(a) Within the area set forth in subsection (3)(c) of this rule, the Agent may issue a construction permit for a new on-site sewage disposal system or a favorable report of evaluation of site suitability to construct a single on-site system on lots that were lots of record prior to January 1, 1981; or on lots in partitions or subdivisions that have received preliminary planning, zoning, and on-site sewage disposal approval prior to January 1, 1981, providing one of the following can be met:

(A) At the time the permit or favorable report of site suitability is issued the lot complies with OAR 340-71-100 through 340-71-360 and OAR 340-71-410 through 340-71-520; or

(B) The lot is found through site evaluation not to comply with OAR 340-71-100 through 340-71-360 and OAR 340-71-410 through 340-71-520, but does meet all of the following conditions when a pressurized seepage bed is utilized:

(i) Groundwater levels shall not be closer than four (4) feet from the ground surface or closer than three (3) feet from the bottom of the seepage bed;

(ii) The seepage bed shall be constructed in accordance with OAR 340-71-275(4) and (5);

(iii) The seepage bed shall be sized on the basis of two hundred (200) square feet of bottom area per one hundred fifty (150) gallons projected daily sewage flow;

(iv) Projected daily sewage flows shall be limited to not more than three hundred seventy-five (375) gallons per lot, except those lots which have a certificate of favorable site evaluation which provides for a larger flow;

(v) All setbacks identified in **Table 1** can be met, except that lots of record prior to May 1, 1973, shall maintain a minimum fifty (50) feet separation to surface public waters;

(vi) Sufficient area exists on the lot to install a seepage bed and a replacement seepage bed. The area reserved for replacement may be waived pursuant to the exception in OAR 340-71-150(4)(a)(B).

(C) The lot is found through site evaluation not to comply with OAR 340-71-100 through 340-71-360 and OAR 340-71-410 through 340-71-520, but does meet all of the following conditions when a conventional sand filter without a bottom is utilized:

(i) Groundwater levels shall not be closer than one (1) foot from the ground surface and not closer than one (1) foot from the bottom of the sand filter;

(ii) Sewage flows shall be limited to not more than three hundred seventy-five (375) gallons per day per lot, except those lots which have a certificate of favorable site evaluation which provides for a larger flow;

(iii) The sand filter shall be sized at one (1) square foot of bottom area for each gallon of projected daily sewage flow;

(iv) The conventional sand filter without a bottom shall be constructed in accordance with OAR 340-71-295(3);

(v) All setbacks identified in **Table 1** can be met, except that lots of record prior to May 1, 1973, shall maintain a minimum fifty (50) feet separation to surface public waters;

(vi) Sufficient area exists on the lot to install a bottomless conventional sand filter and a replacement bottomless conventional sand filter. The area for replacement may be waived pursuant to the exception contained in OAR 340-71-150(4)(a)(B).

(b) Within the area set forth in subsection (3)(c) of this rule, for lots created on or after January 1, 1981, and/or when the on-site system will serve a commercial facility, the Agent may issue a construction permit for a new on-site sewage disposal system or a favorable report of evaluation of site suitability if it is determined that all rules of the Commission can be met;

(c) The Alesa Dunal Aquifer is defined as all the land bounded on the East by Highway 101, the Pacific Ocean on the West, and from Driftwood Beach Wayside South to the southern tip of the Alesa Bay Spit;



(d) If the results of groundwater monitoring in the Alsea Dunal Aquifer indicate unacceptable levels of degradation or if it appears necessary or desirable to pursue development of the aquifer as a source of drinking water, sewage collection and off-site treatment and disposal facilities shall be installed unless further study demonstrates that such facilities are not necessary or effective to protect the beneficial use.

(4) Christmas Valley Townsite, Lake County:

(a) Within the area set forth in subsection (4)(b) of this rule, the agent may consider the shallow groundwater table, if present, in the same manner as a temporary water table when preparing and/or issuing site evaluation reports and construction-installation permits;

(b) The Christmas Valley Townsite is defined as all land within the Christmas Valley Townsite plat located within Sections 9, 10, 11, 14, 15 and 16 of Township 27 South, Range 17 East, Willamette Meridian, in Lake County.

(5) Clatsop Plains Aquifer, Clatsop County: The Clatsop Plains Groundwater Protection Plan, prepared by R.W. Beck and Associates and adopted by Clatsop County, provides a basis for continued use of on-site sewage disposal systems while protecting the quality of groundwater for future water supplies. For the plan to be successful, the following components must be accomplished:

(a) By not later than January 1, 1983, Clatsop County shall identify and set aside aquifer reserve areas for future water supply development containing a minimum of two and one half (2-1/2) square miles. The reserve areas shall be controlled so that the potential for groundwater contamination from nitrogen and other possible pollutants is kept to a minimum;

(b) The Agent may issue construction installation permits for new on-site sewage disposal systems or favorable reports of site evaluation to construct on-site systems, within the area generally known as the Clatsop Plains, which is bounded by the Columbia River to the North; the Pacific Ocean to the west; the Necanicum River, Neawanna Creek, and County Road 157 on the south; and the Carnahan Ditch-Skipanon River and the foothills of the Coast Range to the east, providing:

(A) The lot or parcel was created in compliance with the appropriate comprehensive plan for Gearhart (adopted by County Ordinance 80-3), Seaside (adopted by County Ordinance 80-10), Warrenton (adopted by County Ordinance 82-15), or the Clatsop County plan adopted through Ordinance No. 79-10; and either

(B) The lot or parcel does not violate any rule of this Division; or

(C) Lot or parcel does not violate the Department's Water Quality Management Plan or any rule of this Division, except the projected maximum sewage loading rate would exceed the ratio of four hundred fifty (450) gallons per one-half (1/2) acre per day. The on-site system shall be either a sand filter system or a pressurized distribution system with a design sewage flow not to exceed four hundred fifty (450) gallons per day; or

(D) The Department may approve the use of standard on-site systems to serve single family dwellings within planned developments or clustered-lot subdivisions providing:

(i) The planned development or clustered-lot subdivision is not located within Gearhart, Seaside, Warrenton, or their urban growth boundaries; and

(ii) The lots do not violate any rule of this Division, except the projected maximum sewage loading rate may exceed the ratio of four hundred fifty (450) gallons per acre per day; and

(iii) The Department is provided satisfactory evidence through a detailed groundwater study that the use of standard systems will not constitute a greater threat to groundwater quality than would occur with the use of sand filter systems or pressurized distribution systems.

(6) Within areas east of the Cascade Range where the annual precipitation does not exceed twenty (20) inches, and after evaluating the site, the Agent may issue a construction-installation permit authorizing installation of a standard system to serve a single family dwelling, provided the requirements in subsections (6)(a) and (b) of this rule are met:

(a) Minimum Site Criteria:

(A) The property is ten (10) acres or larger in size. The minimum parcel size considered under this rule is designated by the County, but in no event shall it be less than ten (10) acres;

(B) The slope gradient does not exceed thirty (30) percent;

(C) The soils are diggable with a backhoe to a depth of at least twenty-four (24) inches;

(D) The site is found to comply with the provisions of OAR 340-71-220(1)(b,e,f,g,h, and i).

(b) Minimum Construction Requirements:

(A) The system shall contain not less than two hundred twenty-five (225) linear feet of disposal trench for projected sewage flows not exceeding four hundred fifty (450) gallons per day. Larger sewage flows shall be sized on the basis of seventy-five (75) linear feet per each one hundred fifty (150) gallons of projected flow;

(B) The system shall be constructed and backfilled in compliance with OAR 340-71-220: sections (3), (4), (5), (7), (8), (9), (10), and (11) of this rule.

(c) At the discretion and request of the owner or the owner's authorized representative, a single application may be submitted to the Agent for both a site evaluation report and a construction-installation permit. The application would include the sum of the fees for both activities, pursuant to OAR 340-71-140(1)(a)(A) and OAR 340-71-140(1)(b)(A)(i), as well as the following:

(A) Favorable land use compatibility statement from the appropriate land use authority signifying that the proposed land use is compatible with the Land Conservation and Development Commission acknowledged comprehensive plan or complies with the statewide planning goals;

(B) Property development plan acceptable to the Agent showing the location of existing and proposed improvements, including the locations of the dwelling and sewage disposal system;

(C) All other exhibits the Agent finds are necessary to complete the application.

(d) The Agent may waive the pre-cover inspection for a system installed pursuant to this section, provided the system installer submits the following information to the Agent at the time construction of the system is complete:

(A) A detailed and accurate as-built plan of the constructed system; and

(B) A list of all material used in the construction of the system; and

(C) A written certification (on a form acceptable to the Department) that the construction was in accordance with the permit and rules of the Commission.

(7) Within areas east of the Cascade Range where the annual precipitation does not exceed twenty (20) inches, the Agent may issue a construction-installation permit authorizing installation of a standard system to serve a single family dwelling, provided the requirements in subsections (7)(a) and (b) of this rule are met. The Agent may waive the site evaluation for a single family dwelling provided:

(a) Minimum Site Criteria:

(A) The property is eighty (80) acres or larger in size. The minimum parcel size considered under this rule is designated by the County, but in no event shall it be less than eighty (80) acres;

(B) The separation distance between the proposed on-site system and the nearest dwelling, other than that being served by the proposed system, is at least one-quarter mile;

(C) The nearest property line to the proposed system is at least 100 feet, the nearest domestic water source is at least 200 feet, and the nearest surface public water is at least 200 feet; and

(D) In the opinion of the Agent, sufficient topographical and soils information, including but not limited to slope, terrain, landform, and rock outcrops, is submitted with the application to determine the property can be approved for on-site sewage disposal in conformance with the purpose of these rules as stated in OAR 340-71-110.

(b) Minimum Construction Requirements:

(A) Sizing requirements of **Tables 4 and 5** shall be followed as closely as possible. In any case, the system shall contain not less than two hundred twenty-five (225) linear feet of disposal trench for projected sewage flows not exceeding four hundred fifty (450) gallons per day. Larger sewage flows shall be sized on the basis of seventy-five (75) linear feet per each one hundred fifty (150) gallons of projected flow;

(B) The system shall be constructed and backfilled as closely as possible to the requirements contained in OAR 340-71-220.

(c) At the request of the owner or the owner's authorized representative, a single application may be submitted to the Agent for both a site evaluation report and a construction-installation permit. The application would include the fee for a site evaluation, pursuant to OAR 340-71-140, as well as the following:

(A) Favorable land use compatibility statement from the appropriate land use authority signifying that the proposed land use is compatible with the Land Conservation and Development Commission acknowledged comprehensive plan or complies with the statewide planning goals;

(B) Property development plan acceptable to the Agent showing the location of existing and proposed improvements, including the locations of the dwelling and sewage disposal system;

(C) All other exhibits the Agent finds are necessary to complete the application;

(D) If the decision is made to waive the site evaluation, the fee will be transferred to the permit.

(d) The Agent may waive the pre-cover inspection for a system installed pursuant to this section, provided the system installer submits the following information to the Agent at the time construction of the system is complete:

(A) A detailed and accurate as-built plan of the constructed system; and

(B) A list of all material used in the construction of the system; and

(C) A written certification (on a form acceptable to the Department) that the construction was in accordance with the permit and rules of the Commission.

(e) The conditions for OAR 340-71-400(7) shall be set forth in an addendum to the memorandum of agreement (contract) between the County and the Department.

Stat. Author.: ORS 183.335, 454.625, 468.020, 468B.010 and 468B.020.

Stat. Impl.: ORS 454.610, 454.615

### **340-71-460**

#### **Moratorium Areas**

(1) Whenever the Commission finds that construction of subsurface or alternative sewage disposal systems should be limited or prohibited in an area, it shall issue an order limiting or prohibiting such construction.

(2) The order shall be issued only after public hearing for which more than thirty (30) days' notice is given.

(3) The order shall be a rule of this division which contains a general description of the moratorium area. A more detailed description of the area, if needed, shall be an appendix to these rules.

(4) No permit or site evaluation report shall be issued for construction of a new or expanded system which would violate any order of the Commission issued pursuant to ORS 454.685.

(5) **Criteria For Establishing Moratoriums:** In issuing an order under this section the Commission shall consider the factors contained in ORS 454.685(2).

Stat. Author.: ORS 183.335, 454.625, 468.020, 468B.010 and 468B.020.

Stat. Impl.: ORS 454.685

**ATTACHMENT C**

**JUDGE THOMAS COFFIN'S ORDER**

FILED

96 JUL 16 PM 3:54

CLERK, U.S. DISTRICT COURT  
DISTRICT OF OREGON  
EUGENE, OREGON

BY W

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF OREGON

ROBERT L. MERZ and SHIRLEY M. )  
MERZ, husband and wife; )  
VINCENT M. HOWARD, JR.; GORDON )  
BRIAN HOWARD; MARCIA LEE SMITH; )  
RICHARD G. SARGENT; RUBY )  
BROEKER; KAREN L. ANDERSON; )  
AARON U. JONES; ERLING G. OMLID; )  
LLOYD F. OMLID, and ELLIS L. )  
RACKLEFF, )

Plaintiffs, )

v. )

HECETA WATER DISTRICT, an )  
Oregon municipal corporation; )  
STATE OF OREGON, by and through )  
its Environmental Quality )  
Commission; FRED HANSON, )  
WILLIAM YOUNG and LANGDON MARSH )  
in their official capacities as )  
directors of the Department of )  
Environmental Quality; WILLIAM )  
P. HUTCHISON, JR., DR. EMERY N. )  
CASTLE, WILLIAM W. WESSINGER, )  
HENRY C. LORENZEN, CAROL A. )  
WHIPPLE, TONY VAN VLIET, and )  
LINDA McMAHAN in their official )  
capacities as commissioners of )  
the Environmental Quality )  
Commission; RICHARD NICHOLS, )  
BARBARA BURTON, LYDIA TAYLOR, )  
and GARY MESSER in their )  
official capacities at the )  
Department of Environmental )  
Quality; WILLIAM B. FINLEY; )  
LARRY STONELAKE; ART KONING; )  
BOB SLEEPER; STEVE OLIENYK; )  
and MICHAEL KEATING, )

Defendants. )

Civil No. --

ORDER

COFFIN, Magistrate Judge:

This lawsuit emanates from moratoriums on development in the Clear Lake Watershed. Plaintiffs are lot owners and parcel owners in the Watershed, and seek damages related to the loss of the use of their property during the period that the bans on development have been in effect. Plaintiffs and defendants have each filed motions for summary judgment. The court rules as follows as to the motions presented by plaintiffs and defendant State of Oregon:

1) The Environmental Quality Commission (EQC) is a commission appointed by the Governor of the State of Oregon to establish policies for the Department of Environmental Quality (DEQ). It has the authority to regulate water quality and issues regarding on-site waste disposal within the boundaries of defendant Heceta Water District, and has adopted regulations regulating water-quality and on-site waste disposal regarding the Clear Lake Watershed.

2) On April 7, 1983, EQC established a moratorium [OAR 340-71-460(6)(f), or the "1983 EQC Moratorium"] on the issuance of sewage construction installation permits or approved site evaluation reports for all properties within the Watershed for the purpose of protecting the water quality of Clear Lake. By its terms, the moratorium expired on July 1, 1985.

3) DEQ continued to enforce the 1983 moratorium after its expiration date.

4) On December 14, 1990, EQC adopted another moratorium on on-site sewage systems within the Watershed, which again had the effect of prohibiting development within the Watershed [OAR 340-41-270, or the "1990 EQC Moratorium"] for an indefinite period.

5) The enforcement of the "1983 EQC Moratorium" by DEQ between July 1, 1985 and December 14, 1990 was arbitrary and capricious and, as such, a violation of plaintiffs' due process rights, in that the moratorium had expired on July 1, 1985. Plaintiffs are entitled to prevail on their § 1983 claims pertaining to this issue. As plaintiffs would each have been entitled to septic permits during this time period, DEQ is hereby ordered to issue the plaintiffs in this action septic permits, providing their lots otherwise qualify for such.

6) The "1990 EQC Moratorium" is a valid exercise of authority by EQC, insofar as the regulation represents a temporary moratorium on development while efforts were to be made to implement permanent protection for the quality of water of Clear Lake. At some point, however, a lengthy moratorium or a moratorium that is indefinite in duration operates as a de facto takings of the property affected, and such takings mandate compensation for the owners of the property subject to the moratorium. Because the EQC and DEQ do not have eminent domain powers, it is the ruling of this court that should the "1990 EQC Moratorium" not be repealed as of October 15, 1996, it shall be invalid and of no force and effect. The continued enforcement of the moratorium thereafter will constitute a takings by EQC and DEQ of all properties within the Watershed affected thereby, for which damages will have to be paid.

So ORDERED.

DATED this 16<sup>th</sup> day of July, 1996.

  
THOMAS M. COFFIN  
United States Magistrate Judge



**ATTACHMENT D**

**STATEMENT OF NEED AND EMERGENCY JUSTIFICATION**

**STATEMENT OF NEED AND JUSTIFICATION**  
Before the Environmental Quality Commission

|   |   |                            |
|---|---|----------------------------|
| In the matter of amendment of Oregon Administrative | ) | Statutory Authority,       |
| Rules 340-41-270, 340-71-400 and 340-71-460         | ) | Statement of Need,         |
|   | ) | Principal Documents Relied |
|   | ) | Upon and Statement of      |
|   | ) | Justification              |

1. **Citation of statutory authority:** ORS 183.335, 454.625 and 468.020
  
2. **Need for the rules:** Since 1983, the Department has maintained a construction moratorium on new on-site systems in the Clear Lake watershed, north of Florence, Oregon. The Heceta Water District draws its water from the lake and sells drinking water to Florence, along with other consumers. The moratorium was imposed to prevent the growth of algae in the lake. In 1989, the Department and Heceta Water District were sued by several affected property owners. Settlement discussions occurred in July 1996 and an agreement was reached by the parties. One of the elements of this agreement was the lifting of the moratorium.
  
3. **Documents relied upon:** Settlement Agreement dated July 12, 1996; Order by Thomas H. Coffin dated July 16, 1996.
  
4. **Justification of temporary rules:** As stated above, the lifting of the moratorium is one element of the settlement agreement reached by the parties to the litigation. Furthermore, Judge Coffin, in his order dated July 16, 1996, concluded that if the moratorium is not lifted prior to October 15, 1996, the moratorium will be invalid. If the moratorium is still in place at that time, the moratorium will constitute a taking by the Department and damages will be due to the affected property owners. This time limitation does not allow the Department to conduct permanent rulemaking, but the Department will do so prior to the expiration of the temporary rule.
  
5. **Housing Cost Impact Statement:** The Department estimates that this rulemaking will have minimal effect, if any, on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling on that parcel. The rulemaking affects a very limited area and allows a dwelling to be constructed where it was not previously available. The plaintiffs to the lawsuit will not be required to pay for the site evaluation that is required prior to construction.

9/26/96

\_\_\_\_\_  
Date

*Largan Marsh*

\_\_\_\_\_  
Signature

**ATTACHMENT E**

**DISCUSSION OF DIVISION 71 RULE REVISIONS**

State of Oregon  
Department of Environmental Quality

Memorandum

Date: July 30, 1996

To: Environmental Quality Commission

From: Barbara Burton

Subject: Discussion of Proposed Changes in On-Site Rules (Division 71)

The moratorium for new on-site systems in the Clear Lake watershed appears both in Division 41 (Mid-Coast Basin) as part of the TMDL for Clear and Collard Lakes, and in the on-site rules (Division 71). OAR 340-71-460 is the rule placing a moratorium for new on-site systems in the Clear Lake watershed. OAR 340-71-400 is a special area rule that mentions Clear Lake and needs to be modified.

**OAR 340-71-460 - Lifting of the Moratorium**

This rule describes the criteria and procedures for establishing a new on-site system moratorium area, and gives direction as to what actions can occur within the moratorium area. OAR 340-71-460(6) lists the Clear Lake watershed as the only area in Oregon currently under a moratorium. On-site staff have requested that OAR 340-71-460 (1 - 5) be retained as guidance for future moratoriums, although there will no longer be any areas to which it applies if the Commission raises the Clear Lake moratorium.

**OAR 340-71-400 - Modification of North Florence Dunal Aquifer Area Geographical Rule**

OAR 340-71-400 lists several areas including the North Florence Dunal Aquifer Area which are subject to special considerations. The North Florence Dunal Aquifer area includes the Clear Lake watershed and other areas. OAR 340-71-400(2) allows smaller lot sizes than otherwise allowed for on-site systems within the area but outside the Clear Lake watershed. The increased density was believed to be allowable without unacceptable environmental impacts.

In describing the Clear Lake watershed area, OAR 340-71-400(2) references OAR 340-71-460(6). If the Commission lifts the moratorium in the Clear Lake watershed, and deletes OAR 340-71-460(6), then OAR 340-71-400(2) needs to be amended to include a "metes and bounds" description of the Clear Lake watershed. Otherwise, the Clear Lake watershed could be developed at increased density which would not be desirable because of the phosphorous discharges also associated with septic tanks.

This area rule is not directly related to the moratorium in the Clear Lake watershed. The area rule was adopted in 1983 and is based on total nitrogen loading to groundwater. The rule reflects study results indicating additional development could be allowed without nitrate levels exceeding 5 mg/L (compared to the drinking water standard for nitrate of 10 mg/L). The moratorium in the Clear Lake watershed, on the other hand, was intended to protect surface waters by limiting phosphorous. Phosphorous is not usually a pollutant of concern in groundwater, unless the groundwater discharges to surface waters such as occurs in Clear and Collard Lakes.

Prepared Statement  
at Environmental Quality Commission Meeting  
at Astoria, Oregon, October 11, 1996

by Walter H. Drew  
06103 View Road, P.O. Box 217, Florence, OR 97439-0008  
Phone: (541) 997-6186, Fax: (541) 997-1113, E-mail: wdrew@presys.com

I stand by my prepared statement to the Commission's Public Forum on September 27, 1996, in which I recommended that the Commission leave the current Clear Lake Watershed moratorium intact and appeal Judge Coffin's July 16 order invalidating the moratorium if not repealed by October 15.

However, I would like to extend that statement as follows.

The presentation by the Department of Environmental Quality argues that the Commission must lift the moratorium because that action "is necessary under the terms of the settlement agreement" reached between plaintiffs and the State of Oregon.

There may be no such settlement agreement.

On October 9, Mr. Dave Baker, Law Clerk to Judge Coffin, told me he did not know whether the proposed settlement agreement between plaintiffs and the State of Oregon had been signed. Also on October 9, Ms. Laura Brann, Deputy Clerk of the Court, after reviewing the record, told me no settlement agreement in the case (CV91817TC) had been entered into judgement.

Additionally, I understand that a recent vote by the Heceta Water District Board of Directors to approve a related settlement agreement with plaintiffs is likely to be challenged on procedural grounds.

Thank you.

Prepared Statement for the Public Forum  
of the Environmental Quality Commission Meeting  
at Portland, Oregon, September 27, 1996

by Walter H. Drew

06103 View Road, P.O. Box 217, Florence, OR 97439-0008

Phone: (541) 997-6186, Fax: (541) 997-1113, E-mail: wdrew@prcsys.com

I would like to speak about the Clear Lake Watershed, north of Florence, in connection with the coming October 11 meeting of the Commission. Both the executive session and Action Item J on that day concern the watershed.

The Department of Environmental Quality notice about that meeting which was posted on the Internet on September 17 says "...no comments can be presented by any party to either the Commission or the Department on these items at any time during this meeting." Therefore I am taking advantage of this Public Forum to comment in advance.

**The Main Issue: Should Administrative Convenience Override Environmental Protection?**

The driving motive behind the Department's recommendation to lift the Clear Lake moratorium is to avoid the cost of defense and possible defeat in *Merz, et al. v. Heceta Water District, et al.*, District Court Case No. CV91817TC, in which the Department, the Commission, and several individual members of this Commission are named as defendants.

The Department makes no assertion that lifting the moratorium would in any way serve its core mission, environmental protection. Indeed, the Department states that "There will likely be an adverse impact on both Collard Lake and Clear Lake over time if the moratorium is lifted..." and that "It is likely that some degradation of water quality will occur with the lifting of the moratorium and resulting additional development."

**This is a "Takings" Case Subject to Appeal.**

"Takings" law is still in process of development, both through court cases and legislation. An appeal to overturn Magistrate Judge Thomas Coffin's July 16 order invalidating the "1990 EQC Moratorium" if not repealed by October 15, 1996, is by no means certain to fail.

Since none of the parties has indicated an intent to appeal, I have asked Judge Coffin to let me intervene in the lawsuit for that purpose. It would be better for a party entitled to representation by the Department of Justice to appeal, but by default I am prepared to pursue an appeal on my own.

I have lived in the watershed and owned land there for twenty years and would like to see its environmental protection continued.

**Recommendation to Commission:**

Leave the current moratorium intact and appeal Judge Coffin's order.

# Fax Cover Page

**Date:** September 25, 1996

**To:** Kathleen  
Office of Director, DEQ

**Fax Number-** 1-503-229-5850

**From:** Walter H. Drew

**Phone Number-** (541) 997-6186

**Fax Number-** (541) 997-1113

**E-mail-** wdrew@presys.com

**No. of pages (including cover page) - 2**

**Message:**

Statement to be presented, courtesy of your assistance in my absence, at Public Forum of EQC session on at Portland, Oregon, September 27, 1996.

With appreciation,

Walter H. Drew  
06103 View Road, P.O. Box 217  
Florence, OR 97439

Please call if you experience any transmission problems.



This agenda item was postponed until the November 14-15, 1996 EQC meeting.

# CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS PROGRAM



**Donna C. Shandle**  
**Project Manager for Chemical**  
**Stockpile Emergency Preparedness**

EOC 10-11-94  
"L"



CHEMICAL STOCKPILE

EMERGENCY

CONVERSION

DESTRUCTION



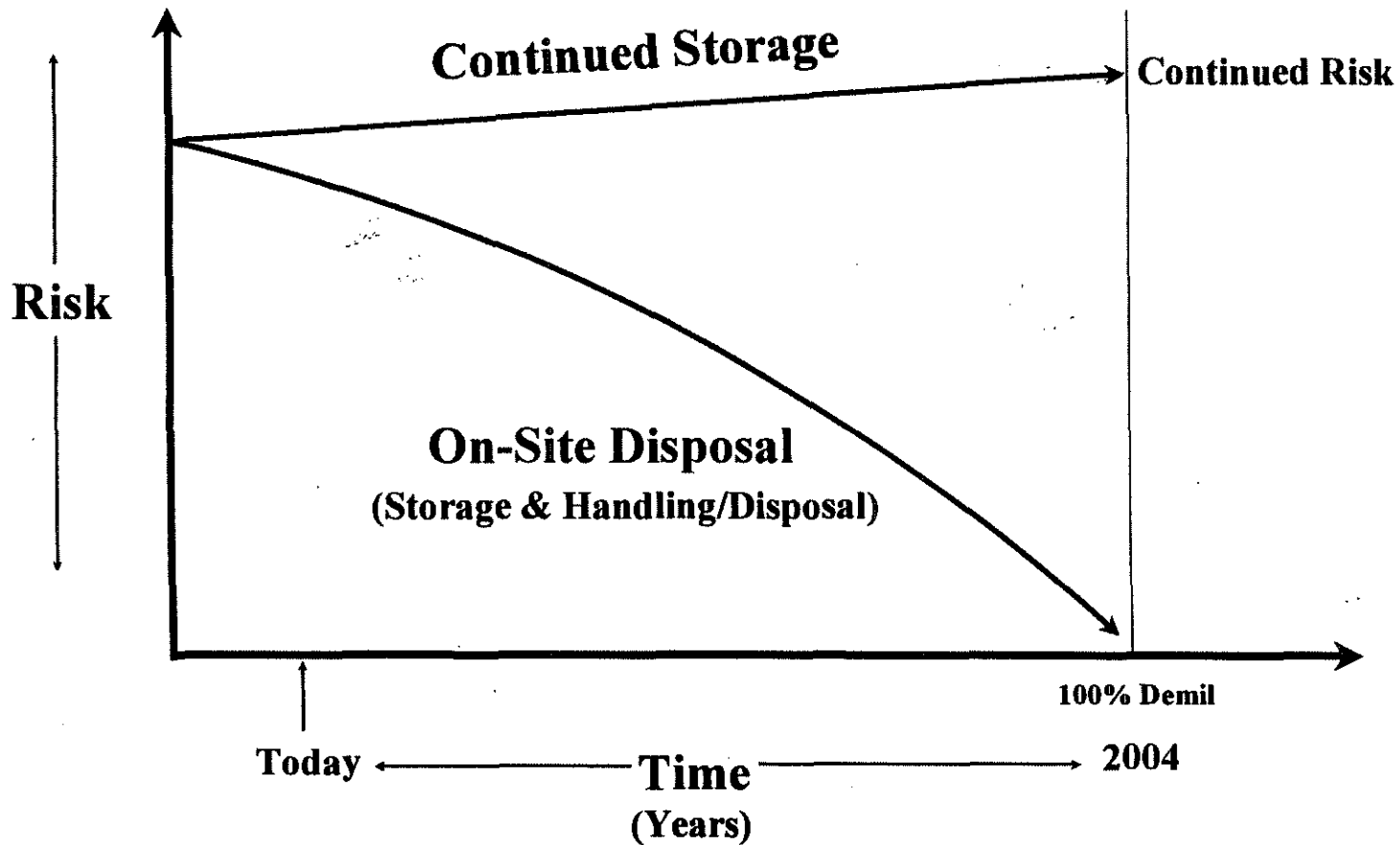
# NATIONAL OBJECTIVE

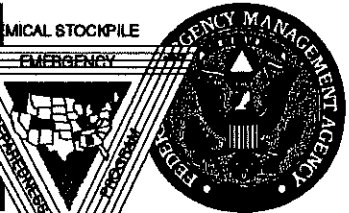
**"The United States will lead the charge to extend indefinitely the Nuclear Non-Proliferation Treaty, to enact a Comprehensive Nuclear Test Ban, and to *ELIMINATE CHEMICAL WEAPONS*"**

**President Clinton  
State of the Union Address  
24 January 1995**

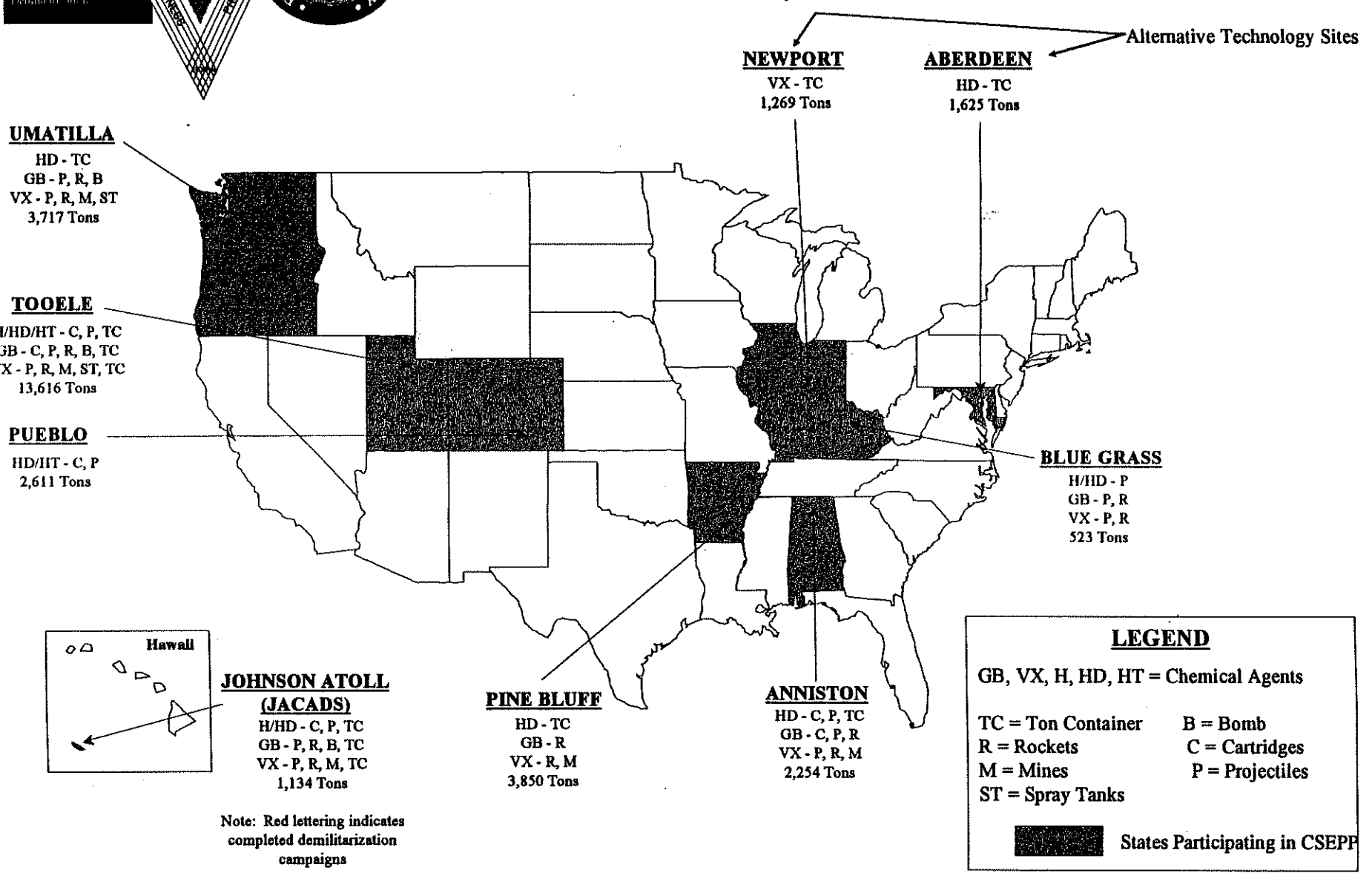


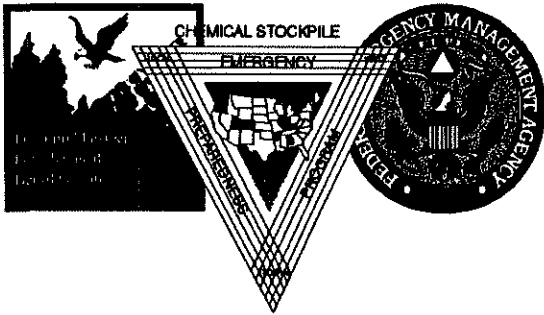
# COMPARATIVE RISK STORAGE vs DISPOSAL





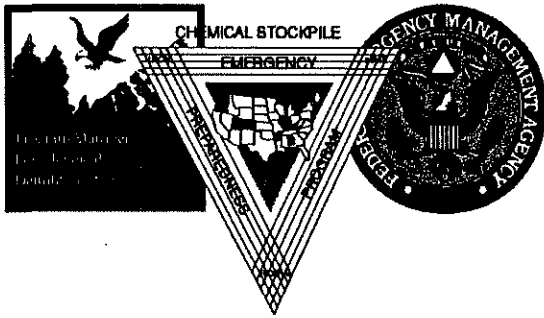
# NATIONAL CHEMICAL STOCKPILE DISTRIBUTION by STORAGE LOCATION





## PURPOSE of the CSEPP

- The purpose of the CSEPP is to protect the health and safety of the public by enhancing preparedness on the part of the installations and nearby communities.
- Realization of this purpose depends upon the cooperative effort of Federal, state, and local communities.



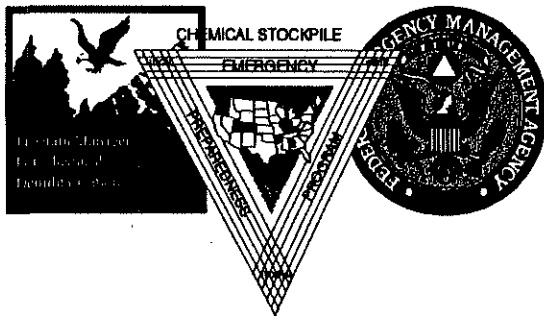
# CSEPP FINANCIAL SUPPORT

## PURPOSE:

ENHANCE emergency management capabilities of the States, local communities, and eight chemical weapons storage locations to enable response to site specific incidents related to storage of chemical weapons stockpiles.

## OBJECTIVE:

Funding augments existing (pre-CSEPP) emergency preparedness capabilities with emphasis on integration of previously funded Federal - State - local infrastructure and resources.



# CONGRESSIONAL DIRECTION

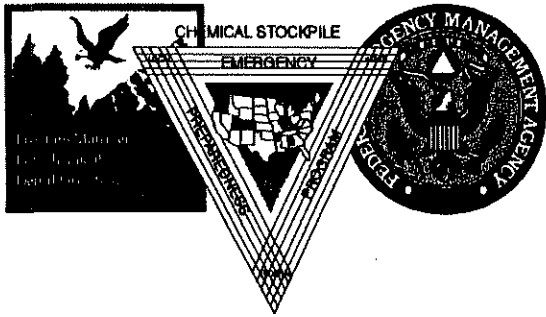
**Public Law 99-145:** The Secretary of Defense ". . . shall provide for - (A) maximum protection for the environment , the general public, and the personnel who are involved in the destruction of lethal chemical agents and munitions . . . ." (November 1985)

**Public Law 101-165:** The Secretary of Defense "may only delegate responsibility for the program planning, policy, budget, management execution and general oversight of the destruction of chemical agents and munitions and the retrograde movement of chemical agents to the Secretary of the Army . . . ." (November 1989)

**Public Law 101-510:** The Secretary of Defense "may make grants to State and local governments (either directly or through the Federal Emergency Management Agency) to assist those governments in carrying out functions related to emergency preparedness . . . ." (November 1990)

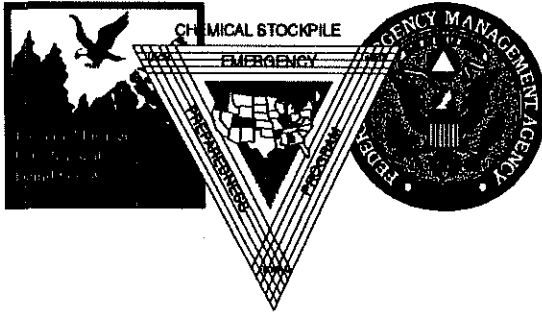
**Public Law 102-396:** Congress has directed the Army to "assume the lead in all affairs of the Chemical Stockpile Emergency Preparedness Program. With the transition of the CSEPP program to the execution phase, the goal is to streamline procedures, be responsive to the needs of the state and local jurisdictions and to align the local and State budgeting process more closely with the Army's budgeting time lines." (October 1992)





# CONGRESSIONAL DIRECTION (Continued)

**Department of Defense Appropriations Act, 1994: ". . . directs the Army to (1) assume full program management responsibility for the execution of the CSEPP; (2) receive, review, and submit all budget requests for CSEPP directly from the States involved; (3) tighten program controls and ensure timely improvement of local capabilities to respond to a chemical emergency; (4) streamline the current CSEPP management structure by doing away with the current steering Committee approach to managing the program and establishing a single accountable focal point, within Department of the Army, to implement the program and draw on the expertise of other organizations as needed; (5) reevaluate FEMA's role in CSEPP and provide by July 1, 1994, a detailed report to the Defense Committees outlining FEMA's new role as a subordinate agency within the CSEPP; (6) establish early target dates for providing critical guidance and equipment needed by the local communities; and (7) establish strict financial controls to ensure accountability over all program funds." (October 1993)**



# CSEPP ORGANIZATIONS and ROLES

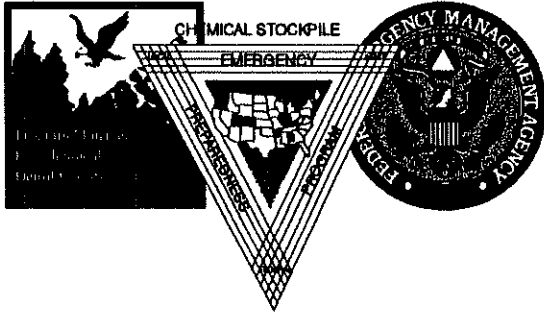
## FEDERAL

### ARMY

- Determines overall program direction and policy.
- Source of program funding.
- Primary source of technical expertise with chemical agents.

### FEMA

- Primary source of emergency preparedness expertise.
- Distributes DA funds to state/local governments via CCA process.
- Provides technical assistance to state/local governments on emergency preparedness: training, planning, exercising, and public information.
- Incorporates functional equivalency of existing systems.



# CSEPP ORGANIZATIONS and ROLES

## FEDERAL

### DHHS - CDC/NCEH

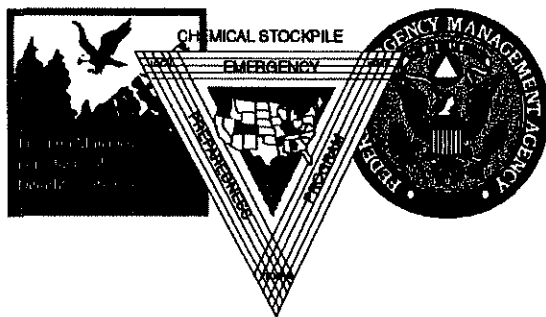
- Provides health related technical advice.
- Training for health professionals.
- Evaluation of medical readiness.

### EPA

- Provides technical advice and policy regarding relation between CSEPP and environmental response programs (CERCLA/SARA and RCRA).

### USDA

- Provides technical advice concerning protection of agricultural products.



# CSEPP ORGANIZATIONS and ROLES

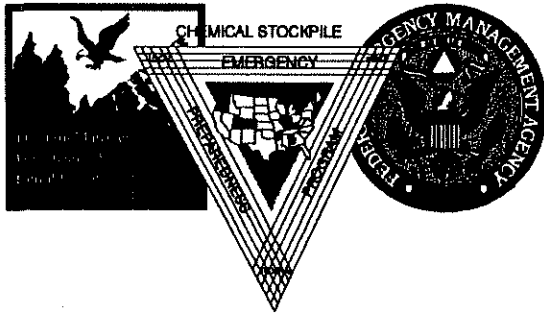
## STATE and LOCAL

### STATE

- Coordinates CCA process with FEMA.
- Planning: State-level plan and coordination of local plans.
- Training: Assesses state and local training needs.
- Exercises: CSEPP and SRF exercises for locals.
- Responds to support local government.

### LOCAL

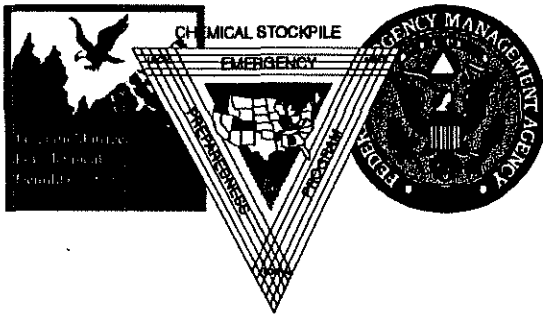
- Primary off-post responder.
- Planning: Produces county plan.
- Training: Trains first responders and other emergency staff.
- Exercises: Participates in CSEPP and SRF exercises.
- Program Management: Coordinates with installation on program planning, response procedures, training, public information, communications and data systems, and exercise efforts.



# CSEPP ORGANIZATIONS and ROLES

## ARMY INSTALLATIONS

- Maintain installation preparedness through planning, training, exercising, and procurement.
- Coordinate with state and local governments to:
  - Establish good working relationships
  - Ensure plans and procedures are consistent
  - Determine mutually agreed protocols for plan implementation (e.g. alert system activation)
  - Ensure compatibility in training, public information, communications, and data systems
  - Participate in joint exercises



# ARMY - FEMA RELATIONSHIP

## ON-POST

ARMY

Assists in developing emergency preparedness plans

ARMY

Assists in upgrading response capabilities

ARMY

Conducts Necessary Training

ARMY

Integration of emergency preparedness capabilities

## OFF-POST

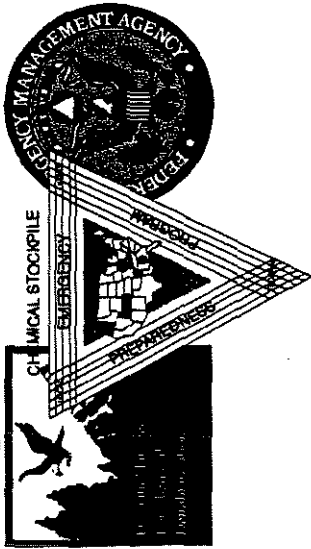
FEMA

FEMA

FEMA

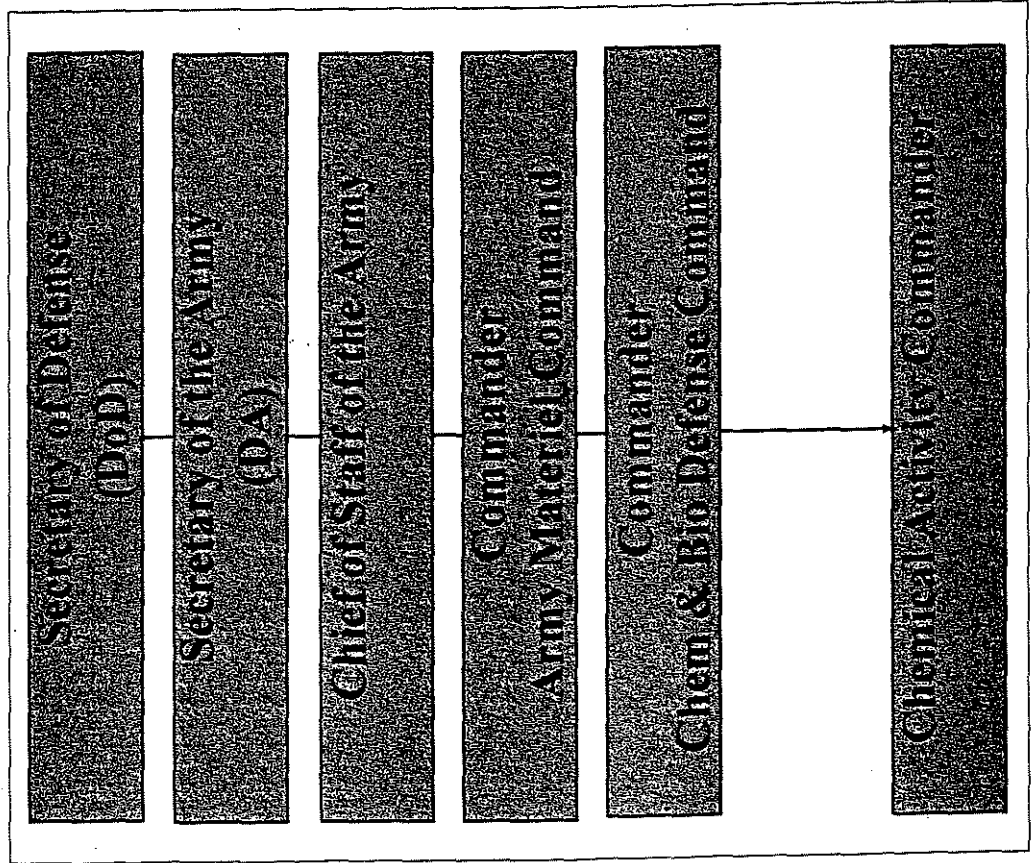
ARMY

**By Public Law 99-145, the Army is Accountable for the Execution of the CSEPP**

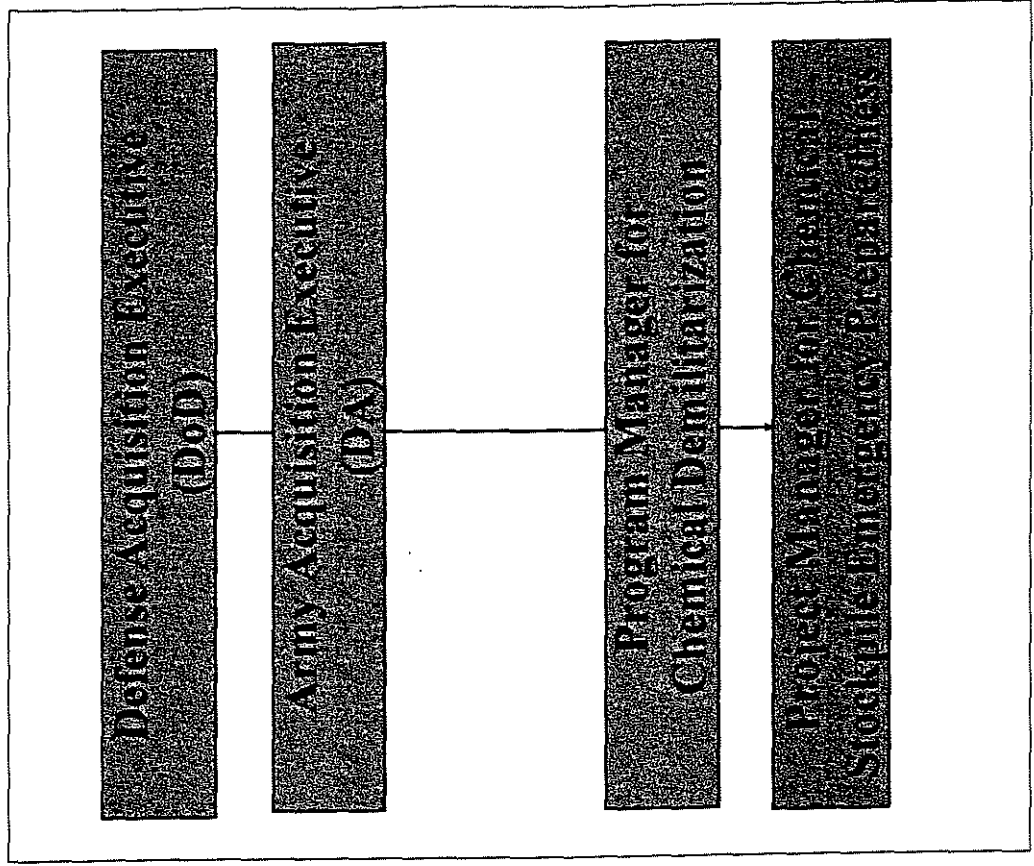


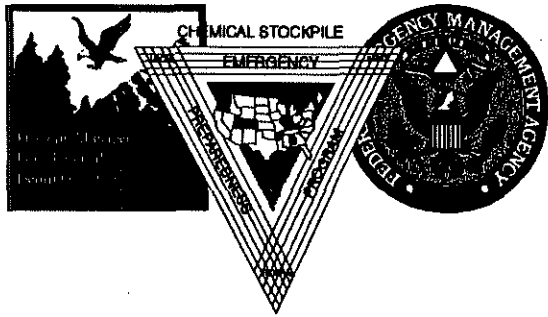
# DOD LINES of AUTHORITY

"Materiel Command"

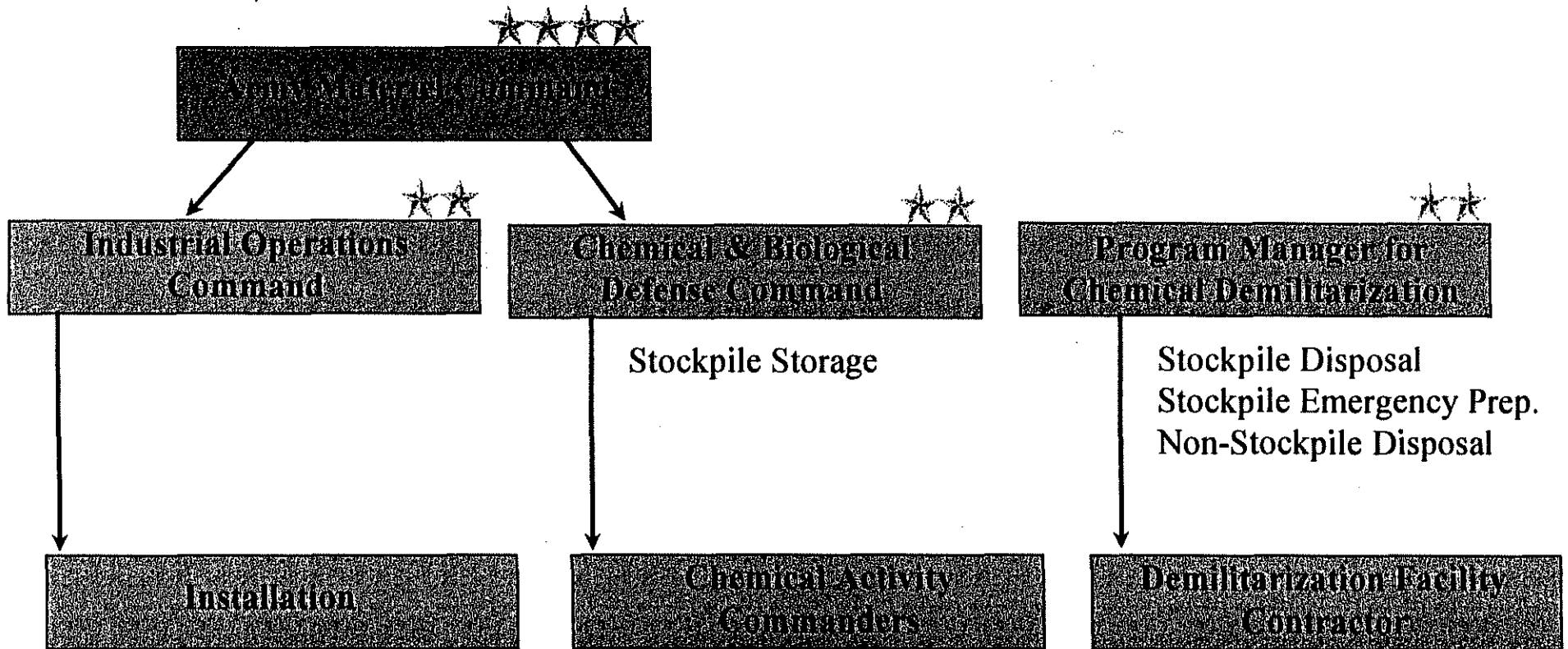


"Acquisition Organization"

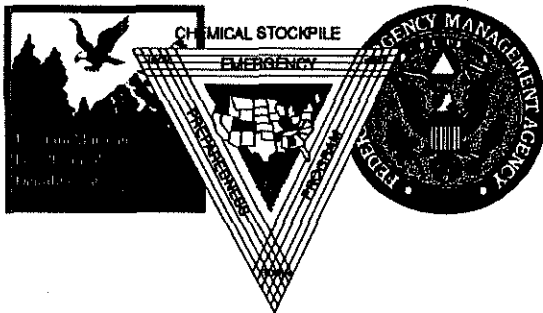




# ARMY RESPONSIBILITIES







# ORGANIZATION

**Hon. Paul G. Kaminski**  
Defense Acquisition Executive

**Department of Defense**

**Hon. Gilbert F. Decker**  
Army Acquisition Executive

**Department of the Army**

**MG Robert D. Orton**  
Program Manager for Chemical  
Demilitarization

**Edgewood Area,  
Aberdeen Proving Ground,  
Maryland**

**Project  
Manager for  
CSD**

**Product  
Manager for  
CTR**

**Project  
Manager for  
CSEP**

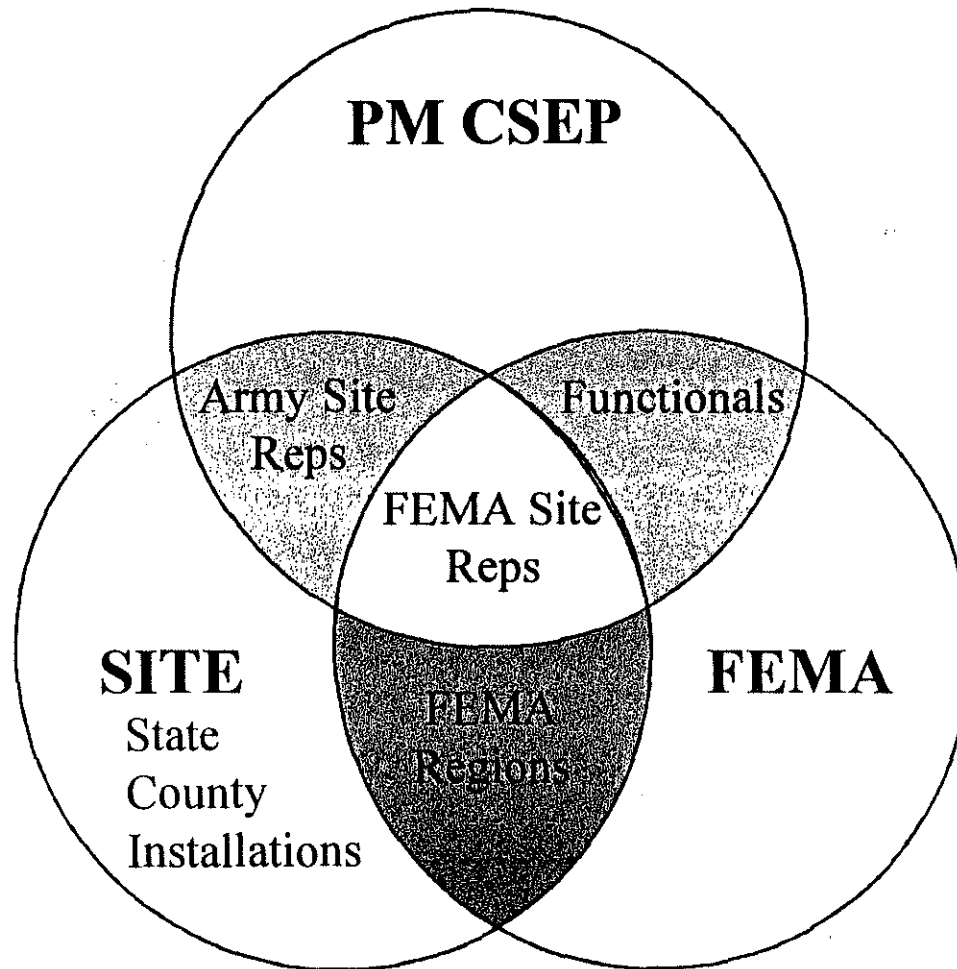
**Product  
Manager for  
ATA**

**Project  
Manager for  
NSCM**

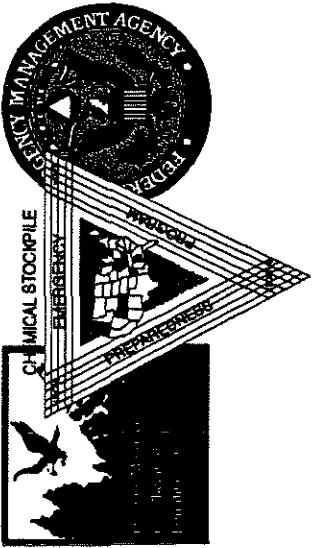
Mrs. Shandle



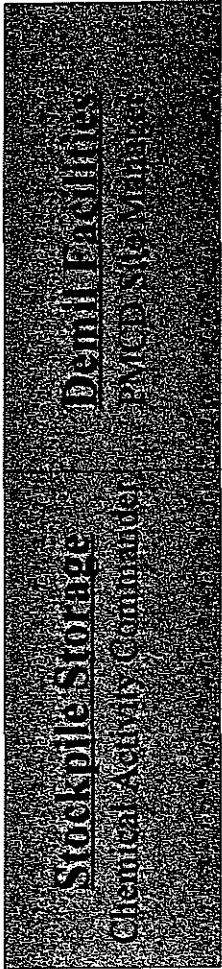
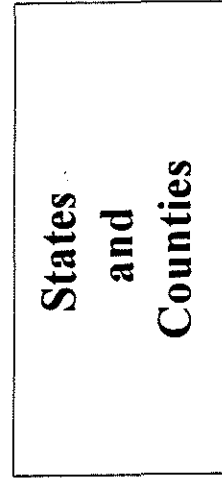
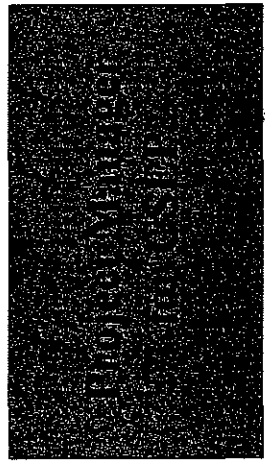
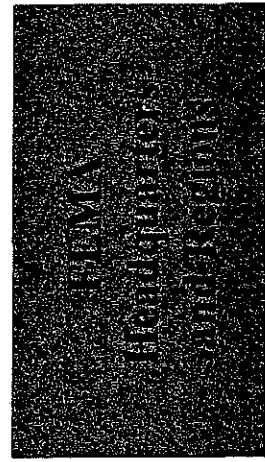
# CSEPP TEAM

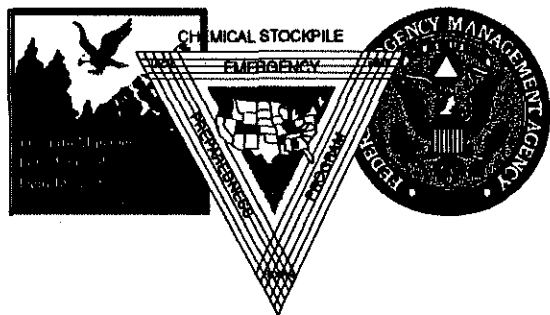


**Integrated Partnership**



# CSEPP PARTNERSHIP



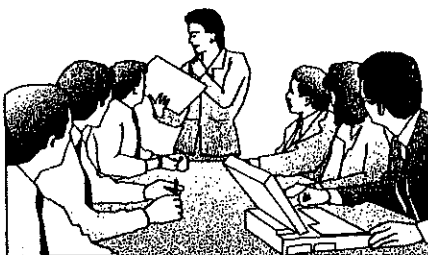


# CSEPP MANAGEMENT

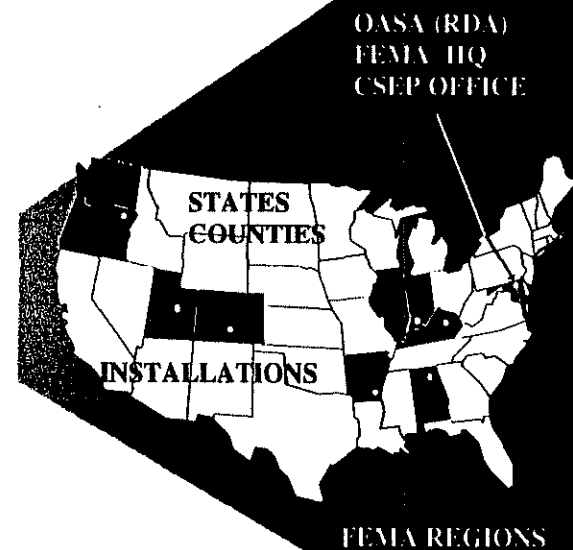
**WHAT**



**HOW**

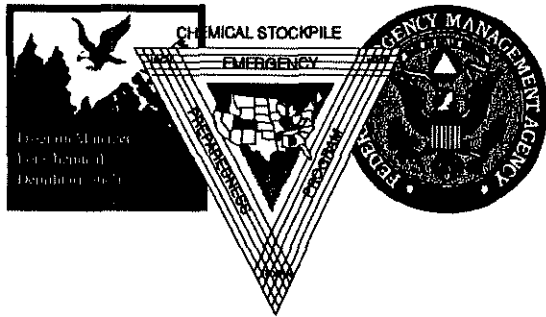


**WHO**

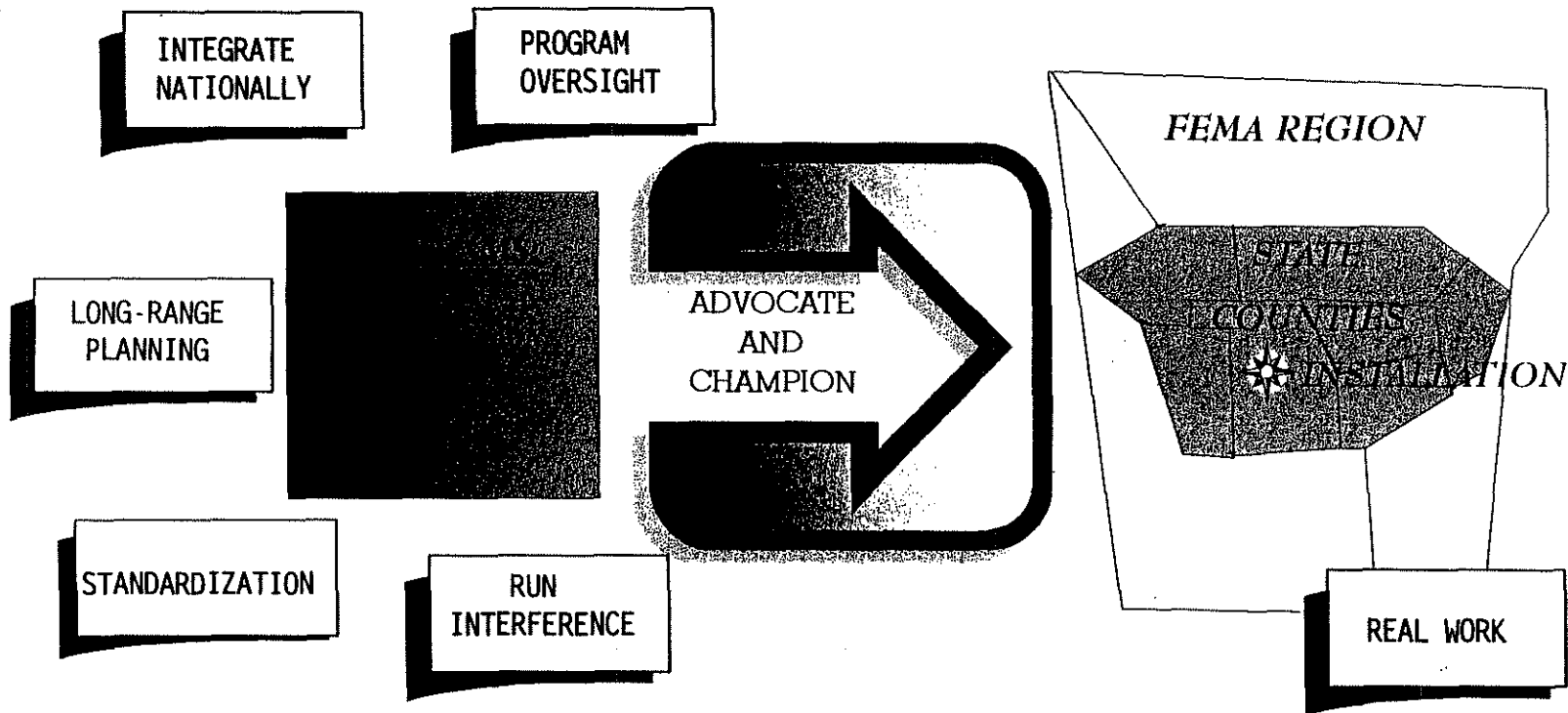


**ONE INTEGRATED EFFORT**

**COMMUNITIES ARE THE KEY**

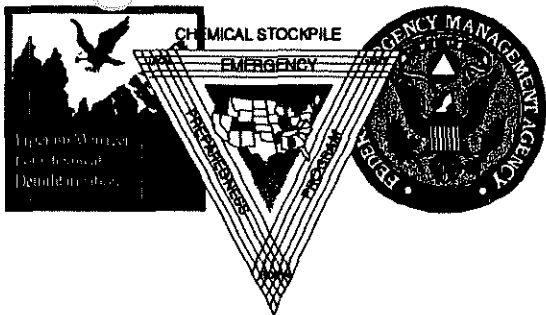


# CSEP OFFICE / OFF-POST RELATIONSHIP



**BUILD A PARTNERSHIP**

FOCUS THE SITES ON THE IMPORTANT ISSUES



# STORAGE and DEMIL ACCIDENT CONSEQUENCES

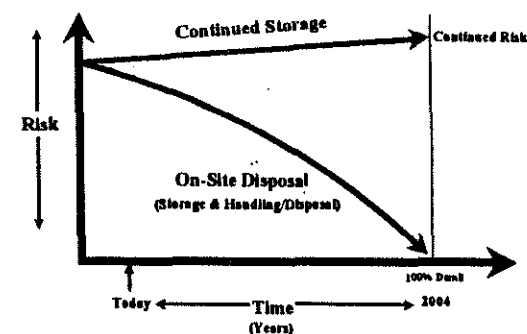
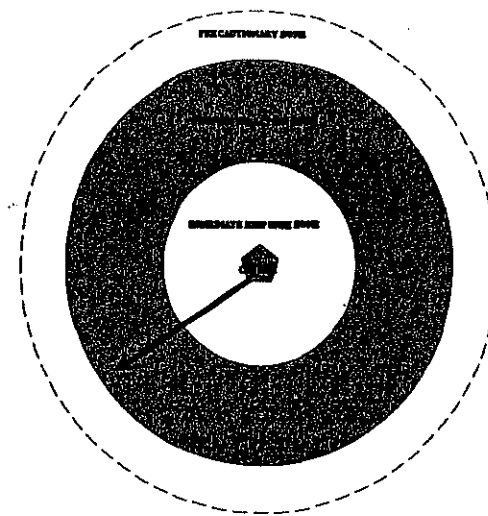
▶ **All consequences of demilitarization facility accidents are already addressed through stockpile storage accident planning:**

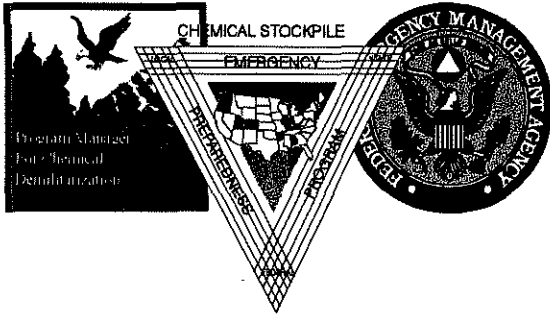
- Does agent leave the installation? How far? What direction?
- Planning zones, notification, alert & warning, protective actions, medical treatment, response coordination, and community support operations are the same .

▶ **Risk of demilitarization accident is less than risk of continued storage.**

▶ **The stockpile is there now.**

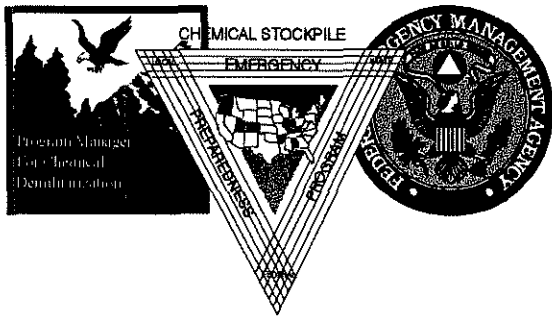
- Associated emergency plans in place.
- Only minor modifications needed to address demilitarization facility (e.g., identify facility location as potential accident source).





## PURPOSE of the CSEPP

- The purpose of the CSEPP is to protect the health and safety of the public by enhancing preparedness on the part of the installations and nearby communities.
- Realization of this purpose depends upon the cooperative effort of Federal, state, and local communities.



# CSEPP FINANCIAL SUPPORT

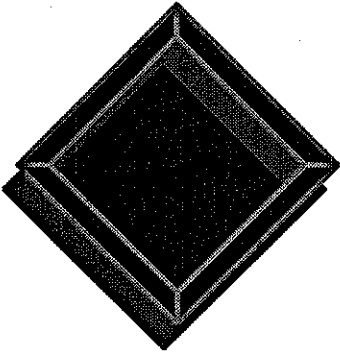
## PURPOSE:

ENHANCE emergency management capabilities of the States, local communities, and eight chemical weapons storage locations to enable response to site specific incidents related to storage of chemical weapons stockpiles.

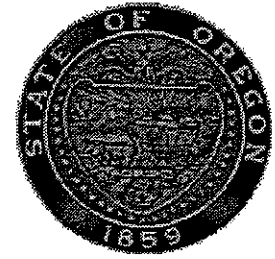
## OBJECTIVE:

Funding augments existing (other hazard) emergency preparedness capabilities with emphasis on integrating Federal, State, and local infrastructure and resources.





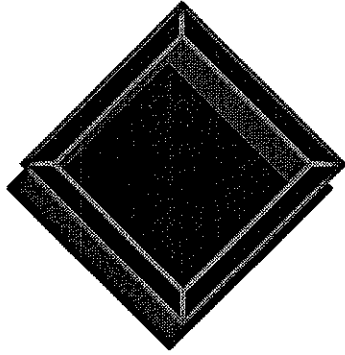
# STATE OF OREGON BRIEFING



FAC  
10-11-96  
"L"

**Presented to the  
Environmental Quality  
Commission  
October 11, 1996  
Astoria, Oregon**

**OFFICE OF EMERGENCY MANAGEMENT**

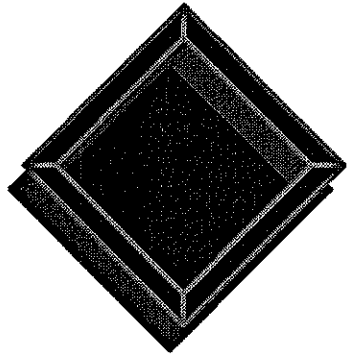


# Legislative Mandate



## MISSION:

**Execute the Governor's responsibilities to maintain an Emergency Services System as defined and authorized in ORS 401, by planning, preparing, and providing for the prevention, mitigation, and/or management of emergencies or disasters that present a threat to the lives and property of the citizens of, and visitors to the State of Oregon.**

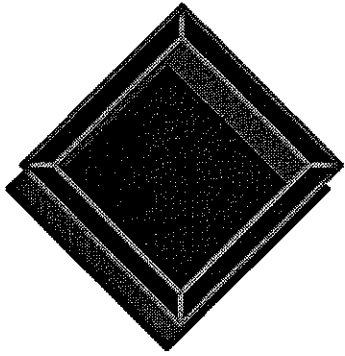


# CSEPP MISSION



**Enhance emergency preparedness in areas surrounding the Umatilla Chemical Depot through planning, preparedness, and mitigating the affects of a release of chemical agent from the Depot.**

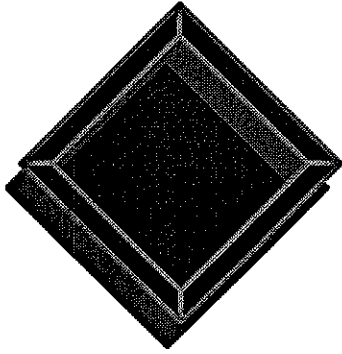
- **Coordination Among Agencies**
- **Alert & Notification System & Procedures**
- **Preplanned Protective Actions**
- **Recovery Processes**



## **OEM CSEPP ROLE LEAD STATE AGENCY**



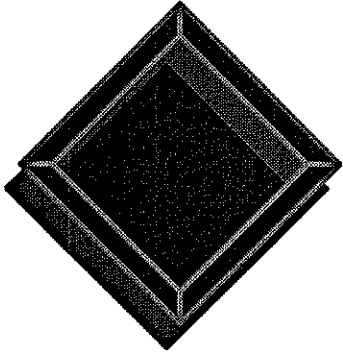
- ❖ **OEM was designated the Lead State Agency for CSEPP through State "Clearing House" process in 1989.**
- ❖ **The Governor reaffirmed OEM as Lead State Agency in July 1996.**
- ❖ **OEM is responsible and accountable for coordination among agencies, including but not limited to;**
  - **County and local governments**
  - **Oregon Health Division**
  - **Oregon Department of Environmental Quality**
  - **Other State of Oregon and Washington agencies**
  - **Volunteer and Private Non-Profit organizations**



## **CSEPP FUNDS AUTHORIZED**



| <b>YEAR</b>  | <b>AMOUNT</b>       |
|--------------|---------------------|
| <b>FY 89</b> | <b>\$ 100,000</b>   |
| <b>FY 90</b> | <b>\$ 1,189,972</b> |
| <b>FY 91</b> | <b>\$ 830,000</b>   |
| <b>FY 92</b> | <b>\$ 576,809</b>   |
| <b>FY 93</b> | <b>\$ 8,140,843</b> |
| <b>FY 94</b> | <b>\$ 7,809,226</b> |
| <b>FY 95</b> | <b>\$ 3,921,359</b> |
| <b>FY 96</b> | <b>\$ 2,734,758</b> |
| <b>TOTAL</b> | <b>\$25,302,973</b> |



# OVERARCHING INTEGRATED PROCESS TEAM MEMBERSHIP



**OREGON/WASHINGTON  
Lead Agencies [EM]**

**Morrow County  
Board of Commissioners**

**Umatilla County  
Board of Commissioners**

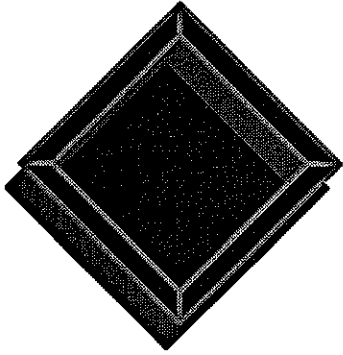
**Umatilla Chemical Depot  
Commander**

**Benton County  
Board of Commissioners**

**FEMA Region X  
Director**

**Army-CSEPP PM**

**FEMA-CSEPP PM**



# OVERARCHING [OIPT] INTEGRATED PROCESS OREGON MEMBERSHIP

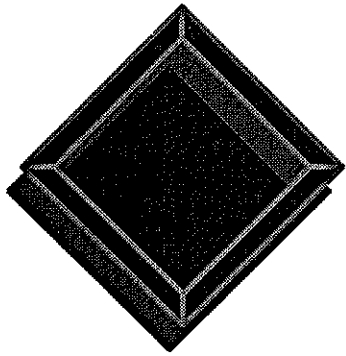


**Oregon Emergency Management  
Director**

**Morrow County  
Board of Commissioners**

**Umatilla County  
Board of Commissioners**

# WORKING [WIPT] INTEGRATED PROCESS TEAM STRUCTURE



OREGON  
WASHINGTON

Morrow County

Umatilla County

Umatilla Chemical Depot

Benton County

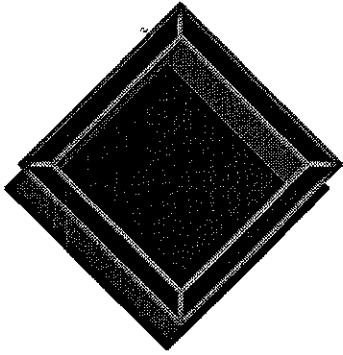
FEMA Region X

FEMA HQ

Army

Administrative Lead and  
Technical Support Groups





# WORKING INTEGRATED PROCESS TEAM



Administrative Lead - Membership

Oregon/Washington - Lead Agencies  
Emergency Management

Morrow County  
Emergency Management

Umatilla County  
Emergency Management

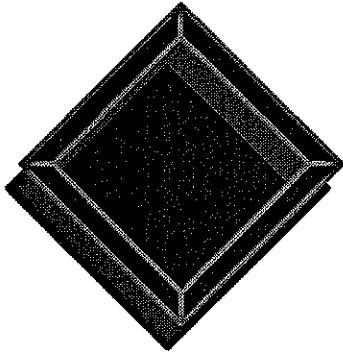
Umatilla Chemical Depot  
UMCA

Benton County  
Emergency Management

FEMA Region X &  
FEMA Site Team

Army  
Site Team

OFFICE OF EMERGENCY MANAGEMENT



**WORKING  
INTEGRATED PROCESS  
TEAM**  
Technical Support Membership



**Oregon/Washington  
State Agencies**  
[to be determined]

**Morrow County**  
(to be determined)

**Umatilla County**  
(to be determined)

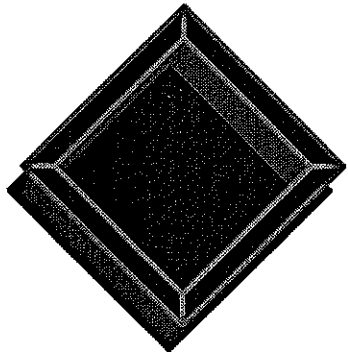
**Umatilla Chemical Depot**  
(to be determined)

**Benton County**  
(to be determined)

**FEMA Region X &  
FEMA Site Team**

**Army  
Site Team**

**Volunteer/Non-Profit  
Organizations**

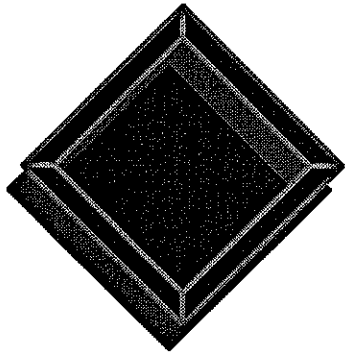


# Accomplishments



## ❖ What's been done?

- Updated State Support Plan
- Connect Counties to Counties to State via Upgrade to the State Police Microwave System
- Establish and Implement Integrated Process Team Concepts
- Transfer OEM CSEPP Staff to Eastern Oregon
- Procurement of Automation System/Network Hardware
- Conduct/Coordination of Exercises
- Conduct/Coordination of Training
- Public Education Initialtives

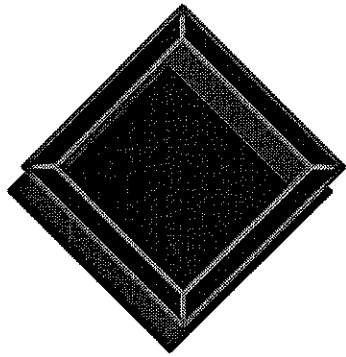


# In Progress



## ❖ Nearing Completion

- Integrated Alert & Warning System
- Procurement of Protective Equipment
- Installation of FEMIS Software

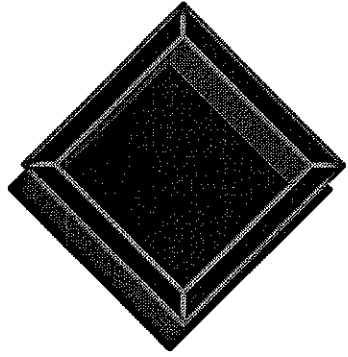


# In Progress



## ❖ Ongoing

- Automation/Comm System Training
- Automation/Comm System Maintenance
- Automation/Comm System Procedure Development
- Training & Exercise
- Community Outreach
- Annual/Long Range Budget Negotiations

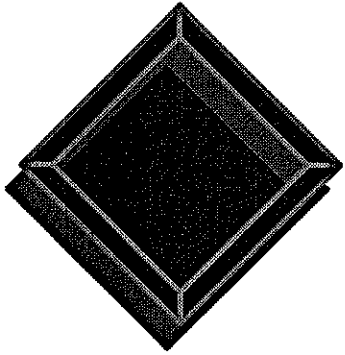


# Future Activities



## ❖ What is yet to be started?

- Tone Alert Radio Decision
- Regional and County Program Integration
- Long Term Maintenance Plan



# Are we ready??



**The State and counties can respond today with emergency resources currently in place. Enhancement of capabilities improves as equipment is received, procedures are developed, training is provided, systems are tested, and the public is informed. Capabilities of comprehensive system improvement are directly related to the coordinated efforts of all organizations involved.**

EQC  
10-11-96  
"M"

Timetable for 1996 Dissolved Gas Annual Report and 1997 Dissolved Gas Waiver Request to the Oregon Department of Environmental Quality

1. Letter requesting Annual Report participation from the NMFS Science Center and Fish Passage Center, September 9, 1996.
2. Draft input target November 15, 1996.
3. Draft Annual Report available for peer and public review.
4. Peer Review by the Integrated Scientific Advisory Board.
5. Final submittal to ODEQ January 15, 1996.
  - a. Annual Report
  - b. Waiver request letter



EQC  
10-11-96  
"M"

F/NW03

September 9, 1996

MEMORANDUM FOR: Distribution

FROM: Mark Schneider

SUBJECT: Annual Report to the Oregon Department of Environmental Quality as Stipulated in the 1996 Total Dissolved Gas Waiver

The Oregon Department of Environmental Quality (ODEQ) considered the National Marine Fisheries Service (NMFS) request for a waiver of the Oregon water quality standards regarding dissolved gas on April 12, 1996. The waiver was granted for the duration of the spill season but carried with it several stipulations. One of those stipulations was that NMFS provide an annual report to the ODEQ by January 15, 1997. A draft of the report is to be released for peer and public review no later than December 1, 1996.

The purpose of this letter is to request participation in the development of the report. Below are the stipulated components of the report, as described in the waiver (in quotes), with identification of the proposed writing assignments. The report is to contain:

- (a) "Statistical evaluation of the available PIT-tag data to determine week-by-week survival changes. Techniques should be used to detect differences between groups with small sample size or maximize the sample size to increase statistical reliability. The association between survival estimates and TDG, temperature, flow related effects, or other phenomena which could affect survivorship will be evaluated."

Suggested assignment - CZES/Seattle (Steve Smith).

- (b) "An empirical estimate of survival associated with spill."

Suggested assignment - Hydro Program/Portland (Gary Fredricks).

- (c) "Week-by-week estimates of the quantities of voluntary vs. involuntary spill. the factors causing the spill scenario shall be stated, i.e., hydraulic capacity, turbine outages, lack of power market, etc."

Suggested assignment - Fish Passage Center (FPC).

- (d) "Survival estimates of transported vs. untransported fish at collector projects."

Suggested assignment - CZES/Seattle (Steve Smith/Bill Muir).

- (e) "Survival and incidence of GBD data from net pens below Bonneville Dam. Care must be taken to avoid areas with excessive flow or elevation fluctuations or engineer around such problems. Care must be taken to avoid size and species differences within net pens to reduce losses from predation."

Suggested assignment - CZES (Earl Dawley).

- (f) "Incidence of GBD signs in adults and estimates of upstream spawning delays of returning salmonids from increased spill."

Suggested assignment - Hydro Program/Portland (Gary Fredricks)

- (g) "Incidence of GBD signs in resident fish species below Bonneville Dam."

Suggested assignment - CZES (Earl Dawley).

Clearly, there are some limitations on what can be developed to respond to this outline. The stipulations, and perhaps in particular, the above outline of the annual report calls for some discussions which are not attainable. In those cases, NMFS needs to identify and explain these limitations. For example, the report does not call for a report on the incidence of GBD in juveniles. Item (b) should be expanded to cover this but do so in a manner that demonstrates the shortcoming of the outline.

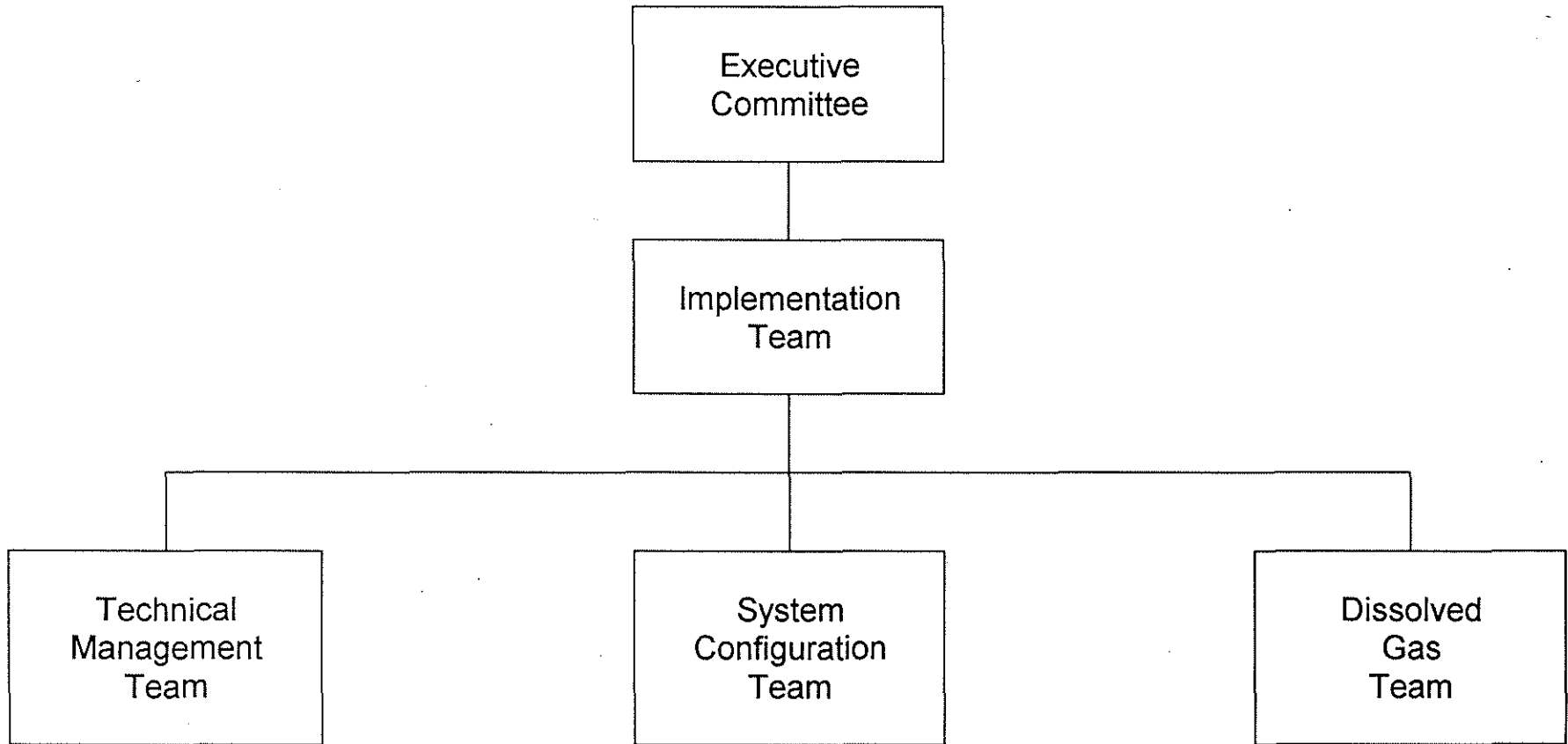
I am requesting that CZES and FPC commit to developing the assigned sections and transmit them to me by November 1, 1996. I will assemble the report for the required peer and public review. As a peer review I have already proposed the Independent Scientific Review Group to the Implementation Team. I believe the November date is necessary to comply with the final delivery to the ODEQ by January 15, 1997. Compliance is particularly important as we are trying to encourage Oregon to participate in the Dissolved Gas Team development and commitment to a long term Memorandum of Understanding to replace the annual requirement for the waiver process.

In mid-October I will need to address the ODEQ Commission at their monthly meeting. This was one of the other stipulations in the 1996 waiver. At that time I hope to be able to report that the annual report drafting is underway and will meet the Commission's expectations. If my proposed approach above causes concerns or is flawed in some way, please let me know at your earliest convenience. I would especially appreciate your suggested improvements.

Mark J. Schneider, Ph. D.  
Hydro Branch Chief

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# Committees Constituted Under the NMFS Biological Opinion



EQC  
10-11-96  
M..

## Executive Committee

### Purpose

This Committee is the senior policy body formed under NMFS and U.S. Fish and Wildlife Service biological opinions to oversee Snake River threatened and endangered salmon recovery.

It is the major dispute resolution committee.

### Membership

Membership of the Committee comprises the three sovereigns, namely:

#### Federal

National Marine Fisheries Service (Chair - Will Stelle)  
U.S. Fish and Wildlife Service  
Bonneville Power Administration  
U.S. Army Corps of Engineers

#### State

Oregon  
Idaho  
Washington  
Montana  
Northwest Power Planning Council

#### Tribes

Kootenai Tribe of Idaho  
Confederated Tribes of the Umatilla Indian Reservation  
Confederated Salish and Kootenai Tribes of the Flathead Reservation  
Shoshone-Bannock Tribes of Fort Hall  
Confederated Tribes of the Warm Springs Reservation  
Yakama Indian Nation

Shoshone-Paiute Tribes of Duck Valley reservation

Burns Paiute Tribe

Kalispel Tribe

Spokane Tribes of Indians

Nez Perce Tribe of Idaho

Coeur d'Alene Tribe of Idaho

Confederated Tribes of the Colville Reservation

## Implementation Team

### Purpose

This Committee is the senior managers body formed under NMFS and U.S. Fish and Wildlife Service biological opinions to oversee Snake River threatened and endangered salmon recovery.

The committee coordinates the input of state and tribal sovereigns into federal decisions on operating the federal hydropower system, and on matters related to hydropower operations contained in the Bonneville Budget Agreement.

This committee seeks to ensure the broadest possible technical and policy input into federal decisions regarding operation of the federal hydropower system and associated funding issues. It also seeks to reach a consensus among fish and wildlife managers on hydropower operations, and to ensure coordination between implementation of the biological opinions and other regional plans to restore Columbia River Basin anadromous fish.

### Membership

Membership of the Committee comprises the three sovereigns represented on the Executive Committee, and utilities, namely:

#### Federal

National Marine Fisheries Service (Chair - Donna Darm)  
U.S. Fish and Wildlife Service  
Bonneville Power Administration  
U.S. Army Corps of Engineers

#### State

Oregon  
Idaho  
Washington  
Montana  
Northwest Power Planning Council

## Tribes

Kootenai Tribe of Idaho

Confederated Tribes of the Umatilla Indian Reservation

Confederated Salish and Kootenai Tribes of the Flathead Reservation

Shoshone-Bannock Tribes of Fort Hall

Confederated Tribes of the Warm Springs Reservation

Yakama Indian Nation

Shoshone-Paiute Tribes of Duck Valley reservation

Burns Paiute Tribe

Kalispel Tribe

Spokane Tribes of Indians

Nez Perce Tribe of Idaho

Coeur d'Alene Tribe of Idaho

Confederated Tribes of the Colville Reservation

## Utilities

Idaho Power Council

Mid Columbia Public Utility Districts



# Technical Management Team

## Purpose

This Committee directs in-season operation of the hydropower projects to meet the requirements of the Biological Opinions. The work of the team is divided into three phases:

1. Pre-Season planning, development of a Water Management Plan;
2. In-Season management, management of both voluntary and involuntary spill; and
3. Post-Season review.

This team advises the U.S. Army Corps of Engineers on in-season flows, spill and fish migration timing. It undertakes in-season planning and evaluation of river operations.

The team recommends special operations for research and demonstration projects.

It evaluates the impacts of meeting flow objectives, and forecasts flows and spill based on runoff projections.

## Membership

### Federal

U.S. Army Corps of Engineers (Chair - Cindy Henriksen)  
National Marine Fisheries Service  
U.S. Fish and Wildlife Service  
Bureau of Reclamation  
Bonneville Power Administration

## State

Washington Department of Fish and Wildlife  
Oregon Department of Fish and Wildlife  
Idaho Department of Environmental Quality  
State of Montana

## Tribes

Kootenai Tribe of Idaho  
Confederated Tribes of the Umatilla Indian Reservation  
Confederated Salish and Kootenai Tribes of the Flathead Reservation  
Shoshone-Bannock Tribes of Fort Hall  
Confederated Tribes of the Warm Springs Reservation  
Yakama Indian Nation  
Shoshone-Paiute Tribes of Duck Valley reservation  
Burns Paiute Tribe  
Kalispel Tribe  
Spokane Tribes of Indians  
Nez Perce Tribe of Idaho  
Coeur d'Alene Tribe of Idaho  
Confederated Tribes of the Colville Reservation

## Meetings

Meetings are held once per week in-season, and a conference phone facility is available for dial-in. Interested parties are encouraged to attend either by phone or in person.

Disputes are elevated to the Implementation Team for resolution. The Implementation Team typically meets a few days after the Technical management Team, and addresses issues that have not be resolved in the Technical Management Team

# System Configuration Team

## Purpose

The primary purpose of this team is to address mainstem Columbia construction issues. Major issues include the use of barges, flippers at dams and fish bypass facilities. The U.S. Army Corps of Engineers gas abatement program focuses on this committee from a construction point of view.

The team discusses, reviews progress and makes recommendations concerning budget priorities and schedules for physical improvements to fish passage facilities and long term operational alternatives, including monitoring and evaluation.

The Team makes decisions relating to testing and evaluation of prototype fish passage facilities.

The Team advises the U.S. Army Corps of Engineers on long term planning of mainstem hydro project priorities, modifications and operations, including projects to abate dissolved gas levels.

The Team undertakes long term planning, prioritization and evaluation of project modifications.

## Membership

### Federal

National Marine Fisheries Service (Co-Chair - Bill Hevlin)  
U.S. Army Corps of Engineers  
U.S. Fish and Wildlife Service  
Bureau of Reclamation  
Bonneville Power Administration

## State

Northwest Power Planning Council (Co-Chair - Jim Ruff)  
Washington Department of Fish and Wildlife  
Oregon Department of Fish and Wildlife  
Idaho Department of Environmental Quality  
State of Montana

## Tribes

Kootenai Tribe of Idaho  
Confederated Tribes of the Umatilla Indian Reservation  
Confederated Salish and Kootenai Tribes of the Flathead Reservation  
Shoshone-Bannock Tribes of Fort Hall  
Confederated Tribes of the Warm Springs Reservation  
Yakama Indian Nation  
Shoshone-Paiute Tribes of Duck Valley reservation  
Burns Paiute Tribe  
Kalispel Tribe  
Spokane Tribes of Indians  
Nez Perce Tribe of Idaho  
Coeur d'Alene Tribe of Idaho  
Confederated Tribes of the Colville Reservation

## Meetings

Meetings are held at least monthly, and are open to the public.

## Dissolved Gas Team

### Purpose

The primary purpose of this team falls under three areas, monitoring, research and long term approaches to dissolved gas waivers (MOU).

This is a technical team with three periods of operation:

1. Pre-Season, development of monitoring and management plans;
2. In-Season, advisor to the Technical management Team on monitoring;
3. Post-Season, research plan and monitoring results review.

The Team evaluates and advises the other committees and teams on the effects of river operations, hydropower operations, and structural modifications on dissolved gas.

Coordinates gas bubble disease research.

A sub-committee of this team is currently involved in developing a multi-agency Memorandum of Understanding that could lead to a long term approach to voluntary spill for salmon recovery.

### Membership

#### Federal

National Marine Fisheries Service (Co-Chair - Mark Schneider)  
Northwest Power Planning Council (Co-Chair - Gustavo Bisbal)  
Bureau of Reclamation  
Environmental protection Agency  
Bonneville Power Administration  
U.S. Army Corps of Engineers

State

Oregon Department of Environmental Quality  
Oregon Department of Fish and Wildlife  
Washington Department of Ecology  
Washington Department of Fish and Wildlife  
Idaho Department of Environmental Quality

Tribes

Columbia River Inter-Tribal Fish Commission

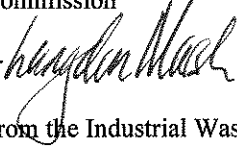
Meetings

Meetings are scheduled on average monthly, and are open to public participation.

State of Oregon  
Department of Environmental Quality

Memorandum

Date: September 25, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director   
Subject: Agenda Item N, Report from the Industrial Wastewater Permit Advisory Committee, EQC Meeting October 11, 1996

**Statement of Purpose**

The purpose of this report is to present the recommendations of the Industrial Wastewater Permit Advisory Committee, and to provide the Department's response to the committee's recommendations, and to request that the Environmental Quality Commission take action to accept the recommendations and direct the DEQ staff to implement them, as appropriate.

**Background**

Historically, most of Oregon's regulated businesses have been supportive of the Department's efforts to administer the industrial wastewater permitting program, and industries realize that a well-run program needs dependable financing, chiefly through a combination of public funds and permit fees. With recent cutbacks in federal and state funding, permit fees have greatly increased over the years; fees are now the largest segment of permit program revenues. Costs of permit compliance have also risen sharply, as the technology to monitor treatment systems has become more advanced, and the demand for information has increased. Higher permit fees and compliance costs result in higher operating costs to businesses, and ultimately, increased costs to consumers.

Oregon industries used the opportunity of a 1994 industrial wastewater permit fee increase to request that the Department create a forum through which the industrial permitting program could be comprehensively reviewed, particularly for ways to improve program cost efficiencies. This forum, calling together industry representatives and Department staff, would be used to evaluate the permitting program, discuss areas of conflict and friction, identify areas where efficiencies could be achieved, and build a more trusting and cooperative relationship between regulators and regulated businesses.

At the September 22, 1994, meeting, the Environmental Quality Commission (EQC) approved the fee increase and directed the Department to establish an industrial wastewater permit advisory committee to undertake a comprehensive review of the permitting process, including review of permit fee schedules.\* Associated Oregon Industries was instrumental in getting the review committee formed.

The Department formed the eleven-member advisory committee in December 1994. Committee members represent both large and small businesses from such industry segments as food processing, mining, utilities, wood products, and aluminum processing. (A list of committee members is included in Attachment A.) The committee members met numerous times over the past year and one-half to discuss issues and develop recommendations. The charge of

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\* The EQC-approved fee increase was later rolled back about 70% in the 1995 legislative session.

this committee was to work with Department staff to comprehensively review the industrial water quality permitting program and recommend improvements and revisions, with particular emphasis on:

- improving equity and fairness in the permit fee structure
- improving the turn-around time on permit transactions
- developing a process through which permit conditions may be evaluated in terms of cost versus environmental benefits realized
- reducing uncertainty in the permitting process
- streamlining the permitting process
- improving DEQ's internal appeals process for contested permit actions
- assuring the requirements of Oregon statutes governing economic impacts of rule-making and response to public comment are met in a manner meaningful to the regulated community

#### **Authority of the Commission with Respect to the Issue**

The Commission directed that the Department form the Industrial Wastewater Advisory Committee to review the wastewater permitting program. The Commission's directive stemmed from the rulemaking action to increase fees for industrial wastewater permits; that is, the Commission's adoption of the fee schedule revision was made with the understanding that the Department would establish a committee of representatives from regulated industries to review not only the fees charged by the Department, but also the overall management of the industrial permitting program.

#### **Summary of the Industrial Wastewater Permit Advisory Committee's Report**

From December 1994 to March 1995, the committee held several public meetings at various locations in the state to review the industrial wastewater permitting program, discuss issues, and craft the committee's report. Department staff were included in the meetings and were encouraged to provide input throughout the development of the committee's recommendations. After much discussion and refinement, the committee identified ten issue areas, divided into two main categories, as follows:

##### **Regulatory Costs Issues--**

- Permit fees
- Requirements for reporting and monitoring
- Management of water quality data
- Groundwater protection and management
- Streamlining the permitting process



Program Coordination Issues--

- Enforcement and conflict resolution
- Pollution Prevention
- Training and education for permit writers
- Interagency coordination
- Small businesses and DEQ

Each of these issue areas is discussed individually in the committee's report, and each discussion section is followed by a prioritized listing of recommendations for immediate attention, then possible benefits and constraints for the recommendations, and finally suggestions for long-term objectives.

Summary of Committee Recommendations and Department's Response

The committee's recommendations along with the Department's response, are summarized as follows:

1. **Permit Fees.** *Accountability* is a major concern of the regulated community relative to management of fee revenues. The Department should be able to demonstrate clear and direct linkages between fees charged and regulatory work performed. The fee schedule should be revised to reflect *flexibility* for fee payers, such as allowing payment of fees on a monthly or quarterly basis. The fee schedule should incorporate *economic incentives* to encourage pollution prevention, waste minimization, and resource conservation. Finally, the fee schedule should be revised as necessary to assure maximum *fairness and equity* for all fee payers.

Department's Response: The Department agrees that there is a need to implement a more detailed time and cost accounting system, not only to support fees charged, but also to better manage budgets and revenues. Some changes have already been implemented to improve our tracking capabilities. The Department's Water Quality and Laboratory Divisions are working together to explore the potential of expanding to water quality programs the time tracking system currently used by the laboratory.

The Department also agrees that the permit fee payment process could be improved in terms of greater flexibility for fee payers. The current rules require that all permit processing fees be paid at the time of application, and compliance determination fees be paid in an annual lump sum, due in July of each year. Rather than change the rules to allow partial payment of fees, the Department preference would be to allow permit applicants and holders to pay fees by credit card. Payment by credit card is not presently accommodated in any of the Department's media programs, but the Department would be ready and willing to set up a pilot project for water quality programs to see if this approach could work, with the idea that the approach could be enlarged to encompass all media programs wherein fees or other payments are collected.

The Department further agrees that more economic incentives could be incorporated into the permitting program for good performers, and has already drafted a conceptual framework for promoting "green" behavior. It should be noted, too, that the Department has issued many general permits covering a wide variety of industrial operations and activities. A facility covered by an individual permit may be able to reduce its permit fees by modifying or reducing its discharge such that it qualifies for coverage by a general permit.

The Department may also be looking into regulatory options for raising fees or instituting other cost recovery measures for those facilities that contribute the most environmental damage and require more than customary Departmental oversight and work effort.

Finally, the Department agrees that the permit fee schedule could be revamped to reflect greater fairness and equity to fee payers; however, a detailed workload study would need to be performed. We have no resources at this time to undertake this study. Our current, though limited, information about the costs of providing services versus the fees charged would indicate that the smaller facilities are being subsidized by the larger ones---industries should be cautioned that a truly equitable fee structure could result in greatly increased fees for some permittees, most likely small businesses.

2. **Reporting requirements.** Permit requirements for reporting, monitoring, sampling, and special studies constitute a major cost to permit holders. Many dollars are spent each year to demonstrate compliance and defend data. To make the most of limited environmental dollars, the Department should incorporate risk-based decision making into the permitting program, such that permit requirements for reporting are tailored specifically to the minimum level of information needed to support compliance.

Department's Response: The Department agrees that in some cases, reporting may be unnecessary, and that we should strive to reduce unnecessary reporting while at the same time maintaining a high level of environmental protection for the state. The EPA has provided guidance for performance-based reduction of NPDES permit monitoring frequencies (memo dated 4-19-96) for regulated facilities demonstrating a good record of performance and pollutant discharges at levels below permit requirements. The guidance may also be applied to pretreatment programs. We will be working to implement the guidance for NPDES facilities, and use the guidance as applicable to the state WPCF permitted facilities.

If resources were plentiful, the Department could certainly perform full-blown cost benefit or risk analyses for determining permit conditions--however, our staff resources are extremely thin. If existing staff were required to undertake this kind of analysis for each permit, processing times would significantly increase. Reassigning staff to this type of effort means that other more pressing water quality priorities would go unaddressed--such as coastal salmon recovery, nonpoint source pollution management, groundwater protection, and development of Total Maximum Daily Loads (TMDLs) for Oregon's water-quality limited streams and rivers.

The Department also agrees that we should as an agency be more consistently responsive to permittees' submitting documentation as requested or required in the permit. Department administration will provide written directives to all staff involved with permitting that special submissions required by permit should be acknowledged within 15 days of receipt, with some indication as to when the submission will be reviewed.

3. **Management of water quality data.** Water quality data are valuable tools to help both the Department and industries assess performance and achieve environmental goals. There is a vast quantity of water quality data that has been collected from a number of sources, including reports prepared for and by industry; however, the information is not available in a readily accessible or comprehensive database. Working with industry, other natural resource agencies and stakeholder groups, the Department should strive to develop and compile a comprehensive water quality database.

Department's Response: The Department agrees that the WQ Division's data management capabilities are inadequate to comprehensively handle the large quantity of water quality data generated and received by the DEQ. Efforts have been made to analyze data needs, and address immediate data problems; however, we need to undertake long-term strategic planning to develop a comprehensive, integrated, water quality database that effectively provides information on a watershed basis. We are able to proceed with long-range planning with current staff levels; however, more staff resources will be required to construct and maintain the database once planning and design has been completed. Additional funding would be needed to support future WQ database efforts.

As part of developing the data management system, the Department is looking for new ways to work with NPDES, WPCF, and General Permits to better manage water quality permit data. The Department is developing a computer program that would provide facilities with the option of electronically filing Discharge Monitoring Reports. The Discharge Monitoring System (DMS) will help shift the focus of permit compliance from violations toward pollution prevention; as treatment facilities electronically file DMRs, the database would provide early warnings about potential violations, and allow facilities to make adjustments to avoid problems. Once the DMS is developed, the Department will select a group of pilot facilities to test the system.

4. **Groundwater protection and management.** Regulated industries have encountered many seeming inconsistencies in the way the Department applies and interprets rules for groundwater protection and management. Rule and policy interpretations differ depending on the media program (solid waste, hazardous waste, voluntary clean-up, water quality) and, at times, depending on the DEQ regional office from which guidance is sought. Both DEQ and industry see a need for greater consistency in the application of regulatory requirements for groundwater, but with flexibility to recognize the varied hydrogeology of the state. A regional or basin specific approach to groundwater management may be a more effective method for achieving groundwater quality goals. Now that the groundwater protection and management program has some history, the Department should form a groundwater advisory committee to review the program, revise rules as necessary, and strive to achieve greater flexibility, responsiveness and consistency.

Department's Response: The Department believes that the committee's recommendations are all good suggestions; the groundwater protection and management program clearly needs review and possibly some revisions to make it work better for both the Department and the regulated community. The Department is certainly amenable to forming an advisory committee and reviewing the groundwater program. However, given the current budget constraints in the water quality program as a whole, and the number of vacancies in the groundwater program that cannot be filled, the Department is unable to initiate these activities in the current biennium. If resources are available in the next biennium, the Department fully intends to thoroughly review the groundwater program using the advisory committee process.

5. **Streamlining the permitting process.** Businesses and DEQ should work harder to function together more productively, to resolve conflicts as informally and expeditiously as possible, to streamline the permitting process, and to reduce the costs for permit issuance and compliance. While maintaining high quality, enforceable permits, the Department should make efforts to: 1) improve timeliness in the issuance of permits, and in responding to permit issues; 2) reduce the paperwork burden for both DEQ and regulated facilities; 3) provide for more meaningful and efficient public participation opportunities; 4) communicate clearly and effectively; 5) remove uncertainty from the permit issuance process; and 6) recognize and reward industries that integrate environmental management techniques to achieve or go beyond permit compliance, including pollution prevention and innovative technologies to reduce, reuse, and recycle wastewater.

Department's Response: The Department agrees that there are a number of opportunities that could be implemented to streamline the permitting process, and address the items enumerated above. Several efforts are already being undertaken to implement the committee's recommendations--a table of goals has been developed with the IW committee for permit processing; the Department is willing to look into establishing an in-house, informal process or other mechanisms for more expeditiously resolving permit disputes; the computerized Discharge Monitoring System currently under development will allow electronic filing of compliance information; a rule committee has been formed to review water quality rules and make revisions as needed; use of general permits will be expanded, if practical; responsiveness will be improved and be more consistent between regions; permits will be combined, if feasible; application forms will be revised and updated; a framework document is being developed to promote "green" behavior; legislative concepts will be presented to

the 1997 session for increased permit terms and permit-by-rule; and the Department will continue to work with EPA to further streamline the NPDES permitting program.

Other recommendations of the committee will be reviewed and implemented as resources allow, and included in our planning for future biennia. The current budget situation in the water quality program precludes our ability to make further commitments; many water quality vacancies must remain unfilled, and some permitting positions now filled will be lost if funding is not forthcoming in the next biennium.

6. **Enforcement and conflict resolution.** To improve the industry/DEQ relationship and to achieve water quality compliance goals, the committee sees the need for a paradigm shift from the Department's strong enforcement orientation to one of compliance assistance. Aggressive enforcement and stiff civil penalties are certainly appropriate in some instances, especially when a facility knowingly and flagrantly violates permit conditions or water quality standards. However, the "stick" approach is not necessarily the most efficacious means of achieving compliance. A more proactive approach is to emphasize compliance assistance and to redesign programs such that sources can readily find and understand the information they need to comply. Especially for small businesses, which lack the in-house resources and expertise of larger industries, the Department should first attempt to resolve conflicts through cooperative problem solving and negotiation, prior to pursuing formal enforcement action.

Department's Response: The Department is clearly committed to cooperative problem solving and this is a major priority committed to by the agency director, water quality and region administrators, and the water quality program managers. Monthly meetings are now held to address problems and seek ways to better effect cooperative problem solving both within the water quality program and with the regulated community. This is a very resource intensive commitment and will continue for the foreseeable future.

For the past several years, the Department has made a very conscientious effort to create a better balance between enforcement and compliance assistance. The Department has fully recognized the significant changes in the regulations, their complexity and that the universe of sources impacted now includes numerous small, less sophisticated businesses that require our assistance. The following are examples of non-regulatory technical assistance projects that have been provided to thousands of sources throughout the state:

- *Hazardous Waste Technical Assistance* projects in all regions-- provided technical assistance to approximately 900 sources.
- *Stormwater Amnesty* projects in Northwest Region (NWR) and Eugene-- provided information and assistance to several thousand sources.
- *Columbia Slough Stormwater Technical Assistance Project*--a non-regulatory project to assist sources potentially discharging to the Columbia Slough which is undergoing a major TMDL and cleanup.
- *VOC Amnesty Program*--a NWR program which contacted about 900 sources and provided industry training in VOC emission reductions and pollution prevention. This project resulted in 80 tons per year reduction in the Portland Ozone Non Attainment area.
- *Pollution Prevention Projects*--the Department has initiated a number of pollution prevention outreach projects across the state which are non-regulatory approaches to compliance.

- *Supplemental Environmental Projects*--the Department has incorporated the use of these projects to allow the use of civil penalties for environmental improvement projects rather than committing the fines collected to the state general fund. These projects are actually proposed by the party subject to the fine.

The Department would like to do more activities such as those described above, specific to water quality permitting programs; however, unlike other media programs, the water quality program has insufficient resources to dedicate personnel to compliance and technical assistance activities.

7. **Pollution prevention.** Permittees would have incentive to pursue pollution prevention or waste reduction efforts if DEQ were to provide some rewards for this "green" behavior. Such rewards could include: more expeditious review of permit transactions; reduction in reporting and monitoring requirements; extension of the permit expiration period; reduced annual compliance fees; reduced regulatory oversight; and permittee self-certification. The committee also recommends that the Department pursue the development of a multi-media recognition permit, or "green" permit, or otherwise investigate opportunities for defining, recognizing and rewarding "green" behavior. Further, the committee recommends that the pollution control tax credit program be broadened to include eligibility for pollution prevention projects.

Department's Response: The Department has formed an internal, all-division, Pollution Prevention Core Committee to help integrate pollution prevention throughout agency programs, and to implement the recommendations of the Ross report. One of the committee's tasks is to develop a "green" permit, or otherwise define "green" behaviors, and then develop a permit or process through which a facility may have alternatives to include pollution prevention incentives or other environmental management options. The intent is to have the "green" permit/process include some economic incentives for going beyond permit requirements. After the framework for the "green" permit is designed, a pilot project will be selected to test the approach.

8. **Training and education for permit writers.** A well-crafted permit is a good tool for achieving regulatory compliance. Permit writers should be able to prepare clear, concise, technically appropriate, and easily administered permits. All staff (both industry and DEQ), and especially new staff, should receive regular training on permit writing. Training opportunities should also include courses on problem-solving and negotiating skills.

Department's Response: The Department's water quality program now provides periodic in-house training sessions covering many aspects of permit writing. In addition, the various permitting subprograms are now holding quarterly staff meetings to provide informal training and new information. The Department's Western Region is using experienced staff to review draft permits. In addition, the Department participates in short schools which emphasize domestic issues, but are now including some industrial topics as well. The Department agrees that inclusion of associations and industry groups at many of these training sessions and meetings would be helpful both to Department staff and to permit holders.

The Department does not have sufficient resources to develop permit writing courses. The Department is committed to sending permit writers to EPA training courses when they are presented. As noted above, some industrial topics are now being included at short school programs. The Department will continue to explore other venues, including colleges and universities, in an effort to utilize available training courses.

Substantive training in industrial wastewater treatment methods is generally handled through specific university engineering and related courses. The Department is not prepared to commit to providing this level of training. There are engineers employed by the Department who have had this level of training and they in turn provide assistance and informal training to compliance inspectors (all senior level engineers at DEQ must be registered and must be competent to work at that level). Several community colleges periodically hold week long training

courses in both industrial and domestic wastewater treatment. When these courses are available and resources allow, the Department encourages permit writers and compliance inspectors to attend.

9. **Interagency coordination.** A long-standing industry concern is consistency of regulatory treatment by and between state agencies, and the resulting predictability of regulatory action. The committee encourages DEQ Director Marsh's work in the area of interagency coordination, as long as coordination efforts trickle down to staff level.

Department's Response: The Department recognizes the need for a more formal arrangement with other natural resource agencies, specifically when rules or policies are prepared that may impact another agency and the regulated community. The Department is willing to explore with the natural resource agencies, potential mechanisms to formalize coordination.

Technical staff from the natural resource agencies now meet periodically on specific projects or activities of interest. Examples include meetings on land use impacts, nonpoint source issues and meetings on joint projects such as development of plans for groundwater management areas. The Department is willing to broaden this commitment to include regularly scheduled meetings on all oversight activities of mutual interest, but through the water quality program's new watershed management approach. The watershed approach requires close coordination between technical staff from several agencies, on a basin by basin basis.

The Department already makes extensive use of interagency agreements to help carry out environmental programs and shared agency responsibilities. The Department intends to continue and expand the use of interagency agreements as appropriate and necessary, especially as we make the transition to a geographically-based, water quality-based approach to water quality management.

10. **Small businesses and DEQ.** Small businesses need help to steer through the vast and ever-changing sea of environmental regulations. Information materials and education programs are needed to help businesses not only determine their compliance status, but also to provide information about how to comply. Pollution prevention and waste minimization information should also be readily available. To accomplish this, the Department should establish a small business compliance assistance program, similar to that in the Air Quality program, to provide "one-stop shopping" for businesses seeking information on water quality permitting issues. Also, as noted above with regard to enforcement actions, if a small business violates its permit, the Department's pursuit of enforcement should be tempered with negotiation, strong technical assistance, and clear communication between DEQ and the violator.

Department's Response: The Department agrees that a small business assistance program for water quality issues would be a useful resource; however, no staff is currently available to perform this work. The Department has submitted in a legislative decision package a request for funding authority to establish a grant program to provide funding to organizations that want to administer small business compliance assistance programs.

*(The full committee report is provided in Attachment A. Detailed responses to the committee's recommendations for immediate attention are provided in Attachment B.)*

**Department Recommendation**

The Department appreciates the efforts of the Industrial Wastewater Permit Advisory Committee, and the commitment of its members to improve the water quality permitting program. The work of the committee has already provided the impetus to make changes in the industrial wastewater permitting program, enabling the Department to make the program more consistent in its application and more responsive to the needs of regulated businesses. By working together through the advisory committee, the Department and industry representatives were able to discuss openly many of the concerns of Oregon's regulated businesses, address some issues immediately and others in the near future, and better understand how each entity functions .

As stated above and in Attachment B, the Department agrees with many of the Industrial Wastewater permit committee recommendations, and steps have or will be taken to implement changes and do things differently; however, not all recommendations can be implemented given the current staff and resources of the Department. Increased training for permit writers, improved permit turn-around times, more technical assistance for small businesses, comprehensive review of the groundwater protection program and rules, enhanced data management capabilities--implementing these and other recommendations would require more Department resources than can be currently committed. If industry truly sees a need for these activities to occur, then the Department needs industries' support to obtain the necessary resources. One solution would be to return permit fees to the levels adopted by the EQC in September of 1994. Another would be to convince the legislature to authorize more general funds to support industrial water quality permitting programs.

It is recommended that the Commission accept this report, discuss the matter, provide advice and guidance, and direct the Department to implement recommendations, as appropriate and with the understanding that the Industrial Wastewater Permit Advisory Committee recommendations will be implemented as Department resources allow.

**Attachments**

Attachment A--Industrial Wastewater Advisory Committee Report

Attachment B--Department's Detailed Response to Committee Recommendations

Approved:

Section: \_\_\_\_\_

Division: \_\_\_\_\_

Report Prepared By: Jan Renfroe

Phone: (503)229-5589

Date Prepared: September 23, 1996

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|---|--|
| State of Oregon                                 | Department of Environmental Quality                            |
| INDUSTRIAL WASTEWATER PERMIT ADVISORY COMMITTEE |  |
| <b>COMMITTEE REPORT</b>                         |  |
| <b>Section I. Regulatory Cost Issues</b>        |  |
| A.  | Permit Fee Structure   |
| B.  | Requirements for monitoring, sampling and reporting            |
| C.  | Management of Water Quality Data                               |
| D.  | Groundwater  |
| E.  | Streamlining the Industrial Wastewater (IW) permitting program |
| <b>Section II. Program Coordination Issues</b>  |  |
| A.  | Enforcement and Conflict Resolution                            |
| B.  | Pollution Prevention   |
| C.  | Training and Education (on permit writing)                     |
| D.  | Interagency Coordination                                       |
| E.  | Small Businesses and DEQ                                       |



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# EXECUTIVE SUMMARY

## OVERVIEW

Environmental regulation is a mature enterprise. Both the regulating agencies and regulated communities have grown more sophisticated. The vast majority of industrial wastewater dischargers are aware of their social and legal obligation to avoid water pollution, and seek a cooperative relationship with water quality regulators.

In working to improve the industrial wastewater permitting system, we must recognize both the benefits and costs of the current system. The existing permitting system has been successful in greatly reducing the quantities of pollutants discharged into Oregon's waters, and has resulted in important improvements to water quality. However, the current system has associated with it significant costs, for both industry and the Department. Additionally, the adversarial nature of the permitting process has resulted in barriers to cooperative efforts where bridges should be built.

Historically, most of Oregon's regulated businesses have been supportive of the Department's efforts to administer the industrial wastewater permitting program, and industries realize that a well-run program needs dependable financing, chiefly through a combination of public funds and permit fees. With recent cutbacks in federal and state funding, permit fees have greatly increased over the years; fees are now the largest segment of permit program revenues. Costs of permit compliance have also risen sharply, as the technology to monitor treatment systems has become more advanced, and the demand for information has increased. Higher permit fees and compliance costs result in higher operating costs to businesses, and ultimately, increased costs to consumers.

Oregon industries used the opportunity of a permit fee increase to request that the Department create a forum through which the industrial permitting program could be comprehensively reviewed, particularly for ways to improve program cost efficiencies. This forum, calling together industry representatives and Department staff, would be used to evaluate the permitting program, discuss areas of conflict and friction, identify areas where efficiencies could be achieved, and build a more trusting and cooperative relationship between regulators and regulated businesses.

At the September 22, 1994, meeting, the Environmental Quality Commission (EQC) directed the Department to establish an industrial wastewater permit advisory committee to undertake a comprehensive review of the permitting process, including review of permit fee schedules. Associated Oregon Industries, a long time advocate for Oregon businesses, was instrumental in getting the review committee formed.

## COMMITTEE REPORT AND RECOMMENDATIONS

The Department formed the eleven-member advisory committee in December 1994. The committee members have met numerous times over the past 18 months to discuss issues and develop recommendations. The charge of this committee was to work with Department staff to comprehensively review the industrial water quality permitting program and recommend improvements and revisions, with particular emphasis on:

- improving equability and fairness in the permit fee structure
- improving the turn-around time on permit transactions
- developing a process through which permit conditions may be evaluated in terms of cost versus environmental benefits realized
- reducing uncertainty in the permitting process
- streamlining the permitting process
- improving DEQ's internal appeals process for contested permit actions
- assuring the requirements of Oregon statutes governing economic impacts of rule-making and response to public comment are met in a manner meaningful to the regulated community

From December 1994 to March 1995, the committee held several public meetings at various locations in the state to review the industrial wastewater permitting program, discuss issues, and craft the committee's report. Department staff were included in the meetings and were encouraged to provide input throughout the development of the committee's recommendations. After much discussion and refinement, the committee identified ten issue areas, divided into two main categories, as follows:

### Regulatory Costs Issues--

- Permit fees
- Requirements for reporting and monitoring
- Management of water quality data
- Groundwater protection and management
- Streamlining the permitting process

### Program Coordination Issues--

- Enforcement and conflict resolution

- Pollution Prevention
- Training and education for permit writers
- Interagency coordination
- Small businesses and DEQ

Each of these issue areas is discussed individually in the committee's report, and each discussion section is followed by a prioritized listing of recommendations for *immediate* attention, then possible benefits and constraints for the recommendations, and finally suggestions for long-term objectives. The committee's recommendations are summarized as follows:

**Permit Fees.** *Accountability* is a major concern of the regulated community relative to management of fee revenues. The Department should be able to demonstrate clear and direct linkages between fees charged and regulatory work performed. The fee schedule should be revised to reflect *flexibility* for fee payers, such as allowing payment of fees on a monthly or quarterly basis. The fee schedule should incorporate *economic incentives* to encourage pollution prevention, waste minimization, and resource conservation. Finally, the fee schedule should be revised as necessary to assure maximum *fairness and equity* for all fee payers.

**Reporting requirements.** Permit requirements for reporting, monitoring, sampling, and special studies constitute a major cost to permit holders. Many dollars are spent each year to demonstrate compliance and defend data. To make the most of limited environmental dollars, the Department should incorporate risk-based decision making into the permitting program, such that permit requirements for reporting are tailored specifically to the minimum level of information needed to support compliance.

**Management of water quality data.** Water quality data are valuable tools to help both the Department and industries assess performance and achieve environmental goals. There is a vast quantity of water quality data that has been collected from a number of sources, including reports prepared for and by industry; however, the information is not available in a readily accessible or comprehensive database. Working with industry, other natural resource agencies and stakeholder groups, the Department should strive to develop and compile a comprehensive water quality database.

**Groundwater protection and management.** Regulated industries have encountered many seeming inconsistencies in the way the Department applies and interprets rules for groundwater protection and management. Rule and policy interpretations differ depending on the media program (solid waste, hazardous waste, voluntary clean-up, water quality) and, at times, depending on the DEQ regional office from which guidance is sought. Both DEQ and industry see a need for greater consistency in the application of regulatory requirements for groundwater, but with flexibility to recognize the varied hydrogeology of the state. A regional or basin specific approach to groundwater management may be a more effective method for achieving groundwater quality goals.

Now that the groundwater protection and management program has some history, the Department should form a groundwater advisory committee to review the program, revise rules as necessary, and strive to achieve greater flexibility, responsiveness and consistency.

**Streamlining the permitting process.** Businesses and DEQ should work harder to function together more productively, to resolve conflicts as informally and expeditiously as possible, to streamline the permitting process, and to reduce the costs for permit issuance and compliance. While maintaining high quality, enforceable permits, the Department should make efforts to: 1) improve timeliness in the issuance of permits, and in responding to permit issues; 2) reduce the paperwork burden for both DEQ and regulated facilities; 3) provide for more meaningful and efficient public participation opportunities; 4) communicate clearly and effectively; 5) remove uncertainty from the permit issuance process; and 6) recognize and reward industries that integrate environmental management techniques to achieve or go beyond permit compliance, including pollution prevention and innovative technologies to reduce, reuse, and recycle wastewater.

**Enforcement and conflict resolution.** To improve the industry/DEQ relationship and to achieve water quality compliance goals, the committee sees the need for a paradigm shift from the Department's strong enforcement orientation to one of compliance assistance. Aggressive enforcement and stiff civil penalties are certainly appropriate in some instances, especially when a facility knowingly and flagrantly violates permit conditions or water quality standards. However, the "stick" approach is not necessarily the most efficacious means of achieving compliance. A more proactive approach is to emphasize compliance assistance and to redesign programs such that sources can readily find and understand the information they need to comply. Especially for small businesses, which lack the in-house resources and expertise of larger industries, the Department should first attempt to resolve conflicts through cooperative problem solving and negotiation, prior to pursuing formal enforcement action.

**Pollution prevention.** Permittees would have incentive to pursue pollution prevention or waste reduction efforts if DEQ were to provide some rewards for this "green" behavior. Such rewards could include: more expeditious review of permit transactions; reduction in reporting and monitoring requirements; extension of the permit expiration period; reduced annual compliance fees; reduced regulatory oversight; and permittee self-certification. The committee also recommends that the Department pursue the development of a multi-media recognition permit, or "green" permit, or otherwise investigate opportunities for defining, recognizing and rewarding "green" behavior. Further, the committee recommends that the pollution control tax credit program be broadened to include eligibility for pollution prevention projects.

**Training and education for permit writers.** A well-crafted permit is a good tool for achieving regulatory compliance. Permit writers should be able to prepare clear, concise,

technically appropriate, and easily administered permits. All staff (both industry and DEQ), and especially new staff, should receive regular training on permit writing. Training opportunities should also include courses on problem-solving and negotiating skills.

**Interagency coordination.** A long-standing industry concern is consistency of regulatory treatment by and between state agencies, and the resulting predictability of regulatory action. The committee encourages DEQ Director Marsh's work in the area of interagency coordination, as long as coordination efforts trickle down to staff level.

**Small businesses and DEQ.** Small businesses need help to steer through the vast and ever-changing sea of environmental regulations. Information materials and education programs are needed to help businesses not only determine their compliance status, but also to provide information about how to comply. Pollution prevention and waste minimization information should also be readily available. To accomplish this, the Department should establish a small business compliance assistance program, similar to that in the Air Quality program, to provide "one-stop shopping" for businesses seeking information on water quality permitting issues. Also, as noted above with regard to enforcement actions, if a small business violates its permit, the Department's pursuit of enforcement should be tempered with negotiation, strong technical assistance, and clear communication between DEQ and the violator.

## SUMMARY

The industrial wastewater permitting program must continue to evolve so that water quality protection will continue, but in a more efficient and cost effective manner. The permitting system of the future must recognize the needs of the public and regulated community as they exist today and will tomorrow, not as needs were 25 years ago. Finally, permitting programs need to recognize that permit issuance alone does not ensure adequate protection of Oregon's water quality and biological habitat; rather, protection must come from a balance of regulated and voluntary activities, and from cooperative efforts from both public and private sectors.

Moving toward the industrial water quality program of the future requires a shift in attitude for those involved in permitting decisions, and may require revisions to existing laws, rules and regulations. Some changes are already underway. Others may take years to fully implement.

The recommendations contained in this report are intended not to relax current regulatory standards, but to provide a menu of suggested actions and opportunities that should be explored as we move into the next century of water quality protection and management.

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Industrial Wastewater Permit Advisory Committee

Section I, Topic A: **Permit fee structure**

Discussion:

Industry understands the mission of the DEQ is to restore, enhance, and maintain Oregon's water quality, and that water quality permitting helps DEQ to accomplish this mission. While the state's statutes allow DEQ to charge fees to cover the costs of water quality permit processing and compliance assurance, careful thought and consideration must be incorporated into the fee setting process and the management of fee revenues. Regulated businesses must pass on water quality fees to the consumer of goods and services, but only to the degree that market forces allow. Individual permit fees impose significant financial burdens on some small and startup business, and businesses which operate seasonally. Particular concerns with fees and the management of fee revenues are as follows:

Accountability. Accountability is a major concern of the regulated community relative to management of fee revenues. The DEQ should be able to demonstrate clear and direct linkages between fee revenues generated and regulatory services delivered applicable to the industrial wastewater permitting program. Regulated industry wants assurance that fees are fair and equitable, and that fees paid are dedicated exclusively to wastewater permitting and compliance determination.

Economic Incentives. The current fee structure contains no built in economic incentives to reduce wastewater flow, use innovative technologies to reduce or replace pollutants, or otherwise encourage pollution prevention, pollution reduction, and waste minimization. In other words, a facility's permit fees are not lowered if the facility invests in and successfully employs treatment methods that reduce flows or produce less pollutants, or adopts in-process recapture or recycling of wastewater, or irrigating over more acreage, or other creative and beneficial approaches to wastewater management.

Discussion, continued:

Permit Categories. The permit fee schedule for annual compliance determination contains several categories for dischargers, based on the level of production, the nature of the industry, or characteristics of the wastewater discharged. General permits are also organized by process or flow constituents. Unfortunately, these categories do not necessarily cover all possible situations when a permit might be required. For example, there are no general permit categories which address discharges that might actually be environmentally beneficial (i.e. discharging well water into a seasonally dry creek bed; surfacewater storage in the ground for later discharge during no/low flow periods).

Fee Equity. Fees for WPCF permits are the same as for NPDES. WPCF permits are issued to facilities which do not discharge wastewater directly to surface waters. It would seem logical to conclude that facilities under WPCF (if properly constructed and operated such that groundwater is protected) pose less of a water quality impact and require less regulatory oversight than facilities operating under NPDES permits.



Recommendations for immediate attention--DEQ should:

- A. Implement a time and cost accounting system, to assure that fees paid cover the costs directly associated with permit application processing and source monitoring and inspection.
- B. Allow applicants for new permits to pay an up front deposit rather than the full permit fee, then collect the remainder when the permit is issued.
- C. Reduce permit fees for facilities which do not directly discharge to surface waters, or which eliminate surface water discharges, provided the new discharge method adequately protects groundwater. The DEQ should investigate the possibility of creating a separate fee schedule for WPCF and NPDES permits.
- D. Develop rules to create categories for discharges that provide environmental benefits, with reduced permit fees for individual or general permits. Some examples include discharges of groundwater to surface waters that serve to beneficially maintain or enhance instream flows, or replenish over-allocated streams, or irrigating over larger land areas, thereby reducing the use of surface and ground water sources for crop irrigation.
- E. Allow some permit holders (such as startup businesses, small or medium size businesses on individual permits, or seasonal facilities) to pay annual compliance fees on an alternative payment schedule (for example, pro rated on a monthly or quarterly basis).
- F. As an incentive for moving beyond compliance, develop separate permit fees, or allow a percentage discount, for dischargers who reduce the volume and strength of their discharges beyond permit requirements or irrigate over larger land areas, being careful to avoid disproportionate shifts of the costs of these reductions to other large volume dischargers. (See also recommendations under Topic IIB, Pollution prevention, reduction, and minimization.)

## Benefits

- Allows new small businesses to start up at lower initial costs with easier budgeting, and reminds them of their continual compliance responsibilities.
- Encourages good stewardship in both routine compliance and pollution prevention (by reducing fee burdens). This should result in less agency costs for complaint response and enforcement actions.
- Promotes environmental management as an integral part of economic development
- Possibility of fee reduction through sound environmental management may help to reach small businesses that don't or won't comply

## Constraints:

- May significantly shift fee revenue burden for some dischargers or class of dischargers
- More burdensome time and cost accounting for DEQ staff

Long-term DEQ objectives:

- A. As an economic development incentive and to promote environmental stewardship, offset up to 100% of the first year's annual compliance determination fee for new businesses that invest in equipment or systems which would result in performance beyond that which is necessary for compliance.
- B. Allow extension of the permit period to 10 years for sources who continually demonstrate compliance with permit conditions (while maintaining the current fee structure). (NB: This would require a statutory change to both federal and state laws.)
- C. Incorporate a sliding fee scale into the permit fee schedule that would accommodate small and startup businesses such that businesses would pay less than the established fee initially, but pay higher than established fees later.
- D. Investigate the possibility of establishing a workload based fee system (applicable to all permittees, both industrial and domestic). This would be a fair and equitable means of assessing fees, as long as each permittee or class of permittee pays no more than the cost of administering the permit or permit class (i.e. one permittee or class of permittees should not subsidize another). However, fees should not be open ended. Carefully track the data for a biennium, and perform an evaluation at the end of the two-year period.

Industrial Wastewater Permit Advisory Committee

Section I, Topic B: **Permit requirements for monitoring, sampling, reporting and studies**

Discussion:

Industries and government regulators share responsibility for achieving environmental goals for protecting and restoring water quality. Both also share a responsibility to use resources wisely and prudently. When environmental policies waste talent, time or material, the price of environmental protection is higher than necessary. Making water quality protection needlessly expensive subverts environmental goals because the added expense lessens industry's willingness to proactively comply with permit requirements or invest in improvements that might lead to better water quality protection.

Permit reporting requirements constitute a major cost factor to industry. Many dollars are spent by industry each year to demonstrate compliance with permit conditions. Large sums of money are also spent on defending data and otherwise increasing the DEQ's comfort level with report recommendations and outcomes. Requirements for monitoring, sampling and reporting sometimes are not directly related to compliance; in some situations, DEQ may impose special study requirements on permittees for the purpose of improving the DEQ's knowledge in general about a particular receiving water (such as collection of ambient data, or dissolved oxygen studies).

Special reports or studies should only be included as a permit condition when: 1) required by law, statute, rule or regulation, or 2) DEQ can provide scientifically-based evidence clearly linking the permittee's operation to the water quality parameter(s) of concern. If DEQ insists that the environmental information is truly needed in the interest of public health or environmental protection, and DEQ lacks the resources to obtain this information, then the DEQ should request industries' support and participation in data collection.

Discussion, continued:

To make the most of limited environmental dollars and to achieve real improvements in pollution control, watershed protection and other goals, DEQ should incorporate risk-based decisionmaking into the permitting program. Such an approach could include a risk-assessment or cost-benefit analysis component, a method comparing the projected environmental risk for taking no action against the overall cost for performing the action (for example, the Oregon Recycled Lands Act).

Our intent here is not to sacrifice our environmental heritage for the sake of economic profit today, but to eliminate costly and excessive monitoring, testing, reporting, and research that provide no significant environmental benefit.

Recommendations for immediate attention--DEQ should:

- A. Reduce monitoring requirements during the permit term if facility consistently achieves compliance with permit conditions (i.e demonstrates satisfactory compliance with discharge limits over a two year period); or reduce monitoring and sampling frequencies at permit renewal for sources demonstrating significant compliance during the previous permit term.
- B. If DEQ requires special reports or studies, make sure the information is reviewed in a timely manner, and that the information will be used. When a report is received, DEQ should within 15 days send a confirmation letter acknowledging receipt, with an indication about who will review, how long review will take, what will be done with the information. The DEQ evaluation should be written and made available to the permittee.
- C. Focus more intensive monitoring during the period of greatest risk (i.e. initiation of operation of a new or substantially renovated facility), then reduce requirements once facility has successfully established operational and performance levels.
- D. To reduce the need for frequent permit modifications, establish automatic triggers or other phased approaches in the permit conditions to reduce the monitoring schedule at certain intervals, provided consistent compliance is achieved.
- E. Implement "green permits" program, or otherwise develop criteria and rewards for "green" behavior (See Section II, Topic B, Pollution Prevention).
- F. Design a decision methodology to aid DEQ in determining the types of studies are really needed in order to ensure compliance. Form a Permit Technical Review committee or other mechanisms to review and resolve disputes.

Benefits:

- Reduces cost of compliance for permittees
- Fewer reports required of permittees means fewer reports for staff to review, thus reducing DEQ oversight costs.
- Improves DEQ credibility with industry
- Promotes coordination and partnerships between DEQ and industry
- Provides clean permits, with conditions clearly relevant to facility performance capabilities
- Allows for smoother negotiation of permit schedules and conditions, with less likelihood of appeal.
- Better delineates the information that is legally necessary for permit compliance from that which is desirable or interesting to know.

Constraints:

- As with all government paperwork reduction or redistribution efforts, the public must be assured that the result is not reduced environmental protection.
- May result in extra paperwork for DEQ staff to develop separate orders or agreements for special reports or studies.
- Requires more up-front staff time in negotiating permit schedules and conditions
- May require more DEQ resources to conduct ambient studies and otherwise collect data for determining ambient conditions.

Long-term DEQ objectives:

- A. Design criteria for performing risk assessments and cost benefit analyses in environmental decisionmaking, rulemaking and permitting actions.
- B. Special studies (like TMDLs, ambient conditions, dissolved oxygen) need to be comprehensive and include non-point sources.
- C. Develop administrative methods to include traditional non-point sources (i.e. agricultural, forestry, municipal storm water, etc.) in special studies.
- D. Develop statewide list of needed studies (i.e. dilution zone, biomonitoring) and "nice to have" studies (ambient, DO, etc.) and seek voluntary industry participation.

Industrial Wastewater Permit Advisory Committee

Section I, Topic C: **Management of water quality data**

Discussion:

Good, well-managed, accessible, water quality data are a valuable tool to help both DEQ and industry achieve environmental goals. The information age has spawned a vast sea of information sources for technical data, legal information, business and financial information. The DEQ needs to focus on bringing itself into the information age by developing and compiling a comprehensive water quality database.

Industry has many untapped opportunities for government information, and expertise to develop database management approaches. Water quality information is also maintained by other natural resource agencies, at all levels of government.

Recommendations for immediate attention--DEQ should:

- A. Coordinate efforts to compile information with industry and with other natural resource agencies (federal, state, regional, and local) to develop a comprehensive database for water quality data
- B. Allow sources to submit data (such as DMRs) electronically (via disk or modem)
- C. Investigate using data from the Willamette River study as a prototype for a water quality database.



Benefits:

- Establishes a better coordinated database for in-state receiving streams, which will lead to better overall understanding of what's out there.
- More accessible database, incorporating collective experience of a variety of information providers.
- Reduces redundancy in data collection
- Reduces administrative costs to both the regulators and the regulated community
- Provides industry with more certainty about data quality, thus provides opportunity to sustain productivity over longer period.

Constraints:

- Information security
- Data incompatibility
- Differing methods for collecting, analyzing and presenting data
- Less control over data quality
- Costs for developing, researching, and compiling compatible databases.

Long-Term DEQ objectives:

- A. Define water quality strategies and objectives with a whole basin approach, and manage data on a basin or watershed basis. Integrate permitting with water quality planning.
- B. Create an integrated database that provides information useful for measuring performance by industry, sector, and facility and for devising long-term multi-media pollution prevention/reduction strategies.
- C. Establish an automated permit information bulletin board to serve as a single source of information for regulated industrial and domestic dischargers. Information could include federal and state environmental permitting requirements, telephone numbers and names to contact for more assistance.

Industrial Wastewater Permit Advisory Committee

Section I, Topic D: **Groundwater**

Discussion:

Both DEQ and industry see a need for consistency in the application of regulatory requirements for groundwater protection; but with flexibility to recognize the varied hydrogeology of the state. A regional or basin specific approach to groundwater management may be a more effective method for achieving groundwater protection goals.

Industry has experienced many inconsistencies in the way DEQ applies and interprets groundwater requirements between DEQ programs (solid waste, hazardous waste, voluntary clean-up, water quality) and among regions. Also, there are no clear timeframes for settling groundwater issues encountered in the permitting process. For example, the permittee may be required by DEQ to provide certain information or documentation within a set timeframe, yet the permittee is uncertain when to expect DEQ's response to the submission.

The groundwater program rules contain no provisions for recognizing differences in groundwater characteristics. Some examples: agricultural return water is regulated in the same manner as all other groundwater; artificially created aquifers (such as those formed when surface water is piped in for cooling water, then land applied for disposal) are subject to the same requirements as natural aquifers; initial water-bearing zones are regulated as if they were deeper aquifers. Unlike the surfacewater rules, the groundwater rules contain no menu of designated beneficial uses. The rules do contain certain criteria for granting concentration limit variances (CLVs) to accommodate some situations; however, the CLV process has not been successfully implemented by DEQ for various reasons (such as limited technical staff, inconsistent guidance on when the CLV process can be used).

The DEQ expects groundwater rules to be strictly followed, yet the rules contain little specificity for conventional situations (i.e. sites not historically or currently impacted by hazardous waste contamination). This interpretation has led to confusion and misunderstandings between DEQ and industry about groundwater management and monitoring requirements. The rules--or DEQs application and interpretation of the rules--seem to go way beyond the intent of the statute. In some ways, the rules seem more a hinderance than a help to achieving groundwater protection goals.

Recommendations for immediate attention--DEQ should:

- A. Now that the groundwater protection program has some history, form a groundwater quality advisory committee to revise the rules and program implementation.
- B. Set reasonable timeframes for responding to and resolving permit or compliance-related groundwater management/protection issues (especially requests for concentration limit variances).
- C. Using industry expertise, develop groundwater management guidances specific to wastestream produced and treatment method employed; incorporate pollution reduction alternatives.
- D. Establish a routine periodic review process for the groundwater protection program, similar to that for water quality standards review.

### Benefits

- Improves responsiveness and clarifies expectations for industry and DEQ
- Aids in streamlining permitting process and improves source's ability to comply with requirements
- Allows for routine periodic examination of the effectiveness of the state's groundwater protection program
- Opportunity for DEQ and industry to form partnerships to gather data on groundwater, develop guidance materials and educational workshops, and promote pollution prevention.

### Constraints:

- May require reallocating or reassigning staff to perform tasks (forming and staffing advisory committee, developing industry or industry group specific guidances, conducting training for small businesses, etc), and to coordinate GW programs between regions, and between other DEQ programs.
- Would require good public relations effort to assure public and environmental groups that DEQ and industry are working together to achieve environmental goals.
- An relational transition would be necessary, from adversarial to cooperative, and from regulatory control to compliance assistance

### Long-Term DEQ Objectives:

Industrial Wastewater Permit Advisory Committee

Section I, Topic E: **Streamlining the Industrial Wastewater Permitting Program**

Discussion:

The DEQ protects human health and the environment through several approaches. One of these is the issuance of water quality permits that regulate the amounts of pollutants which may be discharged into waters of the state. The issuance of permits affects two groups: the public and the regulated community. The public, as primary beneficiary of water quality permits, can enjoy safe drinking water and other uses, as activities regulated by permits must not adversely affect water resources. The regulated community is the second permit audience. By complying with permit requirements, the regulated community actually provides environmental protection for the public.

The DEQ needs to recognize that these two groups comprise the permit program customer base, that this customer base needs to be served wisely and well. The DEQ should strive to process permits expeditiously, clearly communicate permit requirements, and make permit decisions within defined time frames to accommodate business planning.

Management and technical relationships between DEQ and industry need help to function together more productively, to streamline the permitting process, and to reduce the costs for permit issuance and compliance. Efforts should be made to: 1) improve timeliness in the issuance of permits; 2) reduce the paperwork burden on permittees; 3) facilitate meaningful public participation; 4) communicate clearly and effectively; 5) remove uncertainty from the permit issuance process; and 6) remove barriers to pollution prevention and innovative technologies, while maintaining high quality enforceable permits.

Public involvement processes need to be streamlined to reduce costs and save time. Public involvement and participation is an important component of the permitting program; however, this opportunity should not be viewed by special interest groups as a mechanism to unreasonably or unnecessarily delay completion of a permit-related transaction.

Finally, to measure the success of the water quality permitting program, there needs to be established some mechanisms to periodically evaluate program effectiveness and efficiency. The evaluation should include not only permit compliance and water quality improvements, but also measures for determining the level of satisfaction with the program from the perspective of the regulated community.

Recommendations for immediate attention--DEQ should:

- A. To improve timeliness of permit processing, adopt the goals shown on Table 1 (goals assume timely submission of application). The DEQ and the permit applicant should strive to work cooperatively and responsively together to achieve timely permit issuance/reissuance. If, during any phase of permit application processing and applicant review, any disputes should arise between DEQ and the applicant, then DEQ should establish a process to readily and equitably resolve them. The dispute resolution process could include a permit technical review panel, a water quality ombudsman or arbiter, or an independent coordinator appointed by the DEQ Director and responsible for achieving fair resolutions.
- B. Identify statutes and administrative rules that prevent flexibility in permitting, and suggest possible follow-up actions, including revising applicable rules and working with the legislature to amend appropriate statutes.
- C. Be more forceful in closing the public comment period, as required by state rules. Do not accept public comment or testimony after the close of the public comment period, unless there is some overriding or compelling reason (i.e. substantiated new information, previously undisclosed legal implications, etc.)
- D. Set specific criteria or a format for public comment in the public notice (i.e. input/comments should be substantiated by fact or evidence).
- E. Issue individual permits only where truly necessary to apply tailored or site specific requirements; use alternatives where possible, such as permit-by-rule.
- F. Provide written acknowledgment of any documentation submitted by sources within 15 days of receipt. The acknowledgement letter should also include an estimated time for review of the submitted document, along with the name(s) of DEQ contact persons.
- G. Combine permits where feasible; i.e. incorporate storm water requirements into the facility's individual permit. Each source would need to be evaluated to determine if combining permits makes sense.
- H. Have the option to hire consultants to draft permits and perform compliance monitoring;
- I. Revise permit application forms to make them more pertinent to Oregon and to the type of permit being requested.

Recommendations for immediate attention (continued)--DEQ should:

- M. Regionalization of DEQ has generally been good; however, consider recentralizing some functions, i.e. develop a centralized program for large industrial sources, with industrial permit specialists for complex permits.
- N. Publish and make available to the public and the regulated community a list of all DEQ guidance documents currently in effect (through hard copy or electronic means).
- O. Develop industrial wastewater permit writer's handbook. This manual could also provide a set of criteria or other factors for determining when discretion and judgment may be used.
- P. Design a formal mentoring program, or at least assign an experienced permit writer to review work of less experienced staff.
- Q. Establish an assistance program for small business (modelled after that of the Air Quality Division). (See also recommendations under Section I, Topic F, Small Businesses and DEQ).
- R. Work with the US Environmental Protection Agency to review NPDES permit processes, specifically to identify barriers and obstacles to improving and streamlining the permitting process.
- S. Develop a means to periodically evaluate the effectiveness of the permitting program.

### Benefits of Streamlining--

- Conserves DEQ resources
- Compliance is readily verifiable
- Public is assured of pollution protection since professional engineers will have to put their stamps on the certification, and certifications are subject to random audits
- Reduces time and resources spent on application processing and compliance reporting for permittees and DEQ
- Good public relations in a time when the public is demanding government responsiveness and accountability.
- Encourages more businesses to apply for permits if the processes is streamlined and simplified
- (The permit writers handbook) would: 1) be a useful tool for industry, the public, and DEQ; 2) provides more consistency in how permits are written; and 3) provides clear guidance on permit requirements.
- Facilitates business planning.
- Provides definite procedure that DEQ, industry and the public can understand and follow.
- Saves DEQ staff time and associated costs. Eventually, staff resources for point source permit processing and compliance assurance could be shifted to non-point sources (sources already recognized by DEQ as the largest contributors to water pollution.)

### Constraints to implementation:

- Public may perceive that DEQ is relinquishing control of the permitting program
- Requires commitment by DEQ management to reallocate DEQ staff resources to implement (i.e. revise forms, amend appropriate rules, develop mechanisms for electronic reporting, draft new general permits)



Constraints to implementation, continued:

- Unless carefully handled, the public could perceive that the DEQ was trying to limit or restrict public participation. The public must be assured that opportunity for public participation is not eliminated, but that opportunities for meaningful public input are limited to prescribed periods.

Long-term DEQ objectives:

- A. Extend permit term to ten years for good performers (requires change to state statute for WPCF, and to federal law and regulations for NPDES).
- B. Phase out DEQ engineering review of plans and specifications, and accept documents as submitted by qualified and registered engineers. Or maintain engineering review as an option, with associated fee for service. (NB: may require change to state statute).
- C. Develop a pilot program for consolidated public hearings (i.e. combine hearings for various permits into one hearing). Hearing notices should spell out deadlines and be clear that late filings of comments will not be accepted.
- D. Design a tiered approach to public participation; on issues of major interest have opportunities for public input through hearing, and on minor issues provide notice with shortened comment period without hearing. Alternatively, if a public hearing is routinely scheduled, but only limited public response is received (i.e, if less than 10 persons express concern) consider cancelling the hearing. If the hearing is cancelled, provide an opportunity for written comments.
- E. Allow sources to self-certify, evidenced by a professional engineer's stamp or signature of the legally responsible official, subject to random DEQ audit. (For NPDES permittees, the federal regulations would have to be changed to allow self-certification for Discharge Monitoring Reports.)

**Industrial Wastewater Permit Advisory Committee Topic Papers--TABLE 1**

**Goal for Issuance: New permits should be issued within 180 of acceptance of complete application, however:**

1. If not issued within 180 days of permit application, then the permit writer, WQ manager, and permit applicant meet to discuss reasons for delay and determine a schedule, and make arrangements for settling disputes.
2. If not issued within 270 days, all parties meet with appropriate Regional Administrator to discuss reasons for delay and determine a schedule.

**Goal for Modifications: Permit modifications (initiated by the permit holder) should be processed as follows:**

1. For modifications to minor industrial permits (no increased limits), within 60 days of acceptance of complete application.
2. For modifications to major industrial permits (no increased limits), within 90 days of acceptance of complete application.
3. For complex modifications (i.e. increased effluent limits), within 120 days of acceptance of complete application.

**Goal for Renewals: Permits should be renewed prior to expiration, however:**

1. If not renewed before expiration, the permit writer meets with the permittee and WQ regional manager to discuss issues, resolve disputes, and set schedule.
2. If not renewed within 90 days of expiration, the permit writer meets with the permittee and WQ regional manager, then submits the details of the delay (inc. disputes) to the Regional Administrator for review and decision.
3. If not renewed within 180 days of expiration, or by mutual consent of the regional WQ staff and the permittee, the regional WQ staff and Regional Administrator submits info to Director for review and resolution of issues.

**If, at any time during the permit issuance/reissuance process, disputes arise that cannot be readily negotiated at the regional office level, the permittee or DEQ may forward the matter to the Director, for arbitration by the water quality program permit review panel.**

Industrial Wastewater Permit Advisory Committee

**Section II: Program Coordination Issues**

## Industrial Wastewater Permit Advisory Committee

### Section II, Topic A: Enforcement and Conflict Resolution

#### Discussion:

Industry has found that DEQ's approach to enforcement and conflict resolution has been this: the regulated business is expected to know fully and understand completely all compliance responsibilities, with DEQ there to enforce quickly and vigorously in the event of a violation. This "stick" method of enforcement has not led to constructive or trusting relationships between industry and the DEQ.

To improve the industry/DEQ relationship and to achieve water quality compliance goals, the IW committee sees the need for a paradigm shift from this strong enforcement orientation to one of compliance assistance. Aggressive enforcement and stiff penalties may be appropriate in some instances; however, a more proactive approach is to redesign programs to better inform sources, to incorporate pollution prevention incentives, and to promote routine compliance. Businesses, especially small businesses, need help to steer through the vast and ever-changing sea of environmental regulations. Informational materials and education programs are needed to help businesses not only determine their compliance status, but also to provide ideas about pollution prevention and waste minimization. In the event of a violation, the enforcement action should be tempered with strong technical assistance and clear communication between DEQ and the violator.

A related problem concerns operators of publicly owned treatment works (POTWs) regarding enforcement of the operator's NPDES permit. Some operators believe that DEQ will vigorously enforce against the operator for failure to aggressively enforce the pre-treatment ordinance. The regulated community needs clear signals from DEQ and EPA on what circumstances trigger overfiling; if the POTW operator is uncertain, he/she may place too rigid limitations and restrictions on industrial users. The POTW operators need assurance that DEQ or EPA will allow the same latitude in working out cooperative solutions to permit violations as the regulators develop for themselves.

Environmental regulation is a mature enterprise. Both the regulating and regulated communities have grown more sophisticated. The vast majority of industrial wastewater dischargers are aware of their social and legal obligation to avoid water pollution, and seek a cooperative relationship with DEQ. The recommendations in this report are intended not to relax regulatory standards, but to improve compliance through proactive industry action, and flexible DEQ enforcement.

Recommendations for immediate attention--DEQ should:

- A. Adopt an ethic within DEQ of cooperative problem solving. Provide training to compliance inspectors and enforcement staff in communication, problem solving and conflict resolution.
- B. Work with businesses to develop easily readable and understandable fact sheets and handbook for small businesses about water quality regulations and best management practices. The focus should be on how to comply, not a regurgitation of the law or regulation. Update these documents periodically as needed to keep the information current.
- C. Adopt a DEQ policy in favor of self-policing, self-reporting and self-correction. The policy would feature more favorable regulatory treatment and enforcement discretion for violators engaged in proactive action (such as lessened fines or penalties for self-reported violations with self-generated corrective action plans).
- D. Sponsor or provide periodic training for both DEQ staff and the interested public (attorneys, environmental managers, and other compliance personnel) in negotiating agreements for permit, compliance and enforcement actions.
- E. Develop a DEQ guide to and make available all DEQ policy and procedure documents, management policy memos, guidance documents, inspection checklists, permit processing guidance, etc. Update the guide regularly. Provide an opportunity for interested parties to be placed on a mailing list to receive updates of new or revised documents. Provide access to this information on Internet.
- F. Adopt a DEQ policy on enforcement of NPDES permits held by POTWs with pretreatment programs, making clear conditions under which DEQ would act for failure to enforce industrial pretreatment requirements, and only proceed with enforcement when an end-of-pipe violation occurs at the municipal wastewater treatment facility.
- G. Include in the annual enforcement accomplishments report information about permit violations that were self-reported and immediately corrected by the discharger (or addressed with suitable corrective action plans).

Benefits of Implementation:

- Builds trust between industry and DEQ and thereby improves compliance.
- Encourages communication between the regulators and the regulated
- Provides clearer and more consistent guidance on expectations
- Allows businesses to self-audit, thus improving industry compliance and conserving DEQ enforcement resources

Constraints:

- Transition to new approach may require DEQ administration to provide training resources, and resources to develop and maintain informational materials. The front end costs may be high, but should be offset in the long term by reduction in costs for enforcement.
- Possible perception by some members of public that DEQ is too cozy with industry

Long-term DEQ objectives:

- A. Develop a mechanism to let the public know about the positive actions DEQ, businesses and industries are taking to achieve environmental goals.
- B. Publish as a companion piece to the annual enforcement accomplishments report a report on "good performers"--those businesses and industries that have implemented pollution prevention or waste reduction programs, that have consistently performed within permitted limits, that have gone beyond the regulatory requirements for controlling and abating pollution.

Industrial Wastewater Permit Advisory Committee

Section II, Topic B: **Pollution prevention, waste reduction, and resource conservation**

Discussion:

DEQ's own rules express a preference for pollution prevention as a means of achieving environmental protection goals, thus providing an institutional basis for DEQ to recognize proactive environmental behavior. The current industrial wastewater permitting program contains few incentives or enticements for pollution prevention, pollution reduction, waste minimization, and resource conservation.

Permittees would have incentive to pursue pollution prevention or reduction efforts if DEQ were to provide some rewards for this behavior. Such rewards could include: more expeditious reviews of permit transactions; reduction in reporting and monitoring requirements; extension of the permit expiration period; reduced annual compliance fees; reduced regulatory oversight; and permittee self-certification.

**Green Permits.** The recently completed feasibility study about "green permits" (*Recognizing Environmentally Proactive Sources*, prepared by Ross and Associates, July 31, 1995), notes that a multi-media recognition program (i.e. one that identifies and rewards cross-media "green" behavior in environmental management) is consistent with approaches being taken by many other environmental agencies to 1) improve overall efficiency through increased coordination between media programs, and 2) increase integration of pollution prevention into all program activities. The study further finds that this type of program would allow DEQ to simultaneously promote and encourage pollution prevention, reduce permittees' costs for compliance, and improve the state's overall water quality. The IW committee recommends that the DEQ further pursue the development of a multi-media recognition (green permits) program.

**Tax Credits.** In recent legislative action, the pollution control tax credit program was extended and revised. While the pollution control tax credit program is generally a good idea and should be continued, the process for obtaining the tax credit is, for many small businesses, too complex and not financially feasible. Also, the tax credit program focuses on facility improvements for pollution *control* (as required by permit), so pollution *prevention* improvements most likely are not eligible for tax credit.

Recommendations for immediate attention--DEQ should:

(See also, recommendations under Section I, Topic E, Streamlining the permitting program)

- A. Streamline and simplify the tax credit application process, and include pollution prevention alternatives.
- B. Build pollution prevention incentives into the permit fee structure (i.e. reduce annual compliance fees for sources which demonstrate success in preventing or significantly reducing water pollution beyond permit requirements).
- C. Implement a pilot program for a pollution prevention based water quality permit.
- D. Implement the recommendations of the Ross & Associates study on "green" permits, or otherwise investigate opportunities for recognizing "green" behavior for industrial dischargers..
- E. Expand the tax credit program to incorporate pollution prevention improvements as eligible for tax credit.
- F. Provide a series of fact sheets on each tax credit program, including descriptions of facilities, operations, or equipment which qualify for tax credits.

Benefits:

- Rewards and encourages proactive environmental behavior and development of new technology
- Shifts DEQ and industry environmental management strategies orientation from pollution control to pollution prevention
- Helps meet public demand for water quality protection
- Reduces costs to DEQ and industry for compliance

Constraints:

- Reduces annual revenues to DEQ; how will reduction be compensated?
- Increase in tax credits reduces tax revenues to the state.



Long-term DEQ objectives:

- A. Encourage and support industry in the development of environmental management systems (e.g. ISO 14000) by providing technical assistance, and "rewards" to companies that successfully integrate and implement environmental management systems (i.e. reduce reporting requirements, lengthen permit periods, reduce annual compliance fees, allow self-certification, etc.).
- B. Coordinate permit issuance or renewal for environmentally significant sources to encourage cross media pollution reduction strategies. Consider launching a pilot project for cross-media permitting (i.e. air and water) and forming cross-media teams of DEQ staff to review permits and identify cross-media transfer issues.

Industrial Wastewater Permit Advisory Committee

Section II, Topic C: **Training and Education for industrial wastewater permit writers**

Discussion:

The goal of environmental regulation is to foster compliance with established standards. A well crafted permit is a good resource for achieving regulatory compliance. Permit writers should be able to prepare clear, concise technically appropriate, and easily administered permits in a timely manner.

In the past, the primary method for training DEQ permit writers has seemingly been on-the-job, with training usually provided by the permit applicant. In a rapidly expanding technological environment, this approach to training is proving unsuccessful. For industry, the consequences of untrained or unprepared staff are misunderstandings, uncertainties, unnecessary delays in the issuance, modification or renewal of permits, and added cost. Well trained permit writers, who are fully equipped in terms of technical abilities and communication skills, will promote confidence and enhance compliance.

All staff involved in writing permits, and especially new staff, should receive regular training to make them more effective and efficient in fulfilling their job responsibilities. Staff training should include negotiation and problem solving skills. Staff should be given authority to exercise some discretion to work out effective solutions with industry in the field.

Recommendations for immediate attention--DEQ should:

(See also recommendations under Section II, Topic A, Enforcement and Conflict Resolution.)

- A. Develop an internal mentoring program wherein experienced staff are assigned new staff to train, oversee, and advise.
- B. Provide regularly scheduled seminars for new and experienced staff on various aspects of permit writing. Utilize associations and industry groups.
- C. Develop courses for new permit writers, either in-house, with Pacific Northwest Pollution Control Agencies, through the short-school program, or other available venue.
- D. Develop an internship program with industry to increase the permit writers' understanding about the facilities for which the permits are written.
- E. Coordinate with local colleges or universities to provide courses on permit writing and negotiation skills.
- F. Provide training in industrial wastewater treatment methods and equipment (or require participation in training opportunities) for compliance inspectors.
- G. Provide training on pollution prevention, and information on processes and process mapping as a tool to encourage multi-media pollution prevention

Benefits:

- Fosters better understanding of DEQ/industry relationships
- Aids in education both DEQ staff and regulated community
- Provides continuum and smoother transition when staff changes
- Creates more consistency in applying rules and policies, and hence improves DEQ's credibility.
- Enables the permit writer to better understand the critical parameters specific to a facility's site and operation, thereby increasing the probability that the permit will require testing and monitoring of relevant parameters.

Constraints:

- Increases costs for training and education
- Public perception that DEQ mission may be compromised by working closely with regulated community
- Staff turnover hard to control and manage
- Senior staff time spent on training is time not used for processing permits or monitoring compliance

Long-term DEQ objectives:

Investigate opportunities for short-term (i.e 6-month) job rotations for permit writers with regulated industry.

Industrial Wastewater Permit Advisory Committee

Section II, Topic D: **Interagency coordination on water quality permitting (Water Resources, DEQ, ODFW, DSL, etc.)**

Discussion:

A long-standing industry concern is consistency of regulatory treatment by and between state agencies, and the resulting predictability of regulatory action. The IW Committee encourages Director Marsh's work in the area of interagency coordination, as long as coordination efforts trickle down to staff level.

Recommendations for immediate attention--DEQ should:

- A. Provide opportunities for state technical staff to meet periodically, or cross-train, to better coordinate agencies' oversight activities.
- B. Establish an interagency clearinghouse or other appropriate method for assuring coordination between state natural resource agencies when developing water quality rules and policies.
- C. Negotiate more memoranda of understandings between agencies with overlapping or complementary jurisdiction, to clearly lay out which agency takes the lead when issues arise.
- D. Design a coordinated process among agencies to establish a lead agency for permitting (such as the 404 model). When a regulated source's operation requires more than one permit, consider establishing a lead permitting agency, with authority to write a consolidated permit. Other agencies (state, regional or local) would waive the need for additional permits as long as the consolidated permit includes language which otherwise meets their respective requirements.
- E. Set up industry sector teams, made up of technical staff from each natural resource agency, to coordinate permit processing and compliance assurance activities.

**Benefits:**

- makes regulatory obligations more predictable
- streamlines permitting process while assuring all requirements are met
- provides for information transfer between agencies
- provides for early identification of permitting issues
- sets the stage for better coordination and communication between agencies
- saves time and money for everyone

**Constraints:**

- may need statutory and rule changes to implement
- "turf battles" between agencies

**Long-term DEQ objectives:**

Industrial Wastewater Permit Advisory Committee

Section II, Topic E: **Small Businesses and DEQ**

Discussion:

As regulatory requirements are expanded and refined, more and more small businesses find themselves in the position of either needing to meet requirements for the first time, or find that their current method of operating fails (or eventually will fail) to meet requirements. The DEQ needs to recognize that many small and rural enterprises have limited financial and technical resources to keep current on environmental requirements.

Small businesses need clear and timely information about water quality permitting requirements, along with practical and cost-effective technical assistance to encourage compliance.

A small business assistance program needs to be established, similar to the DEQ Air Quality Small Business Assistance Program. The water quality assistance program for small business should include components which:

- \*provide information on water quality program requirements and technical issues, including compliance options such as using alternative or innovative technology,
- \*provide information on water pollution prevention and waste minimization,
- \*help small businesses determine what regulations apply to them and how to obtain the right permit, if needed,
- \*notify small businesses of their rights and obligations under the state and federal regulations,
- \*provide periodic training and outreach to small businesses concerns, to keep them informed about regulatory changes and new permitting requirements.
- \*provide information and technical assistance on the pollution control tax credit program, including guidance on application submission requirements.

Recommendations for immediate attention--DEQ should:

- A. Establish an office of small business assistance, or otherwise designate a core group of DEQ staff, to help small businesses better understand the permitting requirements. Provide a toll-free number for access to information and assistance.
- B. Educate permit writers and compliance inspectors about the complexities of operating a small business.
- C. Through the small business assistance program, provide information and technical assistance on tax credits.

(See also in Section I, Topic A, Permit Fee Structure; Section I, Topic B, Requirements for monitoring, reporting, etc.; Section I, Topic E, Streamlining; and Section II, Topic B, Pollution Prevention.)

Benefits:

- Will bring more small businesses into compliance with regulatory requirements.
- Encourage more businesses to contact DEQ for information about water quality permits.
- Fosters better relationships between DEQ and small business enterprises.
- By improving small business understanding of the tax credit program, and simplifying the application process for tax credits (or at least helping businesses through the process), provide economic incentives to meet regulatory requirements
- Encourages small businesses to seek innovative and alternative solutions to compliance problems.

Constraints:

- Unless DEQ could work within existing resources, would probably require legislative action to implement and fund
- Tax credit program may not be a cost effective alternative for some small businesses



Long-term DEQ objectives:

- A. Work with state financing agencies to set up a grant or low-interest loan program to financially assist small businesses in meeting regulatory requirements.
- B. Design a small business guide to water quality programs. Include information about how to comply with requirements, how to obtain tax credits, where to obtain information about innovative or alternative technology, and who to contact for more information. The guide should be easy to read and understand. Develop supplemental fact sheets for specific businesses or industry groups.
- C. Consider targeting technical assistance activities on those small businesses whose discharge causes the most water quality impact, then proactively provide outreach, education opportunities, publications, and compliance assistance to that audience.

| IW COMMITTEE RECOMMENDATIONS  | DEPARTMENT RESPONSE  |
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| I. Regulatory Cost Issues   |  |
| Section I, Topic A. Permit Fee Structure  |  |
| <p>A. Implement a time and cost accounting system, to assure that fees paid cover the costs directly associated with permit application processing and source monitoring and inspection.</p> <p>B. Allow applicants for new permits to pay an up front deposit rather than the full permit fee, then collect the remainder when the permit is issued.</p> <p>C. Reduce permit fees for facilities which do not directly discharge to surface waters, or which eliminate surface water discharges, provided the new discharge method adequately protects groundwater. The DEQ should investigate the possibility of creating a separate fee schedule for WPCF and NPDES permits.</p> | <p>The Department agrees that there is a need to implement a more detailed, automated time and cost accounting system, not only to support fees charged, but also to better manage budgets and revenues. In order to undertake this effort within existing resources, the best approach would be to expand the time tracking system currently used by the Department's laboratory. The Department intends to review the lab model and implement a similar system for tracking time and costs associated with the water quality permitting program.</p> <p>Estimated timeframe: currently underway, with estimated implementation by July 1997.</p> <p>The current rules in OAR 340-45 require that all permit processing fees be paid at the time of application, and compliance determination fees be paid in an annual lump sum, due in July of each year. Rather than change the rules to allow partial payment of fees, the Department preference would be to allow permit applicants and holders to pay fees by credit card. Payment by credit card is not presently accommodated in any of the Department's media programs, but the Department would be ready and willing to set up a pilot project for water quality programs to see if this approach could work, with the idea that the approach could be enlarged to encompass all media programs wherein fees or other payments are collected.</p> <p>Estimated timeframe: pilot project operational by May 1997.</p> <p>The Department agrees that there may be some inequities in the fee schedule relative to the size of the facility, the nature of the discharge, and the treatment method employed. However, a more detailed review of workload requirements is needed before it can be determined that WPCF permits require less staff work than NPDES permits. While WPCF permits are issued to</p> |

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| <p>D. Develop rules to create categories for discharges that provide environmental benefits, with reduced permit fees for individual or general permits. Some examples include discharges of groundwater to surface waters that serve to beneficially maintain or enhance instream flows, or replenish over allocated streams, or irrigating over larger land areas, thereby reducing the use of surface and ground water sources for crop irrigation.</p> <p>E. Allow some permit holders (such as startup businesses, small or medium size businesses on individual permits, or seasonal facilities) to pay annual compliance fees on an alternative payment schedule (for example, pro rated on a monthly or quarterly basis).</p> <p>F. As an incentive for moving beyond compliance, develop separate permit fees, or allow a percentage discount, for dischargers who reduce the volume and strength of their discharges beyond permit requirements</p> | <p>facilities which do not discharge to surface waters, most of these facilities do or may have impacts on groundwater, and the Department must monitor and inspect groundwater impacts. A fee reduction, or at least a fee less than that charged for NPDES permits, may be inappropriate. At this time, the Department has no resources to undertake a comparative workload analysis to determine if WPCF fees should be changed. If resources become available, the Department is willing to this. (See response to A, above.)</p> <p>The Department issues many general permits covering a wide variety of industrial operations and activities. A facility covered by an individual permit may be able to reduce its permit fees by modifying or reducing its discharge such that it qualifies for coverage by a general permit.</p> <p>The Department agrees that there may be circumstances wherein the wastewater discharged might seem to provide some environmental benefits; however, a detailed review would need to be made to ascertain if the discharge would truly result in net environmental gains. At this time, the Department does not have staff available to perform this kind of in-depth review and develop additional individual or general permit categories. The Department does have the option of writing consent orders to allow for discharges that otherwise are not covered by the normal permitting process. The cost for preparation of the order could be negotiated with the applicant facility, using the permit fee schedule as guidance.</p> <p>The Department's proposal to allow payment of fees by charge card should provide the flexibility needed to address this issue. (See response to A above).</p> <p>The Department is exploring ways to incorporate incentives for moving beyond compliance as a part of efforts to integrate pollution prevention and environmental management systems into the permitting program At this time,</p> |
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| <p>or irrigate over larger land areas, being careful to avoid disproportionate shifts of the costs of these reductions to other large volume dischargers.</p>  | <p>the Department is not prepared to reduce fees; however, as a part of development of the "green" permit project, various incentives will be incorporated including longer permit terms, less frequent reporting and monitoring, less regulatory oversight, public recognition of pollution prevention/waste minimization efforts, and more. The effect of these incentives should result in reduced compliance costs for the permit holder.</p> <p>Estimated timeframe: draft conceptual framework by December 1996.</p>  |
| <p>Section I, Topic B: Permit Requirements for Reporting, etc.</p>   |   |
| <p>A. Reduce monitoring requirements during the permit term if facility consistently achieves compliance with permit conditions (i.e. demonstrates satisfactory compliance with discharge limits over a two year period); or reduce monitoring and sampling frequencies at permit renewal for sources demonstrating significant compliance during the previous permit term.</p> <p>B. If DEQ requires special reports or studies, make sure the information is reviewed in a timely manner, and that the information will be used. When a report is received, DEQ should within 15 days send a confirmation letter acknowledging receipt, with an indication about who will review, how long review will take, what will be done with the information. The DEQ evaluation should be written and made available to the permittee.</p> | <p>The Department agrees that in some cases, reporting may be unnecessary, and that we should strive to reduce unnecessary reporting while at the same time maintaining a high level of environmental protection for the state. The EPA has provided guidance for performance-based reduction of NPDES permit monitoring frequencies (memo dated 4-19-96) for regulated facilities demonstrating a good record of performance and pollutant discharges at levels below permit requirements. The guidance may also be applied to pretreatment programs. We will be working to implement the guidance for NPDES facilities, and use the guidance as applicable to the state WPCF permitted facilities.</p> <p>Estimated timeframe: begin implementation of EPA policy by December, 1996.</p> <p>The Department agrees that we should be consistently more responsive to permittees submitting any special documentation as required in the permit. Department administration will provide written directives to all staff involved with permitting that any special reports or studies submitted to satisfy permit requirements should be acknowledged within 15 days of receipt, with information about who will be reviewing the document, and approximate time to complete the review.</p> <p>Estimated timeframe: provide policy directive to regions by December 1996.</p> |

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| <p>C. Focus more intensive monitoring during the period of greatest risk (i.e. initiation of operation of a new or substantially renovated facility), then reduce requirements once facility has successfully established operational and performance levels.</p> <p>D. To reduce the need for frequent permit modifications, establish automatic triggers or other phased approaches in the permit conditions to reduce the monitoring schedule at certain intervals, provided consistent compliance is achieved.</p> <p>E. Implement "green permits" program, or otherwise develop criteria and rewards for "green" behavior (See Section II, Topic B, Pollution Prevention).</p> <p>F. Design a decision methodology to aid DEQ in determining the types of studies are really needed in order to ensure compliance. Use a Permit Technical Review committee or other informal mechanisms to review and resolve disputes.</p> | <p>The Department strives to monitor facilities within the first year of operation, but staff limitations and competing priorities sometimes preclude our abilities to consistently focus monitoring on new facilities.</p> <p>The Department recognizes the need to reduce permit modifications whenever possible. Perhaps the best mechanism for achieving this is to prepare a high quality permit that is clearly understood by all parties. Beyond this, it is difficult to consider ways to incorporate automatic triggering mechanisms within the permit framework. For example, EPA regulations, 40 CFR Part 122, limit the ability to modify permits as a minor modification. Most monitoring requirement modifications require a major permit modification, e.g., dropping sampling parameters or reducing frequency. Although it might be possible to consider some automatic reductions in frequency, the result would be a very cumbersome permit. In addition, if a monitoring frequency were reduced, and then at a later date, violations occurred, there would have to be another triggering device to deal with the new situation, i.e., an enhanced monitoring frequency.</p> <p>(See response to Section I, Topic A, Recommendation F.)</p> <p>The Department recognizes that, in the past, some studies were required by the permit as a means to gather data rather than to ensure compliance with the permit. The Department commits to the following--in the future, any specific permit requirement for a study must be specifically related to the permit conditions or an associated permit requirement that is necessary to ensure compliance with the permit and/or to ensure that water quality standards are met. In other words, the Department commits to not "piggybacking" nice-to-</p> |
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|  | do studies as a permit requirement.  |
| Section I, Topic C: Management of Water Quality Data   |  |
| <p>A. Coordinate efforts to compile information with industry and with other natural resource agencies (federal, state, regional, and local) to develop a comprehensive database for water quality data</p> <p>B. Allow sources to submit data (such as DMRs) electronically (via disk or modem)</p> <p>C. Investigate using data from the Willamette River study as a prototype for a water quality database.</p> | <p>The Department agrees that the WQ Division's data management capabilities are inadequate to comprehensively handle the large quantity of water quality data generated and received by the DEQ. Efforts have been made to analyze data needs, and address immediate data problems; however, we need to undertake long-term strategic planning to develop a comprehensive, integrated, water quality database that effectively provides information on a watershed basis. Database system design and construction will need to occur in phases under current funding and staff levels. Additional staff resources will be required if the system is to be completed before the year 2000.</p> <p>Estimated timeframe: complete strategic planning by July 1998.</p> <p>The Department is looking for new ways to work with NPDES, WPCF, and General Permits to better manage water quality data. As a part of this effort, the Department is developing a computer program that would provide facilities with the option of electronically filing Discharge Monitoring Reports. The Discharge Monitoring System (DMS) will help shift the focus of permit compliance from violations toward pollution prevention; as treatment facilities electronically file DMRs, the database would provide early warnings about potential violations, and allow facilities to make adjustments to avoid problems. Once the DMS is developed, the Department will select a group of pilot facilities to test the system.</p> <p>Estimated timeframe: Implement DMS by May 1998.</p> <p>The Water Quality Division has completed reviewing all water quality and source related data, and recommendations have been made for establishing a</p> |

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|   | <p>data management system. No resources are available to implement the recommendations.</p>   |
| <p>Section I, Topic D: Groundwater</p>  |   |
| <p><b>A.</b> Now that the groundwater protection program has some history, form a groundwater quality advisory committee to revise the rules and program implementation.</p> <p><b>B.</b> Set reasonable timeframes for responding to and resolving permit or compliance-related groundwater management/protection issues (especially requests for concentration limit variances).</p> <p><b>C.</b> Using industry expertise, develop groundwater management guidances specific to wastestream produced and treatment method employed; incorporate pollution reduction alternatives.</p> <p><b>D.</b> Establish a routine periodic review process for the groundwater protection program, similar to that for water quality standards review.</p> | <p>The Department is willing to form a groundwater quality advisory committee, or a set of issue specific committees, to review the groundwater program. To date, staff limitations have precluded the establishment of any groundwater committees. Due to the current budget situation, vacancies in the groundwater section cannot be filled. If adequate resources are made available in the next biennium, then the Department can move forward with reviewing and revising the groundwater program.</p> <p>The Department agrees that groundwater management/protection issues need to be responded to in a more timely manner than in the past. However, as mentioned above, there are a number of groundwater vacancies that cannot be filled during the current biennium, so the Department must use existing resources to meet current demands. Specific timeframes for responsiveness should be considered within the framework of a major program review (see paragraph A above).</p> <p>The Groundwater Quality Section has recently completed its first major program guidance. This guidance will be updated in the future as resources are available. The Department commits to incorporating industry expertise pertinent to pollutant loadings and method of treatment during the next update process.</p> <p>Due to limited staff resources in the groundwater program, the Department cannot commit to routine scheduled reviews as are done for water quality standards. The standards review is extremely resource intensive and is driven</p> |

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|   | <p>by requirements of the federal Clean Water Act. As noted in paragraph A above the Department is willing to establish a review committee for a major program review in the next biennium, if resources are available.</p>  |
| <p>Section I, Topic E: Streamlining the Permit Process</p>  |  |
| <p>A. To improve timeliness of permit processing, adopt the goals shown on Table 1 (goals assume timely submission of application). The DEQ and the permit applicant should strive to work cooperatively and responsively together to achieve timely permit issuance/reissuance. If, during any phase of permit application processing and applicant review, any disputes should arise between DEQ and the applicant, then DEQ should establish a process to readily and equitably resolve them. The dispute resolution process could include a permit technical review panel, a water quality ombudsman or arbiter, or an independent coordinator appointed by the DEQ Director and responsible for achieving fair resolutions.</p> <p>B. Identify statutes and administrative rules that prevent flexibility in permitting, and suggest possible follow-up actions, including revising applicable rules and working with the legislature to amend appropriate statutes.</p> <p>C. Be more forceful in closing the public comment period, as required by state rules. Do not accept public comment or testimony after the close of the public comment period, unless there is some overriding or compelling reason (i.e. substantiated new information, previously undisclosed legal implications, etc.)</p> | <p>The Department agrees to adopt as goals the Table recommended by the IW committee (page A-28 of Attachment A). Further, the Department agrees to establish an in-house review process or other mechanisms for informally and expeditiously resolving permit disputes.</p> <p>Estimated timeframe: provide directives to staff by January 1997; establish in-house review process for permit dispute resolution by March 1997.</p> <p>The Department had formed a water quality rule advisory committee to review rules and make revisions as necessary to add clarity, remove errors, and include more flexibility. However, the work of the committee has been temporarily suspended because the staff person assigned to the committee is on medical leave. The work of the committee may be further postponed if staff must be shifted to other non-deficit programs.</p> <p>The Department agrees that improvements may be needed to better manage public notification and comments. State statutes require that, when an agency establishes a deadline for comment, the agency may not accept comment after the deadline unless the comment period is extended to all interested and affected parties.</p> |



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| <p>D. Set specific criteria or a format for public comment in the public notice (i.e. input/comments should be substantiated by fact or evidence).</p>   | <p>Public notices for permit hearings contain guidance and information about how to comment. We ask that comments be factual, substantive and germane, and provide us with new information possibly not considered in the permit evaluation process. The nature of the public process is to encourage open participation, and some commenters take this opportunity to introduce or address issues that may not seem relevant. The Department takes into account only that public comment pertinent and relevant to the permit issues at hand.</p>  |
| <p>E. Issue individual permits only where truly necessary to apply tailored or site specific requirements; use alternatives where possible, such as permit-by-rule.</p>  | <p>The Department strives to cover facilities with general permits, if possible, and use the more time intensive and costly individual permits only when the facility's treatment process or discharge cannot meet the requirements of a general permit. The Department has investigated the possibilities of permit-by-rule, for facilities having low or minimal environmental impacts. Analysis by the Attorney General's office determined that this would require statutory changes. A legislative concept to make permit-by-rule possible will be presented for the 1997 legislative session.</p> |
| <p>F. Provide written acknowledgment of documentation submitted by sources within 15 days of receipt. The acknowledgment letter should also include an estimated time for review of the submitted document, along with the name(s) of DEQ contact persons.</p> | <p>As stated above, the Department agrees that we need to be more consistently responsive to permittee's submissions. (See response in Section I, Topic B: Reporting requirements).</p>   |
| <p>G. Combine permits where feasible; i.e. incorporate storm water requirements into the facility's individual permit. Each source would need to be evaluated to determine if combining permits makes sense.</p>   | <p>The Department agrees that, in some cases, combining permits makes sense. We will strive to be more consistent in how the DEQ regional offices work with permit holders to combine permits where feasible, to help reduce paperwork and reporting burdens.</p> <p>Estimated timeframe: provide policy guidance to regions and implement by January 1997.</p>   |

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| <p><b>H.</b> Have the option to hire consultants to draft permits and perform compliance monitoring;</p>   | <p>The Department is willing to periodically review of opportunities for “privatizing” activities when it is cost effective to do so. The option for hiring consultants to draft permits and perform compliance monitoring will be reviewed when there is an overall agency review of potential for “privatizing” activities. Although it would be possible to use consultants to draft permits it is difficult to see how this would result in savings or more timely permits. The drafting of a permit is generally quite complex and requires substantial knowledge of the source, data pertinent to that source, and a complex permit evaluation report. Once all the required information is assembled, the actual “drafting” of the permit is not a difficult task.</p> |
| <p><b>I.</b> Revise permit application forms to make them easier to complete , and more pertinent to Oregon and to the type of permit being requested.</p>   | <p>The Department agrees that the current permit application forms are cumbersome, outdated, difficult to fill out, and otherwise in need of revisions to make them more user friendly.</p> <p>Estimated timeframe: Revise applications forms by July 1997.</p>   |
| <p><b>J.</b> Regionalization of DEQ has generally been good; however, consider recentralizing some functions, i.e. develop a centralized program for large industrial sources, with industrial permit specialists for complex permits.</p> | <p>The Water Quality Division and the three Regions are currently reviewing the water quality program structure, in light of current budget constraints. The intent of the review is look for more effective ways of utilizing limited staff resources, to evaluate what has worked well and to determine where additional changes are needed. Consideration is being given for redefining some headquarters functions along with consideration for more decentralization of programs to regional offices.</p> <p>Estimated timeframe: This review should be complete by January 1997.</p>  |
| <p><b>K.</b> Publish and make available to the public and the regulated community a list of all DEQ guidance documents currently in effect (through hard copy or electronic means).</p>  | <p>The Department agrees that it would desirable to have a current and continuously updated guide for agency publications and documents. Past efforts have been made to provide this kind of service, but this sort of labor intensive effort cannot be maintained within current staffing.</p>   |

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| <p>L. Develop industrial wastewater permit writer's handbook. This manual could also provide a set of criteria or other factors for determining when discretion and judgment may be used.</p> <p>M. Design a formal mentoring program, or at least assign an experienced permit writer to review work of less experienced staff.</p> | <p>If the Department were to compile and maintain a listing of all current documents, either electronically or in hard-copy, then some sort of fee would have to be collected to support additional resources. At this time, the Department is faced with other more pressing needs for staff effort (salmon recovery, TMDL development). In the future, the DEQ may find itself in a position to better provide information at this level of detail.</p> <p>The Department is committed to updating its current list of documents as this is an ongoing Department effort. If resources allow, the Department will provide updated lists are made available to the public and regulated community and that guidance documents will be made available on request.</p> <p>The Department agrees that an industrial permit writers handbook would be a useful tool to help both DEQ and industry in the permitting process; however we have no staff available to undertake this resource intensive effort. This project will be included in our evaluation for activities in the next biennium.</p> <p>The Department does not believe that a formal mentoring program is needed but agrees that highly trained and effective staff are a necessary requisite for a well-functioning water quality program. The recent reorganization, transfer of many positions, and the hiring of a large number of new staff, has resulted in some decline of technical expertise throughout the water quality program. There has been substantial improvements however, in recent months, of staff technical expertise. Many of the subprograms, e.g., industrial waste permitting, domestic permitting, stormwater permitting, biosolids and sludge management, and stormwater permitting have periodic training sessions in each region. In western region there is now an informal mentoring program wherein the lead domestic and industrial staff person reviews and provides comment on all proposed permit and compliance actions. In addition many of the subprograms are committed to quarterly technical seminars to further improve and enhance technical expertise. The Department is committed to continuing these activities.</p> |
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| <p>N. Establish an assistance program for small business (modeled after that of the Air Quality Division). (See also recommendations under Section I, Topic F, Small Businesses and DEQ).</p> <p>O. Work with the US Environmental Protection Agency to review NPDES permit processes, specifically to identify barriers and obstacles to improving and streamlining the permitting process.</p> <p>P. Develop a means to periodically evaluate the effectiveness of the permitting program.</p> | <p>(See response to Section II, Topic E: Small Business and DEQ)</p> <p>The Department agrees that efforts need to be made to coordinate permit program streamlining with EPA. Staff have already been working with the EPA Permit Improvement Team to coordinate streamlining efforts. Seattle Region 10 has assigned a staff person to work with DEQ staff to further review and refine the permitting program.</p> <p>Estimated timeframe: ongoing</p> <p>The Department is very committed to improving methods for evaluating program effectiveness, and intends to make this effort part of our 1997-99 strategy for improving water quality programs. (also see paragraph M above).</p> |
| <p>II. Program Coordination Issues</p>   |   |
| <p>Section II, Topic A: Enforcement and conflict resolution</p>  |   |
| <p>A. Adopt an ethic within DEQ of cooperative problem solving. Provide training to compliance inspectors and enforcement staff in communication, problem solving and conflict resolution.</p>   | <p>The Department is clearly committed to cooperative problem solving and this is a major priority committed to by the agency director, water quality and region administrators, and the water quality program managers. Monthly meetings are now held to address problems and seek ways to better effect cooperative problem solving both within the water quality program and with the regulated community. This is a very resource intensive commitment and will continue for the foreseeable future.</p>  |

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| <p><b>B.</b> Work with businesses to develop easily readable and understandable fact sheets and handbook for small businesses about water quality regulations and best management practices. The focus should be on how to comply, not a regurgitation of the law or regulation. Update these documents periodically as needed to keep the information current.</p>  | <p>(See response in Section II, Topic E, Small Business and DEQ)</p>   |
| <p><b>C.</b> Adopt a DEQ policy in favor of self-policing, self-reporting and self-correction. The policy would feature more favorable regulatory treatment and enforcement discretion for violators engaged in proactive action (such as lessened fines or penalties for self-reported violations with self-generated corrective action plans).</p>   | <p>The Department is willing to evaluate this recommendation to determine if it is practical, feasible, and legal. In addition to the self-auditing feature, there would still have to be some Department oversight. The Department would have to make sure that shifting compliance requirements to the permittee would not result in increased possibility for third party lawsuits.</p>   |
| <p><b>D.</b> Sponsor or provide periodic training for both DEQ staff and the interested public (attorneys, environmental managers, and other compliance personnel) in negotiating agreements for permit, compliance and enforcement actions.</p>   | <p>The Department recognizes that clear and well-thought-out negotiation is a skill that can be enhanced through specific training. The Department is willing to commit to requiring training in negotiation when and if such courses are available. Often various training centers have one or two day courses on improving negotiation skills.</p>   |
| <p><b>E.</b> Develop a DEQ guide to and make available all DEQ policy and procedure documents, management policy memos, guidance documents, inspection checklists, permit processing guidance, etc. Update the guide regularly. Provide an opportunity for interested parties to be placed on a mailing list to receive updates of new or revised documents. Provide access to this information on Internet.</p> | <p>The Department agrees that it would desirable to have a current and continuously updated guide for agency publications and documents. Past efforts have been made to provide this kind of service, but this sort of labor intensive effort cannot be maintained within current staffing. If the Department were to compile and maintain a listing of all current documents, either electronically or in hard-copy, then some sort of fee would have to be collected to support additional resources. At this time, the Department is faced with other more pressing needs for staff effort (salmon recovery, TMDL development). In the future, the DEQ may find itself in a position to better provide information at this level of detail.</p> |
| <p><b>F.</b> Adopt a DEQ policy on enforcement of NPDES permits held by</p>  | <p>The Department's pretreatment program results from EPA delegation, and</p>  |

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| <p>POTWs with pretreatment programs, making clear conditions under which DEQ would act for failure to enforce industrial pretreatment requirements, and only proceed with enforcement when an end-of-pipe violation occurs at the municipal wastewater treatment facility.</p> <p>G. Include in the annual enforcement accomplishments report information about permit violations that were self-reported and immediately corrected by the discharger (or addressed with suitable corrective action plans).</p> | <p>consequently it must be compatible with the requirements of 40 CFR Part 403. The EPA pretreatment program encompasses more than only requiring that permitted effluent limits be met. The pretreatment program also endeavors to ensure that the integrity of the municipal collection system be maintained and that the quality the biosolids be protected. To maintain program delegation DEQ's enforcement policy must adhere to the requirements of the federal program.</p> <p>The Department will review this recommendation to determine if it is feasible and practical. Currently no distinction is made between self-reported violations and other violations for the reason that this does not influence the resultant enforcement action. At a minimum separate logs would have to be maintained. Regarding actions that are immediately corrected, again no distinction is made between them and violations that require substantial time for correction. Often the amount of time needed for correction is dependent on the type of violation and whether or not the correction can be accomplished through better operation and maintenance of if new equipment is needed.</p> |
| <p>Section II, Topic B: Pollution Prevention</p>  |  |
| <p>A. Streamline and simplify the tax credit application process, and include pollution prevention alternatives.</p> <p>B. Build pollution prevention incentives into the permit fee structure (i.e. reduce annual compliance fees for sources which demonstrate success in preventing or significantly reducing water pollution beyond permit requirements).</p>   | <p>The Department agrees that the tax credit program, if continued, should move toward pollution prevention rather than pollution control. A tax credit approach with pollution prevention focus has been launched as a pilot program; however, the program is limited to air emissions (dry cleaners, solvent users, and chrome platers). After completion of the pilot project, the program implications will be evaluated for application to other pollution prevention activities.</p> <p>Estimated timeframe: AQ pilot completed by December, 1999</p> <p>(See response to Section I, Topic A, Permit Fee Structure).</p>   |

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| <p>C. Implement a pilot program for a pollution prevention based water quality permit.</p> <p>D. Implement the recommendations of the Ross &amp; Associates study on "green" permits, or otherwise investigate opportunities for recognizing "green" behavior for industrial dischargers..</p> <p>E. Expand the tax credit program to incorporate pollution prevention improvements as eligible for tax credit.</p> <p>F. Provide a series of fact sheets on each tax credit program, including descriptions of facilities, operations, or equipment which qualify for tax credits.</p> | <p>The Department has formed an internal, all-division, Pollution Prevention Core Committee to help integrate pollution prevention throughout agency programs, and to implement the recommendations of the Ross report. One of the committee's tasks is to develop a "green" permit, or otherwise define "green" behaviors, and then develop a permit or process through which a facility may have alternatives to include pollution prevention incentives or other environmental management options. The intent is to have the "green" permit/process include some economic incentives for going beyond permit requirements. After the framework for the "green" permit is designed, a pilot project will be selected to test the approach.</p> <p>(See response to A, above.)</p> <p>The water quality program is now preparing new rules for the tax credit program in response to legislative requirements. New and revised facts sheets will be prepared at the conclusion of the rule making process.</p> <p>Estimated time frame: within 60 days after adoption of revised tax credit rules.</p> |
| <p>Section II, Topic C: Training and Education for Permit Writers</p>   |   |
| <p>A. Develop an internal mentoring program wherein experienced staff are assigned new staff to train, oversee, and advise.</p> <p>B. Provide regularly scheduled seminars for new and experienced staff on various aspects of permit writing. Utilize associations and industry groups.</p>  | <p>See Section I, Topic E, paragraph M.</p> <p>As noted in Section I, Topic E, paragraph M, the water quality program now provides periodic training sessions covering many aspects of permit writing. In addition, the various permitting subprograms are now holding quarterly staff meeting to provide informal training and new information, and in addition western region is using experienced staff to review draft permits. In addition, the Department participates in short schools which emphasize domestic issues,</p>  |

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| <p>C. Develop courses for new permit writers, either in-house, with Pacific Northwest Pollution Control Agencies, through the short-school program, or other available venue.</p> <p>D. Develop an internship program with industry to increase the permit writers' understanding about the facilities for which the permits are written.</p> <p>E. Coordinate with local colleges or universities to provide courses on permit writing and negotiation skills.</p> <p>F. Provide training in industrial wastewater treatment methods and equipment (or require participation in training opportunities) for compliance inspectors.</p> | <p>but are now including some industrial topics as well. The Department agrees that inclusion of associations and industry groups at many of these training sessions and meetings would be helpful both to Department staff and to permit holders.</p> <p>Estimated timeframe: begin including staff from industry groups and associations at periodic training sessions in late autumn 1996.</p> <p>The Department does not have sufficient resources to develop permit writing courses. The Department is committed to sending permit writers to EPA training courses when they are presented. As noted in paragraph B above, some industrial topics are now being included at short school programs. The Department will continue to explore other venues, including colleges and universities, in an effort to utilize available training courses.</p> <p>The Department cannot make the necessary resource commitment to develop or participate in an internship program with industry or with domestic permittees. The Department is willing, however, to commitment staff to attending short courses or training seminars, etc., to the extent that industrial groups are willing provide this type of training..</p> <p>See paragraph C above.</p> <p>Substantive training in industrial wastewater treatment methods is generally handled through specific university engineering and related courses. The Department is not prepared to commit to this level of training. There are engineers employed by the Department who have had this level of training and they provide assistance and informal training to compliance inspectors (all senior level engineers at DEQ must be registered and must be competent to work at that level). Linn-Benton Community College periodically holds week</p> |
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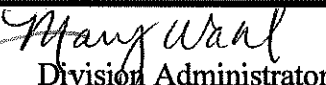
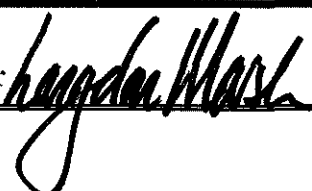

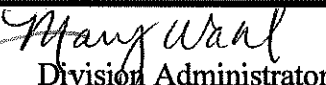
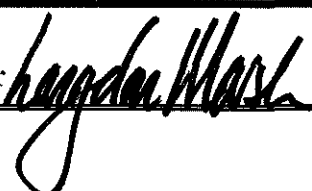

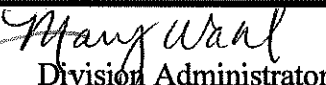
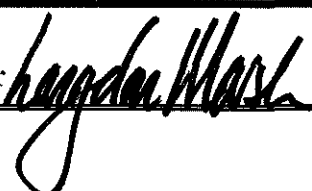
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| <p>G. Provide training on pollution prevention, and information on processes and process mapping as a tool to encourage multi-media pollution prevention</p>  | <p>long training courses in both industrial and domestic wastewater treatment. When these courses are available, the Department encourages permit writers and compliance inspectors to attend.</p> <p>The Department now has an active pollution prevention program, and is strongly committed to this approach. Since the program is still very much in the development stage, training has been limited to policy issues and various approaches to pollution prevention, i.e., there hasn't been much technical training. As the program develops over time, the level of training should become more detailed and technically oriented.</p>  |
| <p>Section II, Topic D: Interagency Coordination</p>  |   |
| <p>A. Provide opportunities for state technical staff to meet periodically, or cross-train, to better coordinate agencies' oversight activities.</p> <p>B. Establish an interagency clearinghouse or other appropriate method for assuring coordination between state natural resource agencies when developing water quality rules and policies.</p> | <p>Technical staff from the natural resource agencies now meet periodically on specific projects or activities of interest. Examples include meetings on nonpoint source issues and meetings on joint projects such as development of plans for groundwater management areas. The Department is willing to broaden this commitment to include regularly scheduled meetings on all oversight activities of mutual interest, but through the water quality program's new watershed management approach. The watershed approach requires close coordination between technical staff from several agencies, on a basin by basin basis.</p> <p>Estimated time frame: The Department intends to initiate the watershed approach in a few basins (Rogue, Umpqua, and Tillamook) beginning in autumn 1996.</p> <p>Department staff now coordinate with other natural resource agencies on topics of mutual interest, particularly with the Department of Fish and Wildlife, Department of Land Conservation and Development, Department of Agriculture, Oregon State Forestry Department, Department of Geology and Mineral Industries, State Health Division and Division of State Lands. In addition, all the natural resource agency directors meet periodically through the Governor's Office on topics of mutual interest.</p> |

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| <p>C. Negotiate more memoranda of understandings between agencies with overlapping or complementary jurisdiction, to clearly lay out which agency takes the lead when issues arise.</p>   | <p>The Department recognizes the need for a more formal arrangement with other natural resource agencies, specifically when rules or policies are prepared that may impact another agency and the regulated community. The Department is willing to explore with the natural resource agencies, potential mechanisms to formalize coordination.</p> <p>The Department already makes extensive use of MOUs/MOAs to help carry out environmental programs and shared agency responsibilities. The Department intends to continue and expand the use MOUs as appropriate and necessary, especially as we make the transition to a geographically-based, water quality-based approach to water quality management.</p> |
| <p>Section II, Topic E: Small Business and DEQ</p>  |  |
| <p>A. Establish an office of small business assistance, or otherwise designate a core group of DEQ staff, to help small businesses better understand the permitting requirements. Provide a toll-free number for access to information and assistance.</p> <p>B. Educate permit writers and compliance inspectors about the complexities of operating a small business.</p> <p>C. Through the small business assistance program, provide information and technical assistance on tax credits.</p> | <p>The Department agrees that a small business compliance assistance program for water quality issues would be a useful resource; however, no staff is currently available to perform this work. The Department has submitted in a legislative decision package a request for funding authority to manage and provide grants for organizations interested in operating small business compliance assistance programs.</p> <p>(See Section II, Topic C, paragraph D.)</p> <p>(See response to A.1.)</p>   |

# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

**Agenda Item "O"**  
**October 11, 1996 Meeting**

|  |   |   |  |
|--|---|---|--|
| <b>Title:</b><br>DEQ "Budget Note" Recommendations   |   |   |  |
| <b>Summary:</b><br>The Department is preparing a report to the 1997 Legislature which will include recommendations for legislative changes based on a review of existing solid waste legislation (requested by the 1995 Legislature in a note to the Department's budget). The Department would like policy guidance from the Commission on strategies it is considering for recommendation to the Legislature. This Information Item presents these strategies and the process followed to develop them.                                  |   |   |  |
| <b>Department Recommendation:</b><br>It is recommended that the Commission accept this report, discuss the matter, and provide advice and guidance to the Department as appropriate.   |   |   |  |
| <table style="width: 100%; border: none;"><tr><td style="width: 33%; vertical-align: bottom;"><br/>Report Author</td><td style="width: 33%; vertical-align: bottom;"><br/>Division Administrator</td><td style="width: 33%; vertical-align: bottom;"><br/>Director</td></tr></table> | <br>Report Author          | <br>Division Administrator | <br>Director |
| <br>Report Author   | <br>Division Administrator | <br>Director            |  |

State of Oregon  
Department of Environmental Quality

Memorandum

Date: September 25, 1996

**To:** Environmental Quality Commission  
**From:** Langdon Marsh, Director  
**Subject:** Agenda Item "O", October 11, 1996 EQC Meeting. DEQ "Budget Note"  
Recommendations

**Statement of Purpose**

The Department is preparing a report to the 1997 Legislature which will include recommendations for legislative and programmatic changes based on a review of existing solid waste legislation. The Department would like policy guidance from the Commission on strategies it is considering for recommendation to the Legislature.

**Background**

In response to an addendum to DEQ's 95-97 budget ("Budget Note") and to directions in 1995 Senate Bill 949<sup>1</sup>, the Department undertook a process to identify recommended changes in waste reduction and recycling legislation.

The Department took as overall goals in this process to:

1. Implement the vision in the 1995 State Integrated Resource & Solid Waste Management Plan
2. Achieve the state's recovery goal of 50% by the year 2000
3. Enhance waste prevention
4. Maximize efficiencies for the regulated community and DEQ

In fall and winter 1995 the Department solicited comments from interested persons to initially identify issues of concern for the Budget Note process. Staff then analyzed major issues and prepared several white papers for consideration by the Solid Waste Advisory Committee (SWAC) at its April, May, June and August 1996 meetings. Finally, DEQ developed a number of "strategies" for potential recommendation to the Legislature. Both the SWAC and interested members of the public have had the opportunity to review the initial strategies.

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<sup>1</sup> "The Department...shall review existing legislation and report to the Sixty-ninth Legislative Assembly on any recommended changes in waste reduction and recycling measurement, requirements and enforcement, including the department's present and potential costs of implementation. As part of the review and report, the department shall include nonregulatory alternatives to [rigid plastic container requirements] that provide for incentives for increased recycling." (1995 SB 949, Sec. 6)

The Department also contracted in the spring of 1996 for a survey of public attitudes and actions concerning solid waste disposal and recycling. Both the residential and commercial sectors were surveyed. Among other things, responses showed strong support for the state's 50% recovery goal by the year 2000. Results of the survey were taken into account in crafting the Department's recommendations.

Before the Department prepares its final report to the Legislature, we would like the advice and guidance of the Commission as to appropriate legislative changes.

### **Authority of the Commission with Respect to the Issue**

The Commission is the policy-making body for the Department. The Department's actions in solid waste management are subject to policy direction by the Commission (ORS 459.025).

### **Alternatives and Evaluation**

The Legislature particularly requested that DEQ investigate nonregulatory means of achieving state goals. As a result, the Department looked for incentives to achieve goals. Most incentives identified by the Department or the public involve providing funding (including tax credits) or removing requirements. Some opportunities were identified for adding flexibility to requirements.

Many of the changes supported by the public, local governments and the recycling community -- especially those concerning a more active DEQ role in providing education and technical assistance -- do not require statutory changes; DEQ already has the authority to implement these recommendations through changes in workplans. The programmatic changes will be brought to the Commission later in context of the 1997-99 budget.

Issue areas considered were:

1. The State's **50% recovery goal**: should it be changed?
2. **Local government programs** and the State recovery goal: how can these programs be enhanced?
3. **Waste prevention** and reuse: how can we move up the solid waste management hierarchy to avoid creating waste in the first place?
4. **Commercial recycling**: how can emphasis be shifted away from residential to the commercial sector?

5. **Funding strategies:** how can we foster recycling of hard-to-dispose-of or hard-to-recycle items?
6. **Recycling market development:** how should the State be involved?
7. **Maximizing efficiencies for the regulated community and DEQ:** what opportunities are there to do this?

Alternatives considered, the Department's evaluation and rationale for the recommendations are in Attachment A.

### **Summary of Public Input Opportunity**

In addition to holding numerous individual conversations with interested and affected persons, DEQ held a series of public meetings around the state in November and December 1995. Members of the public also attended the SWAC meetings. In June 1996 DEQ held a statewide teleconferenced "public meeting" in eight different locations to solicit feedback on the Department's draft proposals for legislative changes, and encouraged people to submit written comments as well.

Some themes emerged from this public involvement process:

1. Even though it is recognized that the state may not achieve its ambitious 50% recovery goal by the year 2000, there is very little support for postponing the date.
2. It is generally agreed that the 1995 watershed (county) recovery goals have been very useful in creating recycling programs and in achieving the significant progress made to date.
3. There is a great deal of support for intensifying efforts in waste prevention, by DEQ as well as by other public agencies and businesses and industries.
4. There is support for shifting recycling emphasis from the residential sector to the commercial sector.
5. There is little support for new mandates either to require new waste prevention initiatives or new recycling activities.
6. Still there is a lot of support for the concept of "advance recycling fees" on hard-to-dispose-of or hard-to-recycle items (such as refrigerators) as long as the fees are actually used to enhance recycling of those materials.

In developing its recommendations the Department has balanced the recycling community's concern that there be no backsliding from the progress we have already made, and a general sentiment that more flexibility and cooperation -- not more government mandates -- are what is needed to keep the momentum going.

## **Conclusions**

The Department's major recommendations for legislation follow in bold type (These items are not presently required):

I. Achieving the state recovery goal through:

A. Enhanced recovery from the Commercial sector

**Identify "commodities of interest"<sup>1</sup> (e.g. newspaper & cardboard).  
Establish for each commodity a recovery rate by the year 2000.  
If rate not met, mandatory recycling for the commodity goes into  
effect in 2002.**

B. Wasteshed recovery rates

**EQC set *advisory* wasteshed recovery rates for year 2000.  
Each wasteshed adopt its own recovery rate for year 2000.  
(Rate can be no lower than what the wasteshed actually achieved in  
1995)**

C. Enhancing local government recycling programs

**Require commercial recycling program in cities over 10,000 by 1/1/99.  
Local governments report procurement of recycled products.**

II. Enhancing waste prevention and reuse activities

**DEQ develop measurement tool to give credit for local government  
waste prevention/reuse activities.**

**EQC establish qualitative waste prevention goals for state.**

III. Shifting focus from the residential to the commercial sector

**(See I.A and I.C above)**

**Require recycling area in new multi-family housing.**

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<sup>1</sup> A commodity could be "of interest" for capturing additional amounts from the waste stream for such reasons as having a relatively good market but with considerable tonnage still being disposed of, because of its high resource value, or due to a relatively high potential for environmental risk if landfilled.

IV. Funding recycling of hard-to-dispose-of or hard-to-recycle items [*Tentative recommendation*; staff is still assessing how extensive the disposal/recycling problems are for these materials]

**Institute advance recovery fee on the following to fund recovery and management of these items:**

- **Refrigerators, freezers, air conditioners**
- **Household paints (high in volatile organic compounds)**
- **Motor oil and oil filters**

V. Promoting recycling market development

**Require public contracts for demolition to include provisions for recycling construction & demolition debris.**

**Require public contracts for landscaping to include provisions for composting & mulching.**

VI. Maximizing efficiencies

**Calculate Rigid Plastic Container Recycling Rate for Compliance Purposes on "as needed" basis rather than annually.**

**Consolidate and reduce required reporting by local governments and DEQ.**

The recommended changes are shown in greater detail (and categorized as to whether they are new initiatives or changes to allow flexibility) in Attachment B, "Budget Note" Statutory Recommendations.

The Department seeks Commission guidance on the recommended statutory changes.

### **Intended Future Actions**

A legislative concept is being drafted by Legislative Counsel including the legislative strategies. A final report on the Budget Note will be presented to the 1997 Legislature by January 1, 1997.

### **Department Recommendations**

It is recommended that the Commission accept this report, discuss the matter, and provide advice and guidance to the Department as appropriate.



**Attachments**

- A. Background Issue Paper, "Budget Note" Recommendations
- B. Statutory Recommendations, "Budget Note" Process

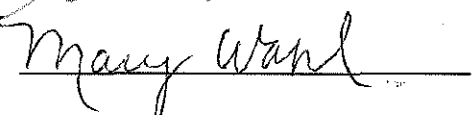
**Reference Documents (available upon request)**

- White Papers (SWAC meetings of April 4, 1996 and May 23, 1995)
- ORS 459
- ORS 459A
- DEQ Residential Public Opinion Survey on Waste Management
- DEQ Commercial Public Opinion Survey on Waste Management
- Estimation of Generation and Recovery for Eight Materials not Currently Counted in Oregon's Annual Recycling Survey

Approved:

Section:

Division:

Report Prepared By: D. Mueller-Crispin

Phone:(503) 229-5808

Date Prepared: September 24, 1996

Attachment A

**BACKGROUND ISSUE PAPER  
"BUDGET NOTE" RECOMMENDATIONS**

9/24/96

**ISSUE AREA 1:**

**ACHIEVE STATE RECOVERY GOAL:  
REAFFIRM STATE'S 50% RECOVERY GOAL**

*The goal of the State is to recover as least 50% from the waste stream by the year 2000. Individual wastesheds have interim recovery rates to be met for calendar year 1995. The State now has four years of experience working toward that goal.*

**I. Statutory Requirements**

*for Local Gov't:* "Wastesheds" (usually counties) are responsible for achieving specific material recovery rates (from 7 to 40 percent) for calendar year 1995. (ORS 459A.010(6))

Cities with over 4,000 population must provide an "opportunity to recycle", including at least monthly curbside collection of recyclables and a choice of several other recycling "program elements." (ORS 459A.005 and .010)

If a wasteshed fails to achieve its 1995 rate, cities over 4,000 within the wasteshed must provide two additional program elements by January 1, 1988. (ORS 459A.010(8))

*for DEQ:* Report biennially to the Legislature on waste disposed of per capita, the annual recovery rate achieved by each wasteshed and the statewide recovery rate, and the amount of each type of material recycled statewide. (ORS 459A.040 and ORS 459A.050(9))

**II. Background**

In 1991 Senate Bill 66, the Legislature adopted the statewide 50% recovery goal for the year 2000, and set 1995 wasteshed recovery rates to measure each wasteshed's progress towards achieving the statewide goal. Cities are responsible for most of the programmatic activities contributing towards achieving the recovery rate. If the 1995 wasteshed recovery rate is not met, cities over 4,000 population in the wasteshed must provide two more recycling program elements; this gives cities an incentive for the rate to be achieved.

State policy is clearly to achieve greater reduction, reuse and recycling. However, the recovery rates reflect only recycling and composting (and some energy recovery) activities and not waste prevention or reuse.

**III. Current Status**

**Waste Generation and Recovery.** The state recovery rate for municipal solid waste (MSW) has climbed steadily since it was first calculated in 1992, to 32.5% in 1994:

**Oregon State Recovery Rates  
and Per Capita MSW Generation, Disposal & Recovery**

| Year | State Recovery Rate | Per capita Waste Generation (lbs/yr) | Per Capita Waste Disposal (lbs/yr) | Per Capita Waste Recovery (lbs/yr) |
|------|---------------------|--------------------------------------|------------------------------------|------------------------------------|
| 1992 | 27.1%               | 2098                                 | 1519                               | 579                                |
| 1993 | 29.9%               | 2143                                 | 1501                               | 642                                |
| 1994 | 32.5%               | 2230                                 | 1504                               | 726                                |

Per capita recovery has also increased. However, the amount of MSW generated has also increased steadily, both in absolute and in per capita terms. Solid waste generation is closely linked to economic activity.

**Getting to 50%.** At the 1994 level of waste generation, nearly 600,000 more tons would need to be recovered to reach the 50% goal. This represents an increase of nearly 54% over the tonnage of materials actually recovered in 1994. In 1994 there were still significant amounts of potentially recyclable materials being disposed of. Following are the eight materials with the highest tonnages still being disposed of:

**Est. Amount of Selected Materials Disposed (1994)  
(Potentially Available for Recovery)**

| Material        | 000's tons    | lbs/per capita/yr |
|-----------------|---------------|-------------------|
| food waste      | 530.9         | 345               |
| wood            | 295.7         | 192               |
| low-grade paper | 261.3         | 170               |
| cardboard       | 217.5         | 141               |
| other metal     | 193.3         | 125               |
| yard debris     | 185.4         | 120               |
| newspaper       | 93.4          | 61                |
| textiles        | 92.6          | 60                |
| <b>TOTAL</b>    | <b>1870.1</b> |                   |

The above materials are good candidates to target to increase recovery rates. However they are available in different proportions in different garbage collection substreams. Commercial garbage haulers, drop boxes, and self-haul dispose of 75% of these materials, with only 25% being collected on residential routes. To be effective, recovery efforts would have to be expanded beyond the traditional residential curbside programs which only impact the residential collection stream.

**IV. Issues**

- What purpose should a state recovery goal serve?  
Oregon no longer has a shortage of landfill space; however it still makes sense to use existing landfill space wisely. Diversion of potentially useful materials from disposal -- i.e. using resources efficiently -- makes sense from an economic, environmental and energy-efficiency standpoint. Capturing organic materials for composting has environmental benefits (use in restoring topsoil and avoiding methane generation in landfills) as well as landfill management benefits.

A state recovery goal is necessary to keep public attention focused on the importance of continuing to recover materials from the wastestream, and as a shared vision to work

toward. Having an ambitious goal "out ahead of us" is more important than attaining (or not attaining) -- and then forgetting -- a goal.

- Is the 50% goal reasonable and achievable by the year 2000?

There are recyclable and compostable materials in the wastestream which could likely be recovered to reach the 50%. But program focus would have to be expanded from residential to other sectors to capture them, or other actions put into place. The level of effort necessary to attain 50% by the year 2000 may not be reasonable or feasible. Keeping the goal but changing the implementation date would allow more time to reach sectors not now well targeted (e.g. commercial). On the other hand, a "goal" is just that, and it may be more important to keep the familiar "50% by the year 2000" goal rather than send a negative message by moving the date back.
- Does the recovery rate as currently defined in statute capture the effects of activities toward which the State should be directing its solid waste management efforts?

The recovery rate does not measure waste prevention or reuse. It may be appropriate to consider other measurement tools which recognize advances made in waste prevention and reuse.

The recovery rate as currently defined is also indiscriminate; a ton of high-grade paper recovered is of no more "value" to the rate than a ton of yard debris recovered. However some materials clearly have a higher environmental "replacement value" than others. It might make sense from a resource efficiency standpoint to set target recovery rates for specific materials ("commodities of interest") based on criteria such as the environmental impact of replacing or disposing of the material and market capacity to absorb additional amounts of the material. If the rate were not met, an option could be to implement mandatory recycling of that material.
- Would measurement of waste generation or disposal on a *per capita* basis be a better way to track the State's progress?

Per capita **disposal** could be determined without calculating a recovery rate. However, a per capita MSW disposal measurement would not provide information on the State's progress in supporting the solid waste management hierarchy. As shown in the first table above, per capita disposal can decrease while waste generation rises if recovery also rises.

A per capita MSW **generation** measurement could indicate progress in waste prevention, but in and of itself does not provide information on recovery. It would be important to have a companion recovery goal to track progress on recovering materials from the wastestream. Generation measurements would need to be adjusted for changes in economic activity, and perhaps natural disasters, etc.

Another approach could be a per capita disposal goal for major recyclable materials: e.g. no more than 100 pounds of cardboard or 50 lbs. of newspaper per capita per year.

## V. Strategies

The Department has considered the following strategies to reaffirm the state recovery goal and add a measurement tool for waste prevention.

1. Keep the statewide recovery goal, but change the **achievement date**:
  - A. 50% recovery by the year 2005  
(nearly a 54% increase in materials recovered over 1994)

- B. 40% recovery by the year 2000  
(a 23% increase in materials recovered over 1994)
- 2. Keep the statewide recovery goal and date as they are, but add recovery rates for specific "commodities of interest" (e.g. cardboard and newsprint) by the year 2000. Recovery rates could be set in statute, by the EQC or by some other entity such as the Recycling Market Development Council.
- 3. Change statute to allow DEQ to develop a tool, through rulemaking, which can be used to give credit to local governments for instituting waste prevention and reuse programs.
  - A. DEQ would work with local governments to devise a measurement tool which recognizes advances made in waste prevention and reuse.

**VI. Recommendation/Rationale**

Strategies 2 and 3.

2. Public comment strongly supported not changing the date for achieving the 50% statewide recovery goal. To postpone the date was perceived as backsliding in support for recycling. The Department agrees that keeping the year 2000 date is important as a goal to aim for.

Establishing a recovery rate for commodities of interest would help shift emphasis to the generator of solid waste and to the commercial sector. It would support accountability, in that mandatory recycling would begin if the rate is not met.

3. Developing a tool to give credit to local governments for waste prevention and reuse programs would reinforce the solid waste management hierarchy, and be a way to reward local government programs making those efforts.

**ISSUE AREA 2:  
ACHIEVE STATE RECOVERY GOAL:  
LOCAL GOVERNMENT PROGRAM ENHANCEMENT**

**I. Statutory Requirements**

*for Local Gov't:* "Wastesheds" (usually counties) are responsible for achieving specific material recovery rates for calendar year 1995. (ORS 459A.010(6))

Cities with over 4,000 population must provide an "opportunity to recycle," including at least monthly curbside collection of recyclables. (ORS 459A.005)

Wastesheds (generally counties) must submit an annual report to DEQ on the opportunity to recycle programs within the county including amounts of material recovered. (ORS 459A.050)

*for DEQ:* Responsible for "certifying" that local government programs meet opportunity-to-recycle requirements. (ORS 459.305)

Must conduct an annual survey of collectors, processors and end users of secondary materials. The survey collects information on the type and weight of each recyclable material collected from each watershed. (ORS 459A.050)

Must conduct a waste composition study every two years. (ORS 459A.035)

## II. Background

**Recovery rates.** The 1991 Oregon Recycling Act (SB 66) established five categories of recovery rates (from 7 to 40 percent) for 1995 for individual watersheds. This grouping corresponds generally to the degree of urban or rural nature of the county and to the distance from recycling markets and major population centers.

**Community programs.** The 1983 Opportunity to Recycle Act required at least monthly curbside recycling collection in cities of 4,000 or more; recycling depots at solid waste disposal sites; and recycling education and promotion programs. SB 66 added requirements for cities and counties to choose several additional recycling options from eight "menu items," including providing:

- Recycling containers to residential garbage service customers
- On-route recycling collection weekly on the same day as garbage service
- An expanded recycling education and promotion program
- Recycling collection at multifamily housing units
- A yard debris recycling program
- More frequent recycling collection from businesses
- Incentive garbage collection rates to encourage waste reduction

## III. Current Status

### Watershed Recovery Rates:

- For 1994, 25 of the 35 watersheds were already meeting their 1995 recovery rate.
- Even if all watersheds met (but did not exceed) their 1995 rate, it would result in a statewide recovery rate of only 32%. Recovery levels must be higher than the 1995 watershed rates to reach the statewide 50% goal.
- There are differences in waste generation, disposal and recovery between large and small watersheds. Small watersheds both generate and recover much less waste **per capita** than do large watersheds. The six largest watersheds<sup>1</sup> generate nearly 80% of the state's municipal solid waste (MSW), while the 12 smallest watersheds generate less than 2% of its MSW.

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<sup>1</sup> Watersheds generating over 100,000 tons of MSW/yr: Douglas, Deschutes, Jackson, Marion and Lane Counties and Metro (the three counties in the Portland metropolitan region).

**Actual 1994: Thousands of Tons of MSW Generated, Disposed, Recovered  
Grouped by Size of Wasteshed<sup>2</sup>**

| Size of Wasteshed  | No. of waste-sheds | 1994 Tons generated (000) | Tons disposed (000) | Tons recovered (000) | Tonnage gen. as % of State total | Tonnage recov, % of St total | Per capita generation (lbs/yr) | Per capita recovery (lbs/yr) |
|--------------------|--------------------|---------------------------|---------------------|----------------------|----------------------------------|------------------------------|--------------------------------|------------------------------|
| Very small         | 12                 | 66.9                      | 56.9                | 10.1                 | 1.9%                             | 0.9%                         | 1,388                          | 209                          |
| Small              | 11                 | 286.0                     | 220.0               | 66.0                 | 8.3%                             | 5.9%                         | 1,524                          | 352                          |
| Medium             | 6                  | 410.3                     | 309.6               | 100.6                | 12.0%                            | 9.0%                         | 1,926                          | 473                          |
| Large              | 6                  | 2,668.5                   | 1,726.3             | 942.2                | 77.8%                            | 84.2%                        | 2,443                          | 863                          |
| <b>State Total</b> | <b>35</b>          | <b>3,431.6</b>            | <b>2,312.7</b>      | <b>1,138.9</b>       | <b>100%</b>                      | <b>100%</b>                  | <b>2,230</b>                   | <b>726</b>                   |

**Local Recycling Programs:**

- All cities over 4,000 population are implementing at least the minimum number of required menu items.
- In 1995, 47 percent of them were doing more than the required minimum.
- 95% were offering residential curbside collection. The types and quantity of materials collected curbside per household varies a lot from wasteshed to wasteshed.
- 24% had yard debris programs (all on the westside of the state). Yard debris programs have made a difference in the amount of yard debris disposed of. But yard debris remains a major component of waste being landfilled.
- Less than 10% offered, as a menu item "program measure," garbage rates designed as a waste reduction incentive.

**IV. Issues**

- What purpose should local wasteshed recovery rates serve?  
Recovery rates are meant to serve as wasteshed goals and allow measurement of progress towards achieving the State's goal. Even if not mandatory, local goals may serve a useful purpose as an end toward which effort is directed. The exercise of setting a recovery goal at the local level has value in itself.
- Are individual wasteshed recovery rates still necessary?  
Without the impetus of a recovery goal to keep the issue highlighted, local programs may not be supported at appropriate levels. Wasteshed recovery rates are necessary to help maintain high quality programs. It is appropriate to set wasteshed recovery goals that would result in achievement of a statewide goal.
- If local rates are necessary, do they need to be changed?  
For a "goal" to have meaning, it needs to exceed current performance; 70% of the wastesheds had already met their 1995 rate in 1994. Higher wasteshed rates will be necessary to reach the statewide 50% recovery goal.
- Should local program measures be changed or other measures added to encourage further progress in recovery?  
The most successful local programs tend to collect more categories of materials in both their residential and commercial programs, and to provide a variety of community education and promotional activities. In addition, the city government tends to provide

<sup>2</sup> Wastesheds grouped by tons of MSW generated annually: very small = <10,000 tons; small = 10-50,000; medium = 50-100,000; large = >100,000 tons.

active leadership in implementing the program. Program refocus to enhance those program aspects might enhance program performance. Technical assistance and closer cooperation and communication between DEQ and local governments might contribute to more successful programs.

**Procurement.** Public agencies are required to give preference to purchasing supplies made with recycled materials. Many public agencies do not have formal policies to implement this requirement. A reporting requirement on procurement could result in more compliance with existing law, and enhance markets for recycled materials.

**Mandatory recycling and landfill bans.** Thousands of tons of materials with steady market demand and materials capable of being composted continue to be landfilled every year. Making such materials subject to mandatory recycling or banning them from landfills can serve an educational function, and make them more available for recycling. This would also spread the responsibility for achieving higher recovery rates throughout the watershed and the state. See Issue Area 4, Commercial Recycling Enhancement for further discussion.

**Incentive garbage collection rates.** Incentive garbage rates are often in place where curbside recovery rates are high. Incentive rates are a non-regulatory way to use market forces to "give the right signals." As noted above, few cities have chosen to implement incentive garbage collection rates as a program measure. The current statutory requirements for this measure are quite prescriptive and do not provide for creative local solutions. The law could be changed to allow additional flexibility and thus encourage use of this measure.

See also Issue Area 4, Commercial Recycling Enhancement for discussion of new commercial recycling program in cities over 10,000 population.

## V. Strategies

The Department considered the following strategies to enhance local programs and thereby to contribute to the statewide recovery goal.

1. Set watershed rates for the year 2000. The EQC could set advisory watershed recovery rates which together would meet the statewide goal. Individual watersheds could either adopt the advisory rate or another rate (in any case the rate must be at least as high as the higher of: a) the statutory 1995 recovery rate, or b) the rate the watershed actually achieved in 1995). Cities and counties would cooperate in setting the local rate.
2. Require reporting on procurement of recycled supplies. Watershed data reporting to DEQ could include amounts of materials and supplies with recycled content purchased by public agencies in the watershed.
3. Add flexibility to the current "enhanced education" program measure so customer notification about recycling can be provided through different media and in appropriate frequencies for the local government's situation. Give option to provide either the education program prescribed in statute, or develop a local education plan.
4. Add flexibility to the current incentive garbage collection rate program measure to provide for more directly weight-based rates.



## VI. Recommendations/Rationale

All 4 strategies.

1. Having the watershed set its own recovery goal for the year 2000 has a number of benefits: the goal will be based on local circumstances; there will be community discussion on opportunities for additional recovery and what resources are available. DEQ can provide information and technical assistance to watersheds in goal development.
2. Public agencies are required by law to give a 5% cost preference to procuring recycled products. However this requirement may receive little local attention. Requiring reporting will help remind local governments of this requirement and help maintain a market for recycled materials.
3. Providing flexibility in the enhanced education program measure should help local governments use their limited resources more effectively by targeting those sectors where returns may be highest.
4. Providing more flexibility in the collection rate program measure should encourage more communities to use this non-regulatory way of encouraging waste reduction.

### **ISSUE AREA 3: ENHANCE WASTE PREVENTION**

*Waste prevention is seeking not to generate waste in the first place. It is using resources and materials as efficiently as possible in the manufacture of products and delivery of services. It is buying only what you need, and buying durable and repairable products.*

#### **I. Statutory Requirements**

*State policy:*

In the interest of public health, safety and welfare and in order to conserve energy and natural resources, the state of Oregon establishes a comprehensive program which seeks first to reduce the amount of solid waste generated and secondly to reuse material for the purpose for which it was originally intended before it is recycled, composted, energy recovered or disposed. (ORS 459.015)

Promote research, surveys and demonstration projects to aid in developing markets for reusable material first and then for recyclable material. (ORS 459.015)

Promote means of preventing or reducing at the source, materials which otherwise would constitute solid waste. (ORS 459.015)

*for DEQ:*

Promote and enhance waste reduction statewide, including data collection, performance measurement, education and promotion, market development, and demonstration projects. (ORS 459A.120)

## II. Background

Since 1983 Oregon's policy has been that waste generators should first seek not to generate waste in the first place (source reduction = waste prevention). When they cannot do that, they should reuse materials and products as much as possible before turning to recycling as the third priority in waste management options. However in practice Oregonians have put most of their resources and efforts into establishing successful recycling programs and safe disposal options for solid waste. None of the statutory tools currently provided relates to waste prevention.

Our non-renewable resources are becoming more and more scarce. Our economic base has to compete in a global economy. Preventing waste helps us do that more efficiently while reducing the pressure on natural resource consumption and the amount of waste that must be managed through recycling, composting and disposal.

## III. Current Status

The amount of waste generated per capita in Oregon continues to rise (from 5.7 pounds per person per day in 1992 to 6.1 pounds per person per day in 1994). The more waste generated, the more natural resources are consumed.

DEQ's Resource Efficiency Program is founded on the concept of a community-based program led by a local public-private partnership. It includes resource efficiency assessments for participating businesses and agencies, implementation of cost-effective measures, and providing community education. It has resulted in considerable cost savings and waste reduction through increased efficiencies.

## IV. Issues

Waste prevention is concerned with how we use raw materials, make products, deliver services and use products and services in order to generate less. It is important to establish policies that focus on all steps. Key issues include:

- Knowing and motivating your audience. The industrial/commercial sector will be motivated by different concerns than private consumers. The business sector is more likely to learn from its peers than from government.
- Educating for behavior change. Successful recycling programs changed people's behavior in managing waste. Many people do not understand how waste prevention differs from recycling. With successful waste prevention, people's behavior in making and using products would be changed -- upstream in the economy before materials have been identified as waste. Educating for behavior change will require a long-term educational investment.
- Measurement. Waste prevention should have its own goals and measurements to motivate progress and evaluate success. **Quantitative** measurement is difficult, other than at the micro (individual business) level. **Qualitative** measurements might be useful, such as percentage of Oregon businesses over a certain size which had conducted a waste prevention assessment. The current local watershed recovery rates do not take waste prevention into account; a mechanism to somehow "give credit" for waste prevention successes could help highlight such activities.

## V. Strategies

The Department has considered the following strategies to enhance waste prevention activities in the State.

1. Add a **waste prevention/reuse program menu component** to local government programs. Local governments would choose among the following types of activities and implement them by a date certain:
  - Waste prevention consumer education for the community.
  - Provide technical and monetary support to encourage public-private partnerships in waste prevention at the community level.
  - Waste prevention assessments and implement programs to achieve 10% reduction in all city agencies.
  - Reuse program: divert reusable goods at transfer station or landfill.
2. Require self-assessments by **public agencies** on waste prevention/resource efficiency (after DEQ pilot program).
3. Allow DEQ to develop a **measurement tool** to give credit to local governments for waste prevention/reuse activities.
4. Have EQC establish **qualitative waste prevention goals** for the state.

## VI. Recommendations/Rationale

Strategies 3 and 4.

The Department believes that fostering partnerships and encouraging cooperation may have more positive results than imposing new mandates, especially in the area of waste prevention. For instance, the local government may not always be the most appropriate nucleus around which to build a local waste prevention effort. The Department prefers to emphasize additional technical assistance and providing good models. A measurement tool to give credit for waste prevention activities will both highlight the importance of waste prevention, and reward many local governments for activities they are already carrying out. Likewise, state waste prevention goals should focus attention (and effort) on waste prevention activities.

## **ISSUE AREA 4: COMMERCIAL RECYCLING ENHANCEMENT**

*Commercial recycling is recycling of solid waste generated by businesses such as stores, offices, including manufacturing and industry offices, restaurants, schools, hospitals, and other non-manufacturing activities, but does not include solid waste from manufacturing activities.*

*Commercial recycling enhancement refers to increasing the quantity of materials recycled by commercial establishments*

### **I. Statutory Requirements**

*for Local Gov't:* Cities with over 4,000 population must provide an "opportunity to recycle," including "collection at least once a month of source separated recyclable material from collection service customers." (ORS 459A.005(1)) In addition, one recycling "program element" a city may choose is regular onsite collection of source separated principal recyclable materials from commercial solid waste generators. (ORS 459A.010(2)(f)). The "expanded education" program element includes educational requirements for commercial customers. (ORS 459A.010(2)(c)(A))

for Citizens:

No person shall dispose of, and no disposal site operator shall knowingly accept for disposal the following materials: discarded or abandoned vehicles, discarded large home or industrial appliances, used oil, tires, or lead-acid batteries. (ORS 459.247)

## II. Background

Basic "Opportunity to Recycle" legislation includes monthly on-site collection for all "collection service customers." In practice, however, the residential sector has tended to receive more programmatic attention than the commercial sector. For example, all but two of the eight recycling "program elements" (on the "menu" from which communities choose) address residential recycling. The recycling laws principally address collection of the materials most likely to be recycled from households. The Waste Prevention and Material Recovery objectives and strategies proposed in the state's Integrated Resource & Solid Waste Management Plan for 1995 - 2005 recognize the importance of business and industry contributions to reaching state goals.

Oregon has statewide landfill disposal bans on five materials: discarded or abandoned vehicles, discarded large appliances, used oil, tires and lead acid batteries.

## III. Current Status

Material from a broader portion of the waste stream than just the residential sector will need to be recovered if the state is to reach its 50% recovery goal. An increased emphasis on reduction and proper management of commercial wastes will be more cost-effective and likely more successful in achieving overall statewide goals than attempts to recover even more from the residential wastestream.

DEQ estimates that about 50% of municipal solid waste comes from commercial sources. There are still very significant quantities of materials potentially available for recovery in the commercial wastestream (basically wastestreams (2) and (3) below):

**Selected Recyclable Materials: Tons Disposed in 1994, from:**  
**(1) Residential Routes (2) Commercial Routes (3) Drop Boxes**

| Material:     | (1)            | (2)            | (3)            | (2+3)          |
|---------------|----------------|----------------|----------------|----------------|
| Cardboard     | 31,200         | 27,700         | 51,300         | 79,000         |
| Newspaper     | 22,100         | 13,400         | 7,700          | 21,100         |
| Yard Debris   | 60,900         | 6,200          | 17,100         | 23,300         |
| Food Waste    | 101,100        | 93,700         | 56,900         | 150,500        |
| <b>Total:</b> | <b>215,300</b> | <b>141,000</b> | <b>133,000</b> | <b>273,900</b> |

There is also considerable potential for increased recovery and reuse of construction and demolition (C&D) wastes such as wood, gypsum wallboard and asphalt shingles.

A number of local governments are looking to increase their commercial recycling program efforts, in order to reach higher wastestream recovery rates.

## IV. Issues

**1. Waste Self-Assessments.** Should waste self-assessments of recycling needs be required of commercial businesses and government agencies? The waste self-assessments would be done at the local level, but DEQ could provide information and technical assistance. If a waste audit

shows a need for new equipment in order to facilitate substantial waste reduction, information on available tax incentives could be offered.

Issues include:

- Require of all businesses, or only larger ones?
- Cost to businesses to do audit (time and staffing)
- Amount of technical assistance offered to business on how to conduct a waste audit
- Once businesses identify potentially recyclable materials, would they be required to implement recycling?

**2. Local Government Commercial Program.** Should larger cities (over 10,000 population) be required to design and implement a recycling program for commercial establishments as part of the opportunity to recycle? The program could be required to contain certain elements, but could be designed to suit local conditions.

**3. Mandatory Recycling/Disposal Bans.** Should some of the largest components of the waste stream (such as cardboard, newspaper and yard debris) be required to be recycled and/or banned from disposal sites? Either of these actions could motivate more source-separation of these materials, which enjoy steady market demand and are commonly recyclable from businesses. Grass clippings and yard debris could likewise be banned from disposal with solid waste, which would encourage waste prevention (through on-site composting, "grasscycling", and lawn alternatives) as well as source separation.

Issues associated with mandatory recycling or disposal bans include:

- Public education
- Length of advance notice before implementing
- Enforcement - hard, soft, or none?
- Markets for subject materials (existing, or need to be put in place?)
- At what point(s) should ban occur (generator, hauler, landfill)?
- Mandatory recycling or ban apply statewide, or to certain regions or counties?
- Quality of materials collected

## V. Strategies

The Department considered the following strategies to increase commercial recycling in the State.

**1. Require self-assessments in commercial and government establishments to identify recycling opportunities.**

- Implement a recycling program for three recyclable materials.

**2. Require local commercial recycling program in cities over 10,000 by a date certain.**

- Cities could design own program, but would need to include certain elements (e.g. education, waste audits, tracking results)

**3. Mandatory Recycling/Disposal Site Bans**

- Ban commercially-generated newspaper and cardboard from disposal sites statewide by a date certain. Commercial and government establishments would be prohibited from disposing of these materials, haulers would be prohibited from collecting them for disposal, and disposal sites would be prohibited from accepting them for disposal.
- Ban yard debris from disposal sites on the west side of the state by a date certain.
- Ban C&D waste from disposal sites in the six largest wastesheds (Deschutes, Douglas, Jackson, Lane, Marion, & Metro) by a date certain.

- Ban commercial food waste (after a feasibility study by DEQ showing positive results) from disposal sites in the six largest watershed by a date certain.
- Use potential mandatory recycling of certain materials ("commodities of interest") as a tool to encourage recovery of those materials. Mandatory source separation of those materials could be triggered if a target recovery rate for the year 2000 was not attained.

Note: Additional strategies to enhance commercial recycling are discussed under Issue Areas 1 ("Commodities of Interest") and 2, Local Government Programs.

## VI. Recommendations/Rationale

### Strategy 2.

As with waste prevention, the Department would like to emphasize partnering and cooperation/coordination and flexibility to enhance recovery in the commercial sector. Requiring a "one-size-fits-all" commercial recycling program statewide could dampen local creativity in establishing even more effective programs tailored to local situations. The recommendation is to require a commercial program in all cities over 10,000, but have the local community decide what that program will be, as happened in the City of Portland where there is much support for the new commercial recycling program.

Landfill bans have served to recover recyclable materials in a number of states. But two major concerns argue against them as a primary strategy: the question of enforcement, and the issue of increasing supply (through a ban) without necessarily increasing market demand. The Department feels potential mandatory recycling is an appropriate tool to encourage generator responsibility under its "commodity of interest" recommendation (Issue Area I).

## ISSUE AREA 5:

### FUNDING STRATEGIES: HARD-TO-DISPOSE-OF ITEMS

#### I. Statutory Requirements

##### *State policy:*

Per ton fees on actual tonnage received at a disposal site 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. (ORS 459A.110)

##### *for DEQ:*

Moneys in the Waste Tire Recycling Account are to be used by DEQ for programs and activities related to waste tire storage, removal or disposal. (ORS 459.775)

#### II. Background

Implementation of all the proposals presented in the budget note package (statutory and programmatic) will require the Department to either shift resources from current activities or to increase revenues in some manner.

The funding alternatives include increasing the existing funding source (per-ton solid waste disposal fee), or tapping new resources to cover legislative and programmatic changes.

### III. Current Status

- *Solid waste disposal fee.* The Department currently collects a \$0.81 per-ton solid waste disposal fee on all municipal solid waste. This fee was reduced from \$0.85 per ton on January 1, 1994. The fee is to fund household hazardous waste programs, activities to enhance waste reduction and recycling statewide, including data collection, performance measurement, education and promotion, market development and demonstration projects; groundwater monitoring and enforcement of groundwater protection at municipal solid waste disposal sites; solid waste planning activities by counties; and grants to local governments for recycling and solid waste planning. During the 1995-97 biennium it is anticipated that about \$5.7 million will be generated from this fee.
- *Unredeemed bottle deposits.* The Oregon bottle bill requires that consumers pay, at retail, a \$.05 deposit upon purchase of beer and carbonated beverages. The deposit is refunded to consumers when they return the empty containers to a retailer. Distributors charge this same fee to retailers, and refund it when retailers return the bottles to them. The containers are then sold for recycling. Over 90% of the bottles with deposits are returned to retailers. The remaining 7 to 10% are not returned and their deposits are not redeemed, amounting to about \$4.5 to 6.5 million annually which is retained by distributors. This amount may be reduced by out-of-state bottles (which didn't pay Oregon deposits) which are redeemed in Oregon. Currently there is no way to determine the amount of unredeemed deposits, as beverage distributors are not required to report this information. In some states unclaimed bottle deposits escheat to the state. For example, in Massachusetts \$12 million was returned to the state in 1995.
- *Waste Tire Recycling Account.* Retail tire dealers collected a \$1 fee on new replacement tires from 1988 through September 1992. Most of the fee went to the Waste Tire Recycling Account, used for waste tire cleanups and market enhancement for recycling waste tires. Currently there is about \$1.3 million in the Account, but no new funds are being generated. Interest from the Account goes into the State General Fund. There is an ongoing need for funds to help with cleanup of illegally stored waste tires. Markets to recycle scrap tires are still limited. If the interest on the Account were directed to the waste tire Account, waste tire activities could be carried out longer.
- *Advanced Recycling Fees.* An advanced recycling fee is an offshoot of another concept used in several states around the country called an "advanced disposal fee." Regardless of the name, it operates the same: essentially, it is a small fee placed on an item at the time of purchase, in advance of its entering the waste stream for ultimate recycling or disposal. States have instituted fees on particularly hard-to-recycle products such as motor oil or white goods (from which refrigerant must be removed before they can be recycled), or on packaging not being recycled at a sufficient rate. The funds generated are typically used to recycle the items with the fee through funding for household hazardous waste collection, grants to local governments, education and technical assistance.

### IV. Issues

The per-ton solid waste disposal fees currently assessed are sufficient for DEQ to carry on existing workload. Several items remain difficult to recycle in parts of Oregon, for example appliances and paint. Recent federal law requires certain refrigerant gases such as freon to be removed before appliances are recycled; removal may cost from \$5 to \$25 per appliance. This may encourage illegal disposal of these appliances. Liquid paints should not be landfilled, so they often make up a large percentage of materials collected at household hazardous waste collection events. Latex paint can be recycled and energy can be recovered from oil paint. However, both are relatively costly and limit the amount of funds available to dispose of more toxic household materials (such as pesticides). The State has a goal of recycling 70% of used motor lubricating oil by the year 2000, but there are numerous barriers to having effective collection opportunities available statewide. An advanced fee on these products could be used to develop more consistent and reliable recycling programs.

**V. Strategies**

The Department has considered the following strategies if additional resources are necessary to fund activities coming out of the Budget Note process.

1. Increased solid waste disposal fee: A minor increase in the solid waste disposal fee (not more than \$0.04/ton) could provide additional revenue for solid waste recycling and waste prevention programs. If 3.5 million tons of municipal solid waste are disposed of annually, this fee increase would generate an additional \$140,000 a year.
2. Unredeemed Bottle Deposits: Capturing unredeemed deposits might result in \$2 to 4 million a year. It would be appropriate that such funds be used to support recycling and waste prevention programs.
3. Waste Tire Recycling Account Interest: Currently moneys in the General Fund accrue interest at about 5% annually. The \$1.3 million in the Account generates about \$65,000 annually; this will decline over time as the principal is used. If this interest were made available to DEQ, the tire program could continue longer.
4. Advance Recovery Fees: Advance recovery fees could be considered to collect funds to further recycling of the following difficult-to-recycle materials and/or items creating solid waste management problems:

| Item, Material   | Fee used for:   |
|--|---|
| appliances (refrigerators, freezers, air conditioners) | recycling appliances (freon removal, etc)                                     |
| household paints with high VOC content                 | local household hazardous waste (HHW) events or collection/recycling programs |
| oil filters and motor oil                              | used oil & used oil filter recycling  |
| household pesticides & fertilizers                     | local HHW events, yard debris programs  |
| green glass  | local market development for glass  |
| polystyrene or PET                                     | polystyrene or PET recycling programs   |
| non-bottle rigid plastic containers                    | recycling programs for these plastics   |
| shrubs/trees   | yard debris programs  |
| tires  | market development for waste tires  |

**VI. Recommendations/Rationale**

Strategies 3, and (tentatively) 4 for appliances with refrigerants, household paints and oil filters/motor oil.

It is not clear that the Department's solid waste programs will need additional financial resources above the projected revenues from its current solid waste fee structure in order to implement activities stemming from the "Budget Note" recommendations for statutory changes. It may be possible to shift resources from current activities to accomplish these tasks, and that discussion should properly take place in the context of the Agency budget. Therefore no general funding increase (such as increasing the solid waste disposal fee) is recommended at this time.

However the cost of program activities connected with managing waste tires are not covered by waste tire permit fees. Use of interest on the Waste Tire Recycling Account could help fund those activities longer.



There was public support for "generator" responsibility concerning hard-to-manage materials. Improper disposal of appliances with refrigerants can cause releases of freon. Household paints can be recycled or recovered, but lack of dedicated funding allows only a small portion of them to be properly managed. A DEQ work group recommended in 1995 that an advance disposal fee be placed on motor oil and/or oil filters to foster proper management of these environmentally harmful materials. No such fee has yet been implemented. [Note: staff is continuing to research the extent of management problems for these items]

## **ISSUE AREA 6: RECYCLING MARKET DEVELOPMENT**

*Recycling market development is any private or public action or set of actions taken with the intention of improving the viability, profitability, stability, and/or long-term health of the recycling industry and particular operations or functions that exist within it, either through the improvement of material supply qualities and quantities in separation, collection, processing, and transporting activities, or in the manufacture and purchase of, or increased demand for, products made by secondary material end users.*

### **I. Statutory Requirements**

*State Policy:* Promote research, surveys and demonstration projects to aid in developing markets for reusable material first and then for recyclable material. (ORS 459.015)

*for DEQ:* Promote and enhance waste reduction statewide, including...market development...(ORS 459A.120) .

### **II. Background**

The success of recycling ultimately depends upon markets for recyclable materials diverted from the waste disposal stream. Collection, transportation and end-use manufacturing are all part of a complete recycling system. Over time Oregon has developed an elaborate and relatively stable recycling system which removes a large quantity of formerly useless material from the solid waste stream and puts it back into the economy as useful feedstock. The markets for recyclable material in Oregon have grown along with the recycling collection systems. The Department has been involved with recycling for over twenty years, including assistance in recycling market development. The Department has been actively involved in the collection and sharing of information on availability of markets for recyclable materials and the specifications for marketable material. The Department has surveyed recyclable material supply and end-use market demand. The Department was also a leader in the development of legislation to improve recycling markets by deregulating the transportation of recyclable materials and by including recycling in the pollution control facility tax credit program.

### III. Current Status

Oregon has mature, stable, markets for some recyclable materials such as metals and paper. However, there are still large quantities of material in the solid waste stream which can be separated and made available for recycling. Markets for some other recyclable commodities are not yet mature or adequate; they need further development before they can adequately serve Oregon needs. For example, glass does not have an adequate marketplace statewide, plastic does not have a stable local market for all common resin types, and the Oregon market for tires is not large enough to be either adequate or stable. Markets for some other recyclable materials such as organic wastes are very immature and are substantially lacking in necessary infrastructure or end-use product markets.

Currently the Department is only indirectly involved with recycling market development. Since the passage of Senate Bill 66 in 1991 the Department has deferred market development planning and evaluation to the Oregon Recycling Market Development Council. The Council's focus is limited by law to markets for paper, glass and plastic which they have reviewed and evaluated during the last five years. The Council sunsets in December 1997.

The US Environmental Protection Agency, the Council, Metro, DEQ and the Economic Development Department (EDD) jointly sponsored a Recycling Economic Development Advocate position at EDD. This program was similar to the successful recycling market development program operated by Metro in the Portland area. The 18-month EDD project demonstrated a strong demand from recyclers statewide for economic development assistance. Startup and expansion of recycling markets are limited by:

- Limited capital investment and operating funds;
- Limited access to supplies of recyclable material;
- Undeveloped markets for recycled products;
- Limited business startup and operating experience; and
- A lack of end-use markets for many recyclable materials.

In May 1996 market development service providers and other stakeholders met at an Oregon Recycling Market Development Summit to discuss and recommend future directions for recycling market development in Oregon. Some of the major issues discussed at that summit meeting are listed below.

### IV. Issues

- How much could an organized market development effort improve recycling collection and waste reduction efforts in Oregon?
- Should the State discontinue, continue or expand its recycling market development efforts? Should resources be redirected from other programs to recycling market development?
- What are the appropriate roles for the different agencies involved in recycling market development?
- How should market development tools such as grants, loans, tax credits, procurement standards, minimum recycled content requirements, disposal bans, and advanced disposal fees be used?
- What local and statewide market development programs should be implemented? Should the Recycling Economic Development Advocate Program be continued? Should the role and focus of the Council be continued or expanded?
- Should market development programs be focused on specific commodities?

## V. Strategies

Based on the discussions from the Department's strategic planning process, the Summit and follow-up meetings, the following general strategies for recycling market development have been considered.

1. Continue the Council's activities as an independent forum for policy review and information exchange for **another four years**.
2. Include in the Council an "**emerging markets**" component for materials other than the Council's existing three divisions (paper, glass and plastics).
3. A two-year short term and five-year medium term "**Oregon Recycling Market Development Workplan**" should be developed by major stakeholders. The short-term plan should include:
  - Establish an information clearinghouse function to collect and disseminate recycling market development information.
  - Identify available resources to help establish or expand recycling markets and feedstock supply systems for new/emerging recyclable commodities.
  - Develop the recycling markets infrastructure: collection, processing, transportation, manufacturing and distribution systems for recyclable materials and products made from recyclable materials.
  - Actively promote and participate in "Buy Recycled" programs to increase use of products made with recyclable materials.
4. Require **public contracts for demolition** to include provisions for recycling construction and demolition debris.
5. Require **public contracts for landscaping** to include provisions for composting or mulching.

## VI. Recommendations/Rationale

Strategies 4 and 5.

The findings and recommendations of the Summit are not yet complete. When they are complete, DEQ's recommendations could be affected. The requirements for public contracts will help stimulate markets for C&D materials and composting/mulching.

## **ISSUE AREA 7:**

### **MAXIMIZE EFFICIENCIES FOR THE REGULATED COMMUNITY AND DEQ**

#### **I. Statutory Requirements**

*for DEQ:* The budget note calls for the Department to look at administration of solid waste and where efficiencies can be found to streamline operations for the Department and to make requirements on the regulated community as easy to implement as possible.

#### **II. Background/Current Status**

In addition to various strategies identified under other "Issue Areas" above, the Department identified the following areas where efficiencies could be maximized.

Reporting. There are numerous reporting requirements in current statute for local governments and for DEQ:

- Local watershed must submit annual reports to DEQ on their local recycling programs, as well as data on the amount of materials recovered in the watershed. The Department needs the annual data to calculate recovery rates, but does not need the program reports annually.
- Metro is required to report to DEQ in different frequencies on different topics related to solid waste management and planning.
- DEQ is subject to duplicative reporting requirements to the Legislature on solid waste programs. One of these requirements is a biennial update on the state solid waste management plan. This update already includes most of the data and information required in other sections of the statute.

Rigid Plastic Container Rate for Compliance Purposes. "Rigid plastic containers" used in Oregon by container manufacturers and product manufacturers must meet certain requirements for recycling, recycled content, or reuse. The compliance path used for the past two years has been that the containers are "made of plastic that is recycled in Oregon at a rate of 25%." The Department is required to determine, annually, an estimated recycling rate for *rigid plastic containers* (RPCR) for the coming calendar year on which manufacturer compliance is then based. (ORS 459A.657) The Department is also required to calculate, annually, a recycling rate for *all* plastic as part of its recovery rate determinations. (ORS 459A.050 (9)(c)) The RPCR for 1996 is 33.3%.

#### **III. Issues/Strategies**

1. **Rigid Plastic Container Rate for Compliance Purposes (RPCR):** Calculate this rate on an "as-needed" basis rather than annually.
2. **Watershed reporting:** To avoid submitting unneeded information, require programmatic reporting only on an as-needed basis as determined by DEQ, while keeping the annual reporting requirement for recycling data needed for the recovery rate. Drop requirement to report recycling participation rates (for residential, commercial and multi-family customers).
3. **Metro reporting:** To maximize efficiencies for both agencies, consolidate all Metro reporting requirements into one annual report to DEQ.
4. **DEQ reporting:** To avoid redundancy, consolidate all required legislative reports into one, incorporating the information into the biennial update of the state solid waste plan.

#### **IV. Recommendations/Rationale**

##### **Strategies 1-4.**

1. DEQ's cost to calculate the RPCR is approximately \$90,000 per biennium plus an additional \$15,000 per biennium for a sub-task in the waste characterization study to gain additional detail on disposal of rigid plastic containers. Those costs would be saved every biennium during which there was no need to calculate that rate. "Need" could be determined by DEQ based on criteria such as level of the all-plastic recovery rate, current status of plastics recycling programs etc.
2. through 4. The reporting recommendations will still provide needed data and information but will eliminate unnecessary reports.

**Attachment B**

**STATUTORY RECOMMENDATIONS,  
"BUDGET NOTE" PROCESS**

9/24/96

| <b>STATUTORY CHANGES</b>   |   |
|--|---|
| <b>New Initiatives</b>   | <b>Changes Allowing Flexibility</b>   |
| <p><b>I. Achieve State Recovery Goal:</b><br/><b>A. COMMERCIAL Sector</b></p> <ul style="list-style-type: none"> <li>• "Commodities of Interest:"               <ul style="list-style-type: none"> <li>- EQC required to identify "commodities of interest"</li> <li>- These will include <b>newsprint &amp; cardboard</b></li> <li>- Establish <b>recovery rate</b> for each identified commodity for year 2000</li> <li>- EQC given authority to <b>add other commodities and rates</b>, and to alter dates for achievement of the rates</li> <li>- If rates not met, statewide <b>mandatory recycling</b> for those commodities starts in 2002</li> <li>- EQC given authority to alter <b>areas</b> of the state where mandatory recycling would apply</li> </ul> </li> </ul> | <p><b>I. Achieve State Recovery Goal:</b><br/><b>A. COMMERCIAL Sector</b></p> <p>(none)</p>   |
| <p><b>I. Achieve State Recovery Goal:</b></p> <p><b>B. WASTESHED Recovery Rates</b></p> <ul style="list-style-type: none"> <li>• Department set <i>advisory</i> wasteshed recovery rates for year 2000 by 1/1/98</li> <li>• New "<b>no backsliding</b>" provision on rates: wasteshed rate must be at least 1) the statutory rate for 1995; or 2) the rate the wasteshed actually achieved in 1995</li> </ul>  | <p><b>(I. Achieve State Recovery Goal:)</b></p> <p><b>B. WASTESHED Recovery Rates</b></p> <ul style="list-style-type: none"> <li>• Wastesheds adopt own recovery rates for year 2000 six months [<i>1 year?</i>] after DEQ advisory rate is set</li> <li>• Cities &amp; counties work together to adopt rate</li> <li>• Notify DEQ of choice of rate</li> </ul>   |
| <p><b>(I. Achieve State Recovery Goal:)</b><br/><b>C. Local Government PROGRAMS</b></p> <ul style="list-style-type: none"> <li>• <b>Commercial program (new):</b> require local commercial recycling program in all cities over 10,000 by 1/1/99</li> <li>• The commercial program should include but not be limited to:               <ul style="list-style-type: none"> <li>- Education/information (e.g. "buy recycled")</li> <li>- Waste audits</li> <li>- (Setting goals and?) Tracking results</li> <li>- Responsibilities of business; self-certify that they implemented</li> </ul> </li> <li>• Local governments report data to DEQ on <b>procurement</b> of recycled products on existing data report (DEQ provide forms)</li> </ul>                                   | <p><b>(I. Achieve State Recovery Goal:)</b><br/><b>C. Local Government PROGRAMS</b></p> <ul style="list-style-type: none"> <li>• "<b>Expanded Education</b>" program element:</li> <li>• add flexibility to existing customer recycling notification requirement (timing &amp; content)</li> <li>• option to do either (less!) prescriptive education program, or develop own education plan</li> </ul> <p><b>"Variable Collection Rate"</b> program element: add flexibility to provide more directly weight-based rates to comply with this program element; open option to commercial as well as residential rates</p> |
| <p><b>I. Waste Prevention/Reuse</b></p> <ul style="list-style-type: none"> <li>• DEQ develop <b>measurement tool</b> used to give credit for local</li> </ul>  | <p><b>II. Waste Prevention/Reuse</b></p> <ul style="list-style-type: none"> <li>• Authorize EQC to give credit for waste prevention &amp;</li> </ul>  |

**STATUTORY CHANGES**

| <b>New Initiatives</b>  | <b>Changes Allowing Flexibility</b>  |
|---|--|
| <p>government waste prevention/reuse activities</p> <ul style="list-style-type: none"> <li>EQC establish <b>qualitative waste prevention goals</b> for state</li> <li>Add <b>“waste prevention”</b> to various parts of statute to emphasize its priority in solid waste activities to be carried out by the Dept.</li> </ul>   | <p>reuse activities to local governments</p>   |
| <p><b>III. Focus on Commercial Sector</b></p> <ul style="list-style-type: none"> <li>Require <b>recycling area</b> in new multi-family housing in buildings with at least 50 dwelling units.</li> </ul>   | <p><b>III. Focus on Commercial Sector</b></p> <p>(none)</p>  |
| <p><b>IV. Funding for Hard-to-Dispose-of Items</b></p> <ul style="list-style-type: none"> <li><b>Waste tires:</b> allow interest on waste tire recycling account to be used by DEQ<br/>-Use for continued funding of waste tire program</li> <li>[<i>Tentative</i>] Advance recovery fee on <b>refrigerators, freezers, air conditioners</b><br/>- Proceeds used in grant program for management of these items</li> <li>[<i>Tentative</i>] Advance recovery fee on <b>household high VOC (e.g. oil) paints</b><br/>- Proceeds to enhance recovery of oil paints, recycle latex paints</li> <li>[<i>Tentative</i>] Advance recovery fee on <b>motor oil &amp; oil filters</b><br/>- Proceeds to foster recovery of used oil and filters (promotion, grants to collection programs, rural transportation costs, funding for management of contaminated loads)</li> </ul> | <p><b>IV. Funding for Hard-to-Dispose-of Items</b></p> <p>(none)</p>   |
| <p><b>V. Market Development</b></p> <ul style="list-style-type: none"> <li>Require <b>public contracts for demolition</b> to include provisions for recycling construction &amp; demolition debris</li> <li>Require <b>public contracts for landscaping</b> to include provisions for composting or mulching</li> </ul>   | <p><b>V. Market Development</b></p> <p>(none)</p>  |
| <p><b>VI. Maximize Efficiencies</b></p> <p>(none)</p>   | <p><b>VI. Maximize Efficiencies</b></p> <ul style="list-style-type: none"> <li>Require DEQ to calculate <b>Rigid Plastic Container Recycling Rate for Compliance Purposes</b> on “as needed” basis instead of annually.</li> <li>Local <b>recycling program reports</b> to DEQ no longer required annually, but on “as needed” basis as determined by the Department</li> <li>Drop requirement for wastesheds to report <b>recycling participation rates</b> (residential, commercial, multi-</li> </ul> |

**STATUTORY CHANGES**

| <b>New Initiatives</b> | <b>Changes Allowing Flexibility</b>  |
|------------------------|--|
|                        | family)<br><ul style="list-style-type: none"><li>• Consolidate Metro reports to DEQ; drop biennial report</li><li>• Consolidate DEQ reports to the Legislature (one report instead of several)</li></ul> |

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State of Oregon  
Department of Environmental Quality

Memorandum

Date: October 11, 1996

To: Environmental Quality Commissioners  
From: Langdon Marsh  
Subject: Director's Report

**Recent Court Cases of Interest**

- A federal district court for Oregon recently concluded that the certification requirement in Section 401 of the Clean Water Act applies to discharges from nonpoint as well as point source discharges.
- In a series of recent cases, the Ninth Circuit Court of Appeals substantially limited the extent to which DEQ administrative consent orders will shield a NPDES permittee from citizen suits.
- A court ruling on representational standing has prompted an environmental group representative to ask EPA to revoke DEQ's authority to administer clean air and clean water programs.
- An environmental group has sued EPA regarding DEQ's TMDL development program and asked the court to order several actions related to the TMDL process.

See attached document prepared by counsel for additional details.

**Coastal Salmon Restoration Initiative Update**

DEQ staff is undertaking a study to evaluate and rank municipal discharges by impact on salmonids beginning with the Umpqua, Rogue and Tillamook basins. The study will key on chlorine, temperature and dissolved oxygen impacts of municipal effluent on salmonid habitat. The information will be used to target facilities for aggressive marketing of the SRF program. DEQ staff will also work with EPA in several pilot projects to evaluate the use of poplar trees as an alternative to mechanical treatment or discharge to sensitive surface waters.

DEQ senior managers attended public meetings on the CSRI in Astoria, Tillamook, Newport, Coos Bay, Grants Pass, Gold Beach and Roseburg. Most meetings were sponsored by local county commissions. Public attendance averaged nearly 100 people. The final community briefing in the series will be October 17 at ODFW Headquarters in Portland. Governor Kitzhaber and National Marine Fisheries Service Regional Director Will Stelle will attend that session.

NMFS is scheduled to make a decision on listing of coastal coho salmon by October 25. There is still a possibility, however, that a final federal ruling on coho status may be delayed until early spring pending additional information about coho returns this fall.

## **Mine Tailings An Issue At Opal Creek**

Senator Hatfield's successful Opal Creek Wilderness rider has generated considerable news coverage. DEQ's Voluntary Cleanup Program has been working with the U.S. Forest Service in proposing an environmental cleanup at a former mining site in the area. The jointly proposed cleanup involves removing the mill tailings and debris to a lined and capped disposal site on adjacent property currently owned by The Friends of Opal Creek.

The cleanup project is generally mentioned in news coverage, often with incorrect information. Although the rock has been sitting there for 50 years, there is no indication it has leached any heavy metals. DEQ staff are confident the containment remedy would be protective. The remedy proposed for selection by DEQ was to be paid for by the Persis corporation. The City of Salem and several environmental groups argued that it would be better to remove the tailings from the area. The site is in the watershed for Salem's water supply, and the City remains concerned about the adequacy of the containment remedy.

Senator Hatfield has included a Congressional appropriation of \$750,000 to remove the mine tailings from the area. Persis is contributing \$750,000, and the Forest Service is contributing \$300,000, for a total of \$1.8 million. However, the cost estimates on removal--which include upgrading the roads to handle heavy truck traffic--go as high as \$2.5 million. Talks are scheduled with the Forest Service to evaluate DEQ's role in implementing tailings removal rather than the original capping proposal.

## **Lydia Taylor To Serve on Federal TMDL Committee**

Lydia Taylor has been appointed to serve as a member of the National EPA Advisory Committee on the Total Maximum Daily Load (TMDL) program. This committee will provide advice to EPA on ways to improve the effectiveness, efficiency, and pace of State and EPA TMDL programs under 303(d) of the Clean Water Act.

The committee will meet over the next 18 to 24 months and will focus on 1. Lists of impaired waters and priorities: monitoring, information, and assessments; 2. TMDL approval criteria and implementation; 3. Science, tools, training and support; and 4. schedules, pace and oversight. EPA pays all travel costs for committee members.

## **Environmental Performance Incentives Program**

DEQ's Pollution Prevention Core Committee is developing the framework of a program which would provide regulatory incentives for companies which demonstrate environmental performance beyond that which is required by law. We are still working out the details of how companies qualify for participation, and what types of rewards we would offer. We are proposing that in order to qualify to be part of the Environmental Performance Incentives program, we would require

- that an Environmental Management System be in place to assure compliance with mandated environmental requirements, plus
- some set of supplemental activities which demonstrate that the facility has taken a comprehensive look at their operation and will protect the environment beyond that which would be required by law, such as a strong pollution prevention program, and
- some mechanism for public communication about the facility's environmental performance.

In turn, we are considering both a recognition program and some regulatory relief, such as expedited permit processing, reduced monitoring and reporting frequencies, and enforcement discretion, as a way to reward the company for their environmental stewardship. We will be convening a workgroup to flesh out these ideas, soliciting pilot facilities early next year, and developing recommendations for turning pilot efforts into a full-scale incentive program.