

Part 2 of 2

OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 12/09/2004



State of Oregon
**Department of
Environmental
Quality**

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State of Oregon
Department of Environmental Quality

Memorandum

Date: November 24, 2004
To: Environmental Quality Commission
From: Stephanie Hallock, Director *S. Hallock*
Subject: Agenda Item E, Action Item: PGE Application for Certification of Independent Spent Fuel Storage Installation for Pollution Control Facility Tax Credit
December 9, 2004 EQC Meeting

Department Presentation In this agenda item, the Department presents Portland General Electric Company's (PGE) application for certification of four components of the Independent Spent Fuel Storage Installation (ISFSI) at the Trojan plant site in Rainier, Oregon. The Department presents the relevant history and the options available to the Commission in approving or denying PGE's application.

Background PGE has applied for certification of the ISFSI as a Pollution Control Facility. The ISFSI stores radioactive waste generated at Trojan during the plant's energy production years between 1975 and 1992. PGE applied for and the Commission granted pre-certification of the ISFSI.

Chronology of ISFSI Tax Credit

4/30/1998	PGE submits its application for pre-certification of the ISFSI (Application no. 5009)
9/29/2000	EQC grants preliminary certification for four of six major components of the ISFSI.
4/15/2001	EQC issues its "Findings of Fact, Conclusions of Law, and Final Order"
9/3/2003	PGE completes construction of the ISFSI
10/15/2003	PGE submits its Water Pollution Control Facility Tax Credit Application
12/2003 – 11/2004	DEQ gathers additional information
6/18/2004	PGE submits final cost documentation
10/22/2004	EQC directs the Department to present the options available to the EQC, including a full analysis of the preliminarily certified facility's technical qualifications for certification
11/19/2004	Applicant provides final written clarification, documenting that PGE does not realize a return on its investment in the ISFSI

Background
continued ...

Pre-Certification

PGE elected to submit an optional preliminary Pollution Control Facilities Application (No. 5009). On November 18, 1999, the Department presented a work session to the Commission on the application. There were several reasons for the work session, 1) the Commission had never approved a facility for the safe storage of spent nuclear fuel, 2) PGE's application was only the second filing under the pre-certification provisions of the 1995 law, and 3) PGE filed its application before the implementing rules for new pre-certification provisions (enacted in 1995) became effective. A transcript of the work session is presented in Attachment B.

The Commission considered pre-certification of the ISFSI as a pollution control facility at its September 29, 2000 meeting. In its staff report, the Department recommended that the Commission deny pre-certification based primarily on staff's conclusion that the installation did not satisfy ORS 468.155(1) in that it did not meet the:

1. Principal purpose test because neither the DEQ nor federal Environmental Protection Agency (EPA) required the claimed facility; or
2. Sole purpose test because the claimed facility did not have an exclusive purpose to prevent, control, or reduce a substantial quantity of air or water pollution.

A majority of the Commission concluded, however, that four of the six major components of the installation would qualify for pre-certification as a pollution control facility and granted pre-certification of those four components. The Commission pre-certified the 1) baskets, 2) concrete storage casks, 3) vacuum drying equipment, and 4) the welding system. The EQC denied certification of the concrete pad foundation for the casks and the transfer station. Attachment C is the staff report and Attachment D is the transcript of the September 29, 2000 EQC meeting. The EQC's March 15, 2001 Final Order is included as Attachment E.

Application for Final Certification

The applicant submitted its application for final certification of the pre-certified **four components** within the one-year filing period. Specifically, the four components are: 1) thirty-four Multi-Purpose Canisters, 2) thirty-four concrete casks, 3) the blowdown, moisture removal and helium backfill systems, and 4) a semi-automatic welding system.¹

The Commission must find that the facility satisfies ORS 468.170(4)(a) before

¹ PGE changed contractors from the time of the preliminary certification, therefore, the terminology used to describe the baskets and the vacuum drying equipment changed.

Criteria for Review

issuing a certification. Specifically, the Commission must find that the facility:

- (A) Was erected, constructed or installed in accordance with the requirements of ORS 468.165 (1);²
- (B) Is designed for, and is being operated or will operate in accordance with the requirements of ORS 468.155;³ and
- (C) Is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and 468B and rules thereunder.⁴

Department Review

The Department's analysis of PGE's application, for final certification is Attachment A. Although PGE installed the facility as pre-certified,⁵ the claimed facility does not satisfy the sole purpose test in ORS 468.155 as required by ORS 468.170(4)(a)(B) or the intents and purposes of DEQ's regulatory authorities as required by ORS 468.170(4)(a)(C). The Department's analysis also includes its recommendations of the costs allocable, as discussed in more detail below, if the Commission determines that the components qualify as pollution control facilities.

² Effective date of authorizing legislation

³ Definition of a pollution control facility

⁴ DEQ statutes and rules

⁵ The MPCs perform the same function as the baskets by confining spent nuclear fuel. The individual smaller systems (blowdown, moisture removal, and helium backfill systems) claimed on the final application replaced the pre-certified multi-functional vacuum drying equipment. The individual systems perform the same functions of draining, residual moisture removal, and helium backfill that the pre-certified vacuum drying system would have performed.

Key Issues

On October 22, 2004, the EQC directed the Department to present the available options for considering the final certification of application number 6605, in light of the Commission's earlier pre-certification. This directive included revisiting the technical qualifications of the claimed facility.

Commission's Authority To Make a Different Decision

As noted above, the Commission previously issued precertification of four components of the ISFSI under ORS 468.167. Here, because the ISFSI components were constructed as proposed in the application for precertification, the precertification is *prima facie* evidence that the components qualify as pollution control facilities. Further, PGE has not requested final certification of the other ISFSI components. Accordingly, the applicant is not required to produce evidence supporting the qualification of the facility and the Commission may elect to make no further determination with respect to the issue of qualification as a pollution control facility and move directly to determine the eligible costs and appropriate cost allocation for the qualified components.

ORS 468.167(4) provides, however, that the preliminary certification does not ensure that a facility will receive final certification. The Department, in consultation with legal counsel, interprets the statute to allow the Commission to reach a different determination with respect to final certification, even if the facility is built as proposed in the application for precertification. The statute does not limit the basis upon which the Commission may determine that a facility does not qualify for final certification. The determination could be made based on one of the following conditions:

1. New facts. There is some new factual information about customer rates earmarked for decommissioning Trojan included in Attachment A, page 10. The Department does not believe that this new information materially alters the facts for the claimed facility.

As discussed under "Substantial quantity" in the Department's Review Report (Attachment A), there is also some new factual information to the effect that the radiation levels adjacent to the former spent fuel pool were likely less than those from the ISFSI. The spent fuel pool would have provided a greater degree of cooling than the ISFSI. Both systems could provide an adequate level of cooling and both systems perform within regulatory limits.

2. A new statute or rule. There are new rules that were not effective when the precertification was issued. These changes do not appear to be material to the issue of whether the claimed facilities qualify as pollution control facilities.
3. Changes in interpretation or application of the existing statutes or rules. When determining whether the facility qualifies for final certification, the Commission may change the way it interpreted or applied the existing statutes or rules in the September 2000 preliminary certification.

Key Issues
continued ...

The EQC's Re-examination of Technical Qualifications

If the Commission decides to re-examine the technical qualifications of the claimed facility, it must determine whether the "sole purpose" of the components in question is to prevent, control or reduce water pollution by an approved method.

Sole Purpose: The Commission's rules clarify that the sole purpose must be the "exclusive purpose" and "only function" of the facility. Although the rules use the term "function," the rules do not expressly address whether the term "purpose" as it is used in ORS 468.155(1)(a)(B) refers to the objective physical function of the property and equipment, or the subjective motivations of the applicant in building or purchasing the property or equipment.

Although it is not entirely clear from the Final Order on PGE's application for pre-certification (Attachment E,) the Commission appears to have balanced the various benefits provided by the components and to have looked to the motivation of the Applicant in constructing the ISFSI. The Commission acknowledged that the function of the pre-certified facility as a whole is to provide temporary storage for the spent nuclear fuel until such time as it is shipped off site for permanent disposal. The Final Order, however, went on to find that the pollution control objective of the canisters (pre-certified as baskets); casks; blowdown, moisture removal, and helium backfill systems (pre-certified as vacuum drying system); and welding systems was the sole purpose for these components.

Substantial Quantity: The second part of the sole purpose test is a determination that the facility prevents, controls or reduces a *substantial quantity* of water pollution.

In the pre-certification decision, a majority of the Commission determined that this part of the test was satisfied because the ISFSI eliminates approximately 50 curies of radioactive gases and tritium from being released each year from the prior wet storage facility. Some or most of this material was expected to reach the Columbia River. In addition, the ISFSI eliminates the generation of some contaminated resin that was generated by the wet storage facility and reduces the risk of contamination from a catastrophic occurrence.

It is clear from the Final Order and the Commission discussions that a majority of the Commission concluded that pollution from radioactive materials is different from substances regulated by the Department and typically encountered in the pollution control tax credit program. Essentially, a majority of the Commission concluded that the elimination or control of any amount of such pollution meets the substantial quantity test.

Key Issues
continued ...

As set out in more detail in Attachment A, the Department concludes that reductions of this magnitude do not represent a “substantial quantity.” Specifically, the Department believes that 50 curies of radioactive gases and tritium is insignificant when considered in the context of the background levels naturally occurring. The Department believes the reduction in contaminated resin is not significant because the resins in the spent fuel pool were never discharged to any waters of the state and the potential for them to contaminate waters of the state was infinitesimal. Further, radiation levels adjacent to the spent fuel pool were likely less than those from the ISFSI. The spent fuel pool would have provided a greater degree of cooling than the ISFSI. Finally, the Department believes that the wet storage facility was designed to withstand any credible earthquake and thus there are no significant additional benefits.

Method of Pollution Control: The third part of the sole purpose test requires that the pollution prevention, control or reduction be accomplished by an approved method. Water pollution control must be accomplished by 1) disposing of or eliminating industrial waste; and 2) the use of a treatment works. Given the breadth of these defined terms, the components that were pre-certified appear to accomplish the level of control achieved by an approved method.

In addition to the sole purpose determination in ORS 468.155(1)(a), the Commission must determine that the ISFSI components satisfy ORS 468.170(4)(a)(C). In short, the pollution control facility must satisfy the intents and purposes of the statutes and rules administered by DEQ. The ISFSI and the spent nuclear materials stored in the ISFSI are not, however, regulated by DEQ. Such regulation is preempted by federal law. The NRC regulates such materials and has established the standards applicable to releases of spent radioactive material. To the extent that such materials, or the decommissioning of nuclear plants in general, are subject to any state regulation, it would be by the Oregon Department of Energy or the Oregon Department of Human Services.⁶

Thus, even if the subject pollution control facilities satisfy the “sole purpose test,” the Commission must further determine that they also satisfy ORS 468.170(4)(a)(C). The Commission’s discussion on September 29, 2000, presented in Attachment D, and its Final Order on the pre-certification (Attachment E) did not present findings that the claimed facility is necessary to meet the intents and purposes of Department statutes and rules as required in ORS 468.170(4)(a)(C).

⁶ To this end, the Commission should consider *Train v. Colorado PIRG*, 426 U.S. 1, 25 (1976), in which the U.S. Supreme Court held that the term “radioactive materials” as used in the definition of “pollutants” under the Federal Water Pollution Control Act does not include source, byproduct, and special nuclear materials, and that the EPA had acted within its statutory mandate by declining to regulate the discharge of such materials, which was instead subject to regulation under the Atomic Energy Act.

Key Issues
continued ...

Determination of Cost and Percentages

If the Commission finds that the claimed facility is a qualifying pollution control facility consistent with ORS 468.155 and ORS 468.170(4)(a)(B), it must then determine the:

1. Actual facility cost. ORS 468.170(1),
2. Percentage of the facility cost allocable to the prevention, control or reduction of water pollution. ORS 468.170(1), and
3. Applicable percentage eligible for the tax credit. ORS 468.170(9).

If the Commission determines that one or more of the components of the claimed facility are not qualified for final certification, the Commission does not need to consider the cost for that component. The burden of proof for the facility cost, the percentage allocable, and the applicable percentage rests with the applicant. OAR 340-016-0070.

Cost Eligibility Determination

The first step in determining the facility cost is to determine which of the costs documented by the Applicant are eligible. (See page 8 of this memorandum for the cost of the individual components.)

The statute and rules identify a number of items that are ineligible *per se*. ORS 468.155 and OAR 340-016-0070. In addition, the rule defines certain general categories of costs that are ineligible. OAR 340-016-0070(3). They include:

1. Insignificant Contribution

The first of these general provisions requires the Commission to strike the costs for any component of the claimed facility that makes an insignificant contribution to the pollution control purpose even though the claimed facility may meet the sole purpose test. In this sense, it is distinct from the substantial quantity requirement discussed above.

2. Benefits of Economic Value

The second element requires the Commission to strike any distinct portion of a component that provides benefits of economic value. Again, this element is similar in some respects but legally distinct from any consideration of motivation under the sole purpose test or determination of allocable costs under OAR 340-016-0075. While it is true that most benefits of economic value, such as rates and cost savings, are addressed through determining the allocable costs, others are a straight deduction from the claimed cost, such as the flat \$700 deduction for the recharge capabilities of refrigerant recovery equipment.

3. Costs Not Directly Related to the Operation of the Industry.

The Department is also directed to reduce the facility cost by "...costs [that] are not directly related to the operation of the industry or enterprise seeking the tax credit but were installed as a result of the facility." The Department has not had an occasion to use this provision.

Department Review

The Department's analysis also includes recommendations of the costs allocable (See Attachment A). If the Commission determines that the four pre-certified ISFSI components are qualified pollution control facilities, the Department's analysis with respect to facility costs, and percentage allocable, and applicable percentage is outlined in the attached review report as follows:

1. The **facility cost** that represents PGE's own cash investment in the claimed facility is **\$42,264,297**. PGE's own cash investment in the individual components is:

a. Multi-Purpose Canisters	\$	34,760,243
b. Concrete Storage Casks	\$	5,340,995
c. Automated Welding System	\$	1,692,051
d. Blowdown, Moisture Removal, and Helium Backfill Systems	\$	471,008

The Department deducted 32.5% of the claimed facility cost that represented PacifiCorp and Eugene Water and Electric Board's investment in the claimed facility.

2. The **percentage** of the facility cost **allocable** to pollution control would be **100%** of the facility if the Commission approves certification of part or all of the claimed facility.
3. The **applicable percentage** eligible for the tax credit would be **50%**. A 2001 law changed the 50% maximum tax credit to a decreasing tiered schedule. The schedule provided the 50% "safe harbor" to construction projects begun before January 1, 2001, if the applicant completed construction before January 1, 2004.
4. The tax credit would be \$21,132,149 when calculated according to the law: facility cost x percentage allocable x applicable percentage.

**EQC Action
Alternatives**

Option 1 - Approve as Pre-certified

The Commission may elect to make no further determination with respect to the qualification of the claimed facility as a pollution control facility and move directly to determine the eligible costs and appropriate cost allocation for the components. Accordingly, the applicant is not required to produce evidence supporting the qualification of the facility.

Option 2 – Deny Certification of a Pre-certified Component

The Commission may elect to deny certification of one, two, or three of the pre-certified components.

Option 3 – Deny Certification


The Commission may deny certification of all four pre-certified components.

Attachments

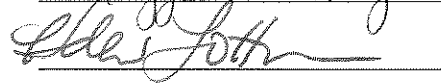
- Attachment A: Review Report
- Attachment B: Transcript November 18, 1999 Work Session
- Attachment C: Agenda Item B, September 29, 2000 EQC meeting
- Attachment D: Transcript September 29, 2000 EQC meeting
- Attachment E: Application No. 5009; Preliminary Certification Order dated March 15, 2001
- Attachment F: Transcript October 22, 2004 EQC meeting
- Attachment G: Tax Credit Regulations

Approved:

Section:



Division:



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State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Water Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

Portland General Electric Company
121 SW Salmon
Portland, OR 97204

Taxpayer ID: **93-0256820**
Organized as: **C-Corp**

Application No. **6605**

Applicant: **Portland General Electric Company**

Department determined:

Facility Cost		\$42,264,297
Percentage Allocable	X	100%
Maximum Percentage	X	50%
Tax Credit		<hr/> \$21,132,149

Facility Identification

71760 Columbia River Highway
Rainier, OR 97048

The certificate will identify the facility as:

Independent Spent Fuel Storage Installation:

34 Multi-purpose canisters (MPCs)
34 Concrete Storage Casks
**One Blowdown, Moisture Removal and Gas
Backfill System**
One Welding System

Technical Information

Portland General Electric (PGE) Company generates energy for industrial, commercial, and residential use. PGE claims the Independent Spent Fuel Storage Installation (ISFSI) at the Trojan site in Rainier, Oregon.

The Trojan Nuclear Plant formerly generated electrical energy from 1976 until it permanently ceased operating in November 1992. During its operations, the plant generated a significant quantity of highly radioactive material. The federal government has the ultimate responsibility to provide a permanent disposal site for the spent fuel. The applicant chose to decommission the Trojan plant because it was not cost effective to continue operation.

As part of the decommissioning process, the owners moved 264 spent fuel assemblies from the functioning wet-storage facility to the ISFSI which is a vertical dry storage system. The U.S. Nuclear Regulatory Commission (NRC) did not require the construction of the Trojan ISFSI. The regulations do require that the owners provide safe storage of spent nuclear fuel and high-level radioactive waste. The

claimed facility meets this requirement, as did the previous wet storage system. The ISFSI is passive and requires minimal surveillance. The NRC prefers this type of interim storage for spent fuel to active spent fuel storage systems similar to the previous wet storage system.

The applicant claims the following major components as part of the pollution control facility.

1. 34 seal-welded stainless steel Multi-Purpose Canisters (MPCs). The transportable canisters encapsulate intact spent fuel assemblies, suspect/damaged nuclear fuel assemblies, nuclear fuel assembly inserts, and/or nuclear fuel debris. The MPCs are about 15 feet tall and 5-1/2 feet in diameter. The exterior is made of 1/2-inch thick stainless steel and the internal structures are made of stainless steel. The MPCs are designed to withstand the maximum credible subduction zone earthquake without loss of integrity.

The applicant claims two types of canisters. Each MPC is capable of storing up to 24 spent fuel assemblies. In addition to storing intact fuel assemblies, the MPC-24Es accommodate up to four fuel assemblies that contain fuel classified as damaged fuel, and the MPC-24EFs accommodate up to four fuel assemblies classified as damaged fuel or fuel debris. The balance of the fuel assemblies placed in the canisters is intact fuel.

2. 34 BFS TranStor™ Concrete Casks. The casks provide structural support for the MPCs. They also provide radiation shielding, and natural circulation cooling for the spent nuclear fuel. The applicant stored the MPCs in the central steel-lined cavity of the casks. Internal airflow paths allow the removal of decay heat by natural circulation around the metal MPC's wall. A temperature measurement device located in each of the four air outlets in each cask monitors proper decay heat removal.
3. Blowdown, Moisture Removal, and Helium Backfill Systems. The applicant loaded the fuel assemblies into an MPC while underwater for radiation shielding purposes. The Blowdown System injected pressurized gas into the MPCs' cavity to "blow" out the bulk water, and the Moisture Removal System vacuum-dried or forced helium dehydration to remove the residual moisture. Finally, the applicant backfilled the canisters with inert gas (helium) using the Helium Backfill System to ensure the integrity of the MPCs.
4. A semi-automatic welding system used to seal-weld the canisters. The Automated Welding System welded a closure on the MPCs during the loading operations. The applicant also used the system on a second lid-to-shell weld, the vent and drain port cover plate welds, and the MPC closure ring welds.

Prior to installing the ISFSI, the applicant stored the spent fuel assemblies in the now decommissioned spent fuel pool. The water provided cooling capacity and shielding for the spent fuel assemblies, which are 12 by 12 arrays of zirconium alloy tubes (pins) containing ceramic pellets of spent fuel. Each pin is about a centimeter (less than one-half inch) in diameter and about 12 feet long. Between one-half to one percent of the spent fuel pins that make up the fuel assemblies became unsealed in the harsh reactor environment. These unsealed pins leaked a small amount of radioactive fission products into the water of the spent fuel pool.

Taxpayer Allowed CreditORS 315.304(4) Criteria

The taxpayer who is allowed the credit must be:

- a. The **owner, including a contract purchaser**, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

Portland General Electric Company is a 67.5% owner of the claimed facility. The joint owners conduct the business that operates the ISFSI.

Eligibility**Timely Filing** Criteria

2001 Edition
ORS 468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The final application, however, is not valid if the applicant submits the application before they complete construction or before they place the facility into operation.

Applied to this Application

The applicant **timely filed** the application within the one-year filing requirement. They completed construction on **9/3/2003** and submitted the application on **10/15/2003**. The applicant submitted the application after they completed construction and placed the facility into operation on 9/4/2003.

Purpose: Voluntary Criteria

ORS 468.155
(1)(a)(B)

The sole purpose of the claimed facility must be to prevent, control, or reduce a substantial quantity of water pollution.

OAR 340-016-
0060(2)(b)

The sole purpose of the facility must be the exclusive purpose of the facility. Its only function or use must be to control, reduce, or prevent water pollution.

Definition in Rule: "Pollution" or "water pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, **gaseous, solid, radioactive or other substance into any waters of the state**, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to **render such waters harmful**, detrimental or injurious to **public health**, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.

**Purpose: Voluntary
Continued ...**

Sole & Exclusive Purpose	<p><u>Applied to this Application</u></p> <p>The Department determined that ISFSI does not have a sole and exclusive purpose to prevent a substantial quantity of water pollution. The purpose of the ISFSI is:</p> <ul style="list-style-type: none"> • To provide safe storage of spent fuel as required by the NRC. The previous wet storage system also met this requirement. • To provide storage of spent fuel until the federal government takes possession of it for permanent disposal. The previous wet storage system also met this requirement. • For financial reasons considering the federal government's failure to provide a permanent storage site for the nuclear waste. <ul style="list-style-type: none"> ○ The applicant estimates the cost savings associated with operations and maintenance, and security of the claimed components compared to the spent fuel pool will be approximately \$1,580,000 every year. ○ The Public Utility Commission, in a general rate order, granted PGE full recovery of its estimated decommissioning costs through 2011 (1995, Commission Order Number 95-322.) The same rate order provided PGE recovery of, and a rate of return on, 87% of its remaining Trojan plant investment costs. ○ Decommissioning allows the owners to release the Trojan site for unrestricted use for reasons of radiation safety. Unrestricted use means that the property could be used for other industrial or recreational purposes.
Substantial Quantity	<p>The Department determined that the ISFSI does not prevent, control, or reduce a substantial quantity of water pollution. To determine "substantial quantity", the Department compared the ISFSI to the previous spent fuel pool.</p> <p>In 1999, the radioactive gaseous effluents from the spent fuel pool were about 26 curies of radioactive gases and 24 curies of tritium. The system would have had decreasing releases with each passing year. The releases from the spent fuel pool did not exceed the standard for levels of safety for releases of radioactive material established by the NRC.</p> <ul style="list-style-type: none"> • Approximately 8,800 curies of tritium flow by the Trojan plant in the Columbia River each year. The Department determined that a 24-curie reduction, based on 1999 data, that PGE achieved with the ISFSI was not substantial.

- The amount of krypton-85 emitted to the atmosphere from the spent fuel pool every year was comparable to the krypton emitted from a large metropolitan hospital.
- The ISFSI eliminated the need to dispose of approximately 1200 gallons of low-level radioactive resins at Hanford every year. The resins in the spent fuel pool, however, were never discharged to any waters of the state. The potential for the resins to contaminate waters of the state in was infinitesimal.

The spent fuel pool would have provided a greater degree of cooling than the ISFSI. Additionally, the radiation levels adjacent to the spent fuel pool were likely less than those from the existing ISFSI. Both systems perform within regulatory limits and both systems could provide an adequate level of cooling. See Exhibit B to this report.

Water
Pollution

Radioactive waste could meet the definition of a water pollutant **depending on its ability to alter** the physical, chemical, or biological properties of **any waters of the state**. However, on June 1, 1976, the U.S. Supreme Court held that pollutants subject to regulation under the Federal Water Pollution Control Act **do not include** source, byproduct, and special nuclear materials...”

*Train v. Colorado PIRG, 426 U.S. 1 at 25.
10 CFR 51, Subpart A – National Environmental Policy Act –
Regulations Implementing Section 102 (2)*

The seal-welded MPCs encapsulate the source and the means of producing radioactive gases and tritium. The gaseous space above the spent fuel pool contained tritium as a component of water molecules, some of which likely recondensed into liquid water and ended up in the Columbia River. The spent fuel pool never discharged to waters of the state. No additional nuclear fission was happening in the spent fuel pool.

In 1999, the radioactive gaseous effluents from the spent fuel pool were about 50 curies of radioactive gases and tritium. The effluent included:

- About 26 curies of radioactive gas, primarily krypton-85. The last krypton produced at Trojan was in November 1992. Krypton-85 is a chemically inert noble gas with about a 10-year half-life. The krypton escaped from the unsealed pins and was released to the atmosphere; it is not readily soluble in water. The release of krypton-85 from the spent fuel pool did not exceed the NRC standard for levels of safety for releases of radioactive material. This source of krypton-85 never caused water pollution.

Krypton does not generally participate in any biological processes. Any small amount inhaled would have been quickly exhaled through normal processes. The likelihood of krypton-85 undergoing radioactive decay while in the body is very small, and quick dispersion in the atmosphere after being released from the spent fuel pool would make any human

exposure immeasurable.

- About 24 curies of tritium. Tritium is a radioactive form of hydrogen with about a ten year half-life. It would have been released from the spent fuel pool as a part of water molecules. It is naturally produced in the upper atmosphere, and surface waters contain natural amounts of tritium. The release of tritium from the spent fuel pool did not exceed the NRC standard for levels of safety for releases of radioactive material. This source of tritium never caused water pollution.

Because tritium is present in the form of tritiated water, the human body processes it as it does any water taken into the body. If all of the tritium released from the spent fuel pool ended up in the Columbia River, it would add an average 35 picocuries per liter of tritium to a background of about 40 picocuries per liter. The EPA drinking water limit for tritium is 20,000 picocuries per liter. Thirty five (35) picocuries per liter of tritium, if ingested in 2.5 liters of water per day from drinking water, would result in an approximate increase of 0.002 millirem (0.0007%) to the 300 millirem the average human is exposed to from background sources of radiation in a year. This level of radiation exposure is not measureable, and would result in no adverse health consequences.

- The MPCs eliminated the source and the means of producing approximately 1200 gallons of low-level radioactive resins every year. The owners disposed of these resins at Hanford. The source of the resin was the spent fuel pool's low-level radioactive wastewater treatment system. The system used ion-exchange resins (styrene matrix beads) to extract radioactive fission products released into the water from unsealed pins. Between one half to one percent of the spent fuel pins that make up the fuel assemblies became unsealed in the harsh operating reactor environment.

The Department determined that it would take a catastrophic event or a deliberate destructive force for the spent fuel assemblies to contaminate waters of the state. The owners constructed the ISFSI to withstand a maximum credible subduction zone earthquake. Similarly, the owners had previously designed the spent fuel pool to withstand a credible earthquake by constructing its five-foot thick concrete walls on an eight-foot thick foundation sited on basalt bedrock. The water in the spent fuel pool, a boric acid solution, could have splashed out of the confines of the pool in this type of major event with no effect on the ground or the surface water.

Method ORS 468.155 (1)(b) The prevention, control, or reduction must be accomplished by 1) disposal or elimination of industrial wastewater, and 2) the use of a treatment works for industrial waste as defined in ORS 468B.005.

"Industrial waste" means any liquid, gaseous, **radioactive** or solid **waste** substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any

natural resources.

"Treatment works" means any plant or other works used for the purpose of treating, stabilizing or **holding wastes**.

Applied to this Application

The Department determined that radioactive waste falls within the definition of industrial waste but the resins, effluent from the spent fuel pool, intact spent fuel assemblies, suspect/damaged nuclear fuel assemblies, nuclear fuel assembly inserts, and/or nuclear fuel debris contained in the claimed facility are not within DEQ's regulatory purview.

The Department determined that the MPCs hold the various fuel assemblies and debris while the casks provide structural support for the MPCs and radiation shielding.

Exclusions	<u>Criteria</u>
ORS 468.155 (3) OAR 340-016-0070(3)	Rules on ineligible costs became effective on May 1, 1998. Ineligible items may not be certified and will be deducted from the claimed facility cost. Ineligible costs are any distinct portion of a pollution control facility that makes an insignificant contribution to the principal or sole purpose of the facility; or provides benefits of economic value; or where the costs are not directly related to the operation of the industry or enterprise seeking the tax credit but were installed as a result of the facility. In part, the rule excludes start-up costs; purchased equipment used to install the facility; and maintenance, operation, or repair of a facility, including spare parts.

Applied to this Application

The Department determined that the claimed facility does not have a pollution control purpose as described in the *Purpose: Voluntary* section above.

Replacement	<u>Criteria</u>
ORS 468.155 (3)(e)	The replacement or reconstruction of all or part of a facility that the State of Oregon previously certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions. The applicant replaced the facility: <ol style="list-style-type: none"> 1) due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or 2) before the end of its useful life.

Applied to this Application

The State of Oregon issued **eight certificates** for other facilities to the applicant at this location. The claimed facility is **not a replacement** for any of the previously certified facilities.

Necessary to Meet Criteria
DEQ Regulations The facility must be necessary to satisfy the intents and purposes of DEQ statutes and rules.
 ORS 468.170
 (4)(a)(C)

Applied to this Application

DEQ regulations do not apply to the nuclear waste stream, the ISFSI, decommissioning, or the previous spent fuel pool represented in this application. The NRC requires safe storage of the spent and failed fuel. The Oregon Department of Energy administers the Spent Nuclear Fuel Storage requirements provided in OAR 345-026-0390. The NRC and the Oregon Department of Energy regulate decommissioning of nuclear power plants.

Many DEQ regulations state that it is in the interest of public peace, health and safety to protect the environment. Concern for public health and safety as it relates to nuclear waste materials, however, was specifically separated from other types of environmental concerns. The NRC established the standard for levels of safety for releases of radioactive material to the atmosphere. In Oregon, the regulatory agency that applies the federal rules governing the release of radioactive materials into the environment is the Oregon Health Services, Radiation and Protection Services.

Maximum Credit Criteria
 1999 Edition The maximum tax credit is 50% of the certified facility cost if the applicant
 ORS 468.173(1) commenced construction before January 1, 2001, and completed construction
 OAR 340-016-0007 before January 1, 2004.

Applied to this Application

The **maximum tax credit is 50%** because the applicant commenced construction in April of 1997 and completed construction of the facility on 9/3/2003.

Facility Cost

Subtractions Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost.
 The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

\$ Certification Criteria

ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

PGE, PacifiCorp, and Eugene Water & Electric Board (EWEB) owned and operated the Trojan plant in respective shares of .675, .30 and, .025. Each partner paid its share of the cost of the ISFSI; therefore, 67.5 percent of the cost represents PGE's **own cash investment**.

Invoices, cost summaries, and an indirect charge summary substantiated the eligible facility cost.

Referenced Section	Description of Ineligible Portion	Claimed
	Multi-Purpose Canisters	51,496,657
	Concrete Storage Casks	7,912,585
	Automated Welding System	2,506,742
	Blowdown, Moisture Removal, and Helium Backfill Systems	697,790
	Total Claimed	\$62,613,774
	Paid by PacifiCorp and EWEB @ 32.5%	- 20,349,477
	Eligible Costs	\$42,264,297

Facility Cost Allocable to Pollution Control**% Certification** Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

Applied to this Application

Had the facility prevented, controlled, or reduced water pollution as discussed in the *Purpose: Voluntary* section above, the percentage of the eligible facility cost would have been **100 percent** of the eligible facility cost is allocable to pollution control.

Percentage Criteria

ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.

- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
- b. The estimated annual percent return on the investment in the facility;
- c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
- d. Any related savings or increase in costs that occur or may occur as a result

- of the installation of the facility; and
- e. Any other relevant factors.

Applied to this Application

The Department determined that the applicant calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above and a 40-year useful life.

- a. The claimed facility does not produce a salable or useable commodity.
- b. PGE received a rate increase to recover the cost of decommissioning. The applicant, however, does not realize a return on investment in the claimed facility because the rates only recover the actual expenditures. PGE deposits any customer funds earmarked for decommissioning the Trojan plant into the Decommissioning Trust Fund. This external fund may be used only to reimburse PGE for activities involving the decommissioning; moving the spent fuel from the spent fuel pool to the claimed facility is one of many decommissioning activities. At the time that PGE completes decommissioning the Trojan plant, a true up of the fund will occur with either any excess returned to customers, or PGE being reimbursed for any underage.
- c. The applicant investigated possible alternative technologies.
- d. The applicant claims the average cost savings associated with operations and maintenance, and security of the claimed facility compared to the spent fuel pool will be approximately \$1,580,000 every year. Any cost savings will be offset, dollar for dollar, by a reduction in PGE's revenues through rates.
- e. There are no other relevant factors.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ issued NPDES number 101226 to the site on 12/31/2002. DEQ does not regulate nuclear waste; therefore, the NPDES permit does not cover nuclear waste.

Reviewer: Maggie Vandehey, DEQ



Oregon

Theodore R. Kulongoski, Governor



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November 22, 2004

Maggie Vandehey, Tax Credit Program Manager
Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390

Ms. Vandehey:

You asked me to clarify a few matters regarding the tax credit application by PGE for Trojan's Independent Spent Fuel Storage Installation (ISFSI). The issues relate to cooling of the spent fuel, and radiation levels resulting from the dry storage system as compared to the former spent fuel pool. You asked whether the ISFSI or the spent fuel pool would provide a greater degree of cooling. You also asked which of the two facilities would provide a greater degree of shielding.

Because water is a better conductor of heat than Helium, the spent fuel pool would have provided a greater degree of cooling than the ISFSI, but both systems could provide an adequate level of cooling. In addition, the spent fuel pool had a greater degree of shielding due to thicker concrete walls as well as the cooling water. The radiation levels outdoors and adjacent to the spent fuel pool would likely have been less than those adjacent to the existing ISFSI. However, both systems would perform within regulatory limits. In addition, the ISFSI has other advantages over a spent fuel pool, such as lower operating costs, passive cooling capability, greater earthquake safety and transportability.

In both of these examples, the spent fuel pool was designed to provide cooling and shielding for fuel newly from the operating reactor. Such fuel generates much more heat and radiation than the fuel in the ISFSI. The most recent Trojan spent fuel reached the end of its operating life in November 1992. The spent fuel pool was designed with the greater cooling and shielding capacity because of the nature of what it was being called upon to do.

I hope this helps clarify these questions for you.

Sincerely,

David A. Stewart-Smith
Assistant Director, Energy Resources
Oregon Department of Energy

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

WORK SESSION ON:

Portland General Electric
Company's independent spent fuel
storage installation at the
Trojan Nuclear Power Plant.

TRANSCRIPT OF PROCEEDINGS

November 18, 1999

BEFORE:

COMMISSIONERS

MELINDA EDEN, Chair
TONY VAN VLIET
LINDA McMAHAN
MARK REEVE

DIRECTOR:

LANGSTON MARSH

LARRY KNUDSEN
DEQ Counsel

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1 CHAIR EDEN: Good afternoon. This is the regularly
2 scheduled meeting of the Environmental Quality Commission,
3 and we welcome you here.

4 I'm Melinda Eden. To my right are Linda McMahan and
5 Tony Van Vliet, and to my left is Mark Reeve, our newest
6 member. Harvey Bennett, unfortunately, is ill and unable to
7 be with us today. So we are it.

8 And we have convened this afternoon to begin with a
9 work session. On?

10 COMMISSIONER VAN VLIET: Madam Chair, I'd like to
11 make a nomination right now.

12 CHAIR EDEN: Commissioner Van Vliet. That's right,
13 we don't have a chair.

14 COMMISSIONER VAN VLIET: I would like to nominate
15 Melinda Eden to be the chair of the Environmental Quality
16 Commission commencing as soon as possible.

17 COMMISSIONER McMAHAN: Second.

18 CHAIR EDEN: It's been moved and seconded that
19 Melinda Eden be elected chair of the Environmental Quality
20 Commission. Is there any discussion? All those in favor
21 signify by saying aye.

22 (Three aye votes)

23 CHAIR EDEN: Can I vote for myself? Aye.

24 All those opposed. There is no one. So, thank you
25 very much for your confidence that I can run a meeting

1 responsibly, and I will do my best.

2 And now is the time schedule for a work session on
3 Portland General Electric's company's independent spent fuel
4 storage installation at the Trojan Nuclear Power Plant. And
5 Maggie Vandehey is here and --

6 MS. TAYLOR: Chair Eden, maybe I could introduce
7 Maggie Vandehey --

8 CHAIR EDEN: You may.

9 MS. TAYLOR: -- who will be presented the work
10 session report to you along with David Stewart-Smith from
11 the Department of Energy, who is an expert in this arena.
12 And they'll both kind of describe the facility to you. And
13 then Maggie will express to you the questions that the
14 Department will be attempting to answer between now and next
15 spring about the -- whether the facility qualifies for tax
16 credit. And what we'd like from you today, of course, is to
17 provide you with information but also if you have questions
18 of us that you would like us to explore in the interim, we'd
19 like to hear that today.

20 Know that there are members of the company here who
21 would be more than willing to answer questions when our
22 staff has completed their -- their information to you, if
23 you have questions. If you do not, I'm sure they'll be
24 available in the spring when we bring this item back to you.

25 CHAIR EDEN: Okay. Then let's proceed on that basis.

1 I would like to say ahead of time that it is not a time --
2 it's not a public hearing, so it's not a time for that; it's
3 a time for the Department to make its presentation to us,
4 but as Ms. Taylor said, if we have questions, I appreciate
5 that there are company representatives here to assist us.

6 MS. VANDEHEY: Good afternoon, Madam Chair,
7 Commissioners. As Lydia told you, my name's Maggie
8 Vandehey, and I'm Tax Credit Coordinator for the DEQ. Dave
9 Stewart-Smith on my right has timely agreed to be here
10 today. He's the administrator of the Energy Resource
11 Division with the Oregon Office of Energy. Dave is also the
12 Secretary of the Energy Consulting Siting Council.

13 We're here today to talk about Portland General
14 Electric proposed application for preliminary certification.
15 The application is for certification of their independent
16 spent fuel storage installation. PGE refers to it as the
17 ISFSI. Because I have trouble getting that off of my lips
18 I'll be referring to it in tax credit terms as "the
19 facility."

20 PGE submitted the application under the Pollution
21 Control Facility Tax Credit laws. The plant facility is
22 located at the Trojan Nuclear Power Plant site in Ranier.
23 To quote from PGE's application, "The sole purpose of the
24 Trojan ISFSI is to control spent nuclear fuel and to prevent
25 spills or unauthorized releases of radioactive materials to

1 the air, water and adjacent land during interim storage
2 period pending final disposal."

3 PGE estimates the facility will cost \$55 million. As
4 Ms. Taylor told you, at this time, the Department is not
5 prepared to offer a recommendation regarding the eligibility
6 of the facility. We'll do that next spring. Our purpose
7 today is to provide the Commission with an overview of the
8 planned facility, background at the Trojan site, and a
9 discussion of questions that we'll answer before finalizing
10 the preliminary review report.

11 Before I talk about the specifics of the application,
12 a brief chronology may be helpful in understanding why the
13 facility is constructed. In 1976, Trojan Nuclear Power
14 Plant began commercial production. In January of '93, PGE
15 notified the Nuclear Regulatory Commission of their decision
16 to cease operating the power plant. PGE bases this -- based
17 this decision on the uncertainty of plant's reliability, the
18 uncertainty about the cost of operation, particularly as
19 related to the steam generators, and also about the
20 availability of replacement power at a lower cost.

21 Once PGE made their decision to stop operating the
22 nuclear power plant, NRC regulations requires them to
23 completely decommission the plant within 16 years. In 1995,
24 PGE moved four contaminated steam generators and a
25 pressurizer to the regional commercial low level waste

1 disposal site at Hanford.

2 In '96, the NRC and the Oregon Energy Facility Siting
3 Council approved the Trojan decommissioning of the plant.
4 This year, PGE removed the reactor vessel to the disposal
5 site at Hanford. Currently PGE is preparing the Trojan site
6 for unrestricted use. Unrestricted use means that the
7 property could be used for other industrial or recreational
8 purposes. Finally, during the first quarter of the next
9 century, the spent nuclear fuel will be moved to a yet
10 unknown federal repository.

11 In a minute, I'll discuss the scope of the
12 preliminary application with you. I'll also discuss
13 questions that the staff will have to answer before we
14 complete the review. At this time, Dave Stewart-Smith will
15 provide information regarding the independent spent fuel
16 storage installation, dry storage versus wet storage, air or
17 water contaminants, decommissioning of Trojan, and the
18 federal repository.

19 MR. STEWART-SMITH: Thank you, Madam Chair. For the
20 record, my name is David Stewart-Smith, Secretary to the
21 Oregon Energy Facility Siting Council. I'm pleased to be
22 here today. I have some brief prepared notes that I will go
23 over, and I would encourage the Commission to interrupt me
24 at any time, in case I get a bit too oblique or I say
25 something that needs to be clarified.

1 As Maggie mentioned the Trojan plant closed its
2 commercial operations in 1993. Under the rules of the U.S.
3 Nuclear Regulatory Commission they had -- first choice they
4 had to make was whether or not they would put the plant into
5 long-term storage and allow much of the radioactivity to
6 decay, and the Nuclear Regulatory Commission refers to that
7 option as Safe Store. Or whether they should decommission
8 the plant in the near term, and they refer to that option as
9 Decom.

10 Portland General Electric made the case to the NRC
11 and to the Energy Facility Siting Council that, given the
12 specifics in their situation, that immediate dismantlement
13 was an appropriate option. The regulatory agencies agreed,
14 and shortly thereafter PGE began preparations for
15 decommissioning the plant.

16 They are well over halfway done with decommissioning
17 at this point, having sent five large components, the -- the
18 four steam generators and a pressurizer tank, off for
19 disposal at our regional disposal site in 1995. And having
20 sent the reactor vessel itself, without the spent fuel in
21 it, to our regional low level waste disposal site in August
22 of this year.

23 About 10 percent of the nonspent fuel radioactivity
24 was disposed of with the large components: the steam
25 generators and the pressurizer, something less than 10

1 percent. And about 90 percent of the nonspent fuel
2 radioactivity was disposed of with the reactor vessel. The
3 balance of the contamination on the Trojan site is in the
4 form of contaminated concrete, piping, tanks, storage and
5 radioactive waste treatment systems and similar pieces of
6 equipment.

7 Once the site is decontaminated, the site can be
8 released, as Maggie mentioned, for unrestricted use. It
9 doesn't mean that all of the buildings will be gone. It
10 means that what is left will not need to be restricted for
11 reasons of radiation safety.

12 The process of site release is a -- is a complex and
13 detailed one. PGE has broken some new ground in this area,
14 being the first large commercial power plant to undergo
15 decommissioning. There have been several of them a number
16 of years older that that have undergone decommissioning, but
17 this was a very different kind of decommissioning because of
18 the size of the facility, and they will use many different
19 measurements throughout the site and a sophisticated
20 computer model to determine the potential pathway exposures
21 to the public once the site is unrestricted. And based on
22 their measurements and on the computer modeling, the
23 company, along with the regulatory agencies will decide when
24 the site is ready for unrestricted release.

25 Maggie also asked me to talk about the difference

1 between storing spent nuclear fuel in the spent fuel pool,
2 as it is today, and storing it in dry spent fuel casks. Let
3 me explain those a little bit. Since the plant began
4 commercial operation, spent nuclear fuel which comes out of
5 the plant -- an individual fuel bundle stays in the reactor
6 for about -- in Trojan's case for about three years. Every
7 year they had an annual refueling outage at which time about
8 a third of the reactor core was removed, having spent three
9 years in the reactor, and placed in the spent fuel pool.

10 The spent fuel pool is a water cooling system. It
11 has about eight-foot thick foundation built on basaltic
12 bedrock. The plant itself is built on a bedrock outcropping
13 next to the Columbia River. It's got about five-foot thick
14 concrete walls. It maintains about 20 feet of water over --
15 at all times over the top of the spent fuel. The water
16 provides not only cooling capacity, because, as these spent
17 fuel bundles come out of the reactor, their degree of
18 radioactivity is high enough that they generate a great deal
19 of heat, but it also provides for the shielding. You can
20 walk up to the edge of the spent fuel pool, look down
21 through ultra-pure water that is a boric acid solution, and
22 you can see the top of the spent fuel bundles and the racks
23 that hold them.

24 The spent fuel pool has active pumping cooling and
25 purification systems. That's the main -- other than the

1 difference between wet and dry -- that's the main difference
2 between storing spent fuel and spent fuel pool -- I'm going
3 to trip over that phrase, I know I am -- and storing it in
4 dry concrete casks. The spent fuel pool relies on active
5 cooling and maintenance in order to maintain its
6 capabilities. Once the spent fuel is welded into stainless
7 steel cylinders and placed inside concrete silos or concrete
8 casks, it's basically a passive protective and cooling
9 system.

10 Water is a better heat transfer medium than air
11 convection, and as long as the fuel is less than five years
12 out of the reactor, it must be cooled with water. All of
13 the spent fuel at Trojan is greater than five years out of
14 the reactor, having been closed in 1993. So this an
15 appropriate spent fuel storage medium for fuel of this age.

16 The dry casks are massive structures. They provide
17 not only radiation shielding capability with about 21 inches
18 of concrete, high-density concrete as part of the concrete
19 cask, but they provide for a very robust structurally sound
20 storage medium. These concrete casks are placed on a
21 concrete pad that's about 18 inches thick, and, as I recall
22 seeing it before the concrete was poured, I think it has as
23 much rebar in it as it has concrete. And this system is
24 designed with enough mass and enough structural stability to
25 withstand any credible earthquake.

1 The spent fuel pool was also designed to withstand an
2 earthquake, but being open at the top, it was certainly less
3 contained, if you will, than a dry concrete cask system.

4 I want to talk a little bit about air and water
5 pathways of release of radioactive materials. A spent fuel
6 pool is open to the environment. As I mentioned, you can
7 walk up to the edge of it and you can look through the water
8 and you can see the tops of the spent fuel assemblies. And
9 it's housed in an industrial building. There are, because
10 of -- because of the nature of spent nuclear fuel, the
11 temperatures and pressures inherent in a commercial nuclear
12 reactor are such that on the order of one half to one
13 percent of the spent fuel pins that make up a fuel assembly
14 that are sealed when the fuel assembly goes into the reactor
15 become unsealed. That provides a small but a measurable
16 pathway for radioactive materials to be released into the
17 water of the spent fuel pool, hence the radioactive waste
18 treatment systems that are built into that storage material.

19 COMMISSIONER REEVE: Excuse me. Did you pens?

20 MR. STEWART-SMITH: Pins.

21 COMMISSIONER REEVE: Pins.

22 MR. STEWART-SMITH: They're called pins. Each fuel
23 assembly contains 144 pins that are about a centimeter in
24 diameter and about 12 feet long, making up a fuel assembly.
25 held together with brackets. But for a commercial nuclear

1 reactor, the need to maximize surface area to transfer the
2 heat from the fuel to the water surrounding it means you
3 need a lot of small pins rather than one large fuel rod.
4 You'll often hear people talk about nuclear fuel rods.
5 Well, the actual fuel assemblies for a commercial reactor
6 are a 12 by 12 array of about one-centimeter diameter zircon
7 tubes -- excuse me, zirconium alloy tubes filled with
8 ceramic uranium fuel.

9 COMMISSIONER REEVE: Okay, so there -- you said some
10 percentage of them -- of those -- are those the little tubes
11 that actually --

12 MR. STEWART-SMITH: The tubes. Correct.

13 COMMISSIONER REEVE: Some percentage leak or --

14 MR. STEWART-SMITH: One or something less than one
15 percent. They're sealed at each end. They're -- they're
16 spring loaded at each end to keep the fuel pellets
17 themselves held together and held in place, but in fact the
18 seals at the ends of some small percentage of them become
19 unsealed because of -- because of the conditions inherent in
20 the core of a commercial reactor.

21 COMMISSIONER REEVE: Now, if that happens, what --
22 what is it that escapes? Is it actual physically the fuel
23 or is it radiation or what --

24 MR. STEWART-SMITH: It's not the pellets themselves.
25 And certainly there's a great deal of radiation that can

1 escape from the fuel pins, radiation being either high
2 energy photons or particulate alpha particles, beta
3 particles, different kinds of radiation. Some of that can
4 escape from the fuel assemblies themselves.

5 What I'm talking about is a small amount of fission
6 products. These are the -- usually radioactive isotopes
7 left over from an individual atom or, in this case,
8 countless individual atoms of uranium undergoing nuclear
9 fission, becoming two smaller atoms. Some of those are
10 gaseous in nature: Isotopes of krypton and xenon. Many of
11 them -- most of them are not, but in any case, once the seal
12 in the end of one of those spent fuel pools begins to leak,
13 the annular space around -- between the zirconium tubing and
14 the fuel pellets themselves can become filled with water,
15 become contaminated, and a small amount of it can leak out
16 through the leak in the seal at the end of the tube.

17 COMMISSIONER REEVE: Now, during this act that you
18 described -- the current storage is kind of an active system
19 in terms of the water being filtered and whatnot. Is there
20 a system that actually is able to remove that from the
21 water --

22 MR. STEWART-SMITH: Yes.

23 COMMISSIONER REEVE: -- as it circulates?

24 MR. STEWART-SMITH: Yes. There are radioactive waste
25 treatment systems that remove the contamination that is

1 dissolved in the water; also remove the excess heat from
2 that water and transfer it to another system, another
3 industrial heat removal system (indiscernible) in the plant.

4 So those isotopes can be removed. There are,
5 however, as I mentioned, some small amount of those isotopes
6 that are gaseous in nature, and once they're released into
7 that cooling water, the spent fuel pool may become airborne
8 in the gaseous space above the spent fuel pool itself.

9 So there is a pathway, however, vanishingly small it
10 might be. During normal storage of spent fuel for a small
11 amount of radioactive material to be released into the
12 cooling water and into the air surrounding the spent fuel
13 pool all of which is tightly regulated under federal and
14 state rules.

15 CHAIR EDEN: Excuse me, but that creates -- taking
16 the radioactivity out of the water in the pool then creates
17 another repository of --

18 MR. STEWART-SMITH: A more --

19 CHAIR EDEN: -- contamination.

20 MR. STEWART-SMITH: A more concentrated low-level
21 radioactive waste which is in turn disposed of at our
22 regional commercial low-level radioactive waste site.

23 CHAIR EDEN: So it does ultimately become low level
24 through that -- through the systems that --

25 MR. STEWART-SMITH: Correct.

1 CHAIR EDEN: -- pull it out of the water?

2 MR. STEWART-SMITH: Correct.

3 CHAIR EDEN: In the most simple terms.

4 MR. STEWART-SMITH: The spent fuel itself is known as
5 high-level radiation.

6 CHAIR EDEN: Right.

7 MR. STEWART-SMITH: But any resulting contamination
8 or treatment system that works with the cooling water, any
9 radioactive material resulting from that is -- is low level.

10 CHAIR EDEN: Thanks.

11 MR. STEWART-SMITH: As I -- as I mentioned there are
12 small amounts, however vanishingly small, of radioactive
13 material released from the spent fuel pool. In contrast, a
14 -- a dry spent fuel storage system, the fuel has been -- has
15 been vacuum dried and sealed inside a stainless steel
16 container known -- you'll see references to it in some of
17 the material Maggie has supplied you -- known as a basket.
18 For the life of me I don't know why they would could
19 something a basket. But if you see that term, that's what
20 they're talking about.

21 The walls are about three-quarters of an inch thick
22 stainless steel; there's a shielding and a structural lid
23 that are -- that are more massive yet. And these are welded
24 on so that the spent fuel becomes sealed inside this
25 stainless steel cylinder known as a basket, and the

1 atmosphere around it, rather than being atmosphere as is
2 around us, is replaced with an atmosphere of helium. The
3 reason for that is that helium is a very good heat transfer
4 gas, unlike nitrogen which is the bulk of the air around us.

5 So the dry spent fuel storage system is sealed, and
6 even if the spent fuel pool was remarkable effective at --
7 at isolating radioactive materials from the environment, the
8 dry spent fuel storage system theoretically, at least, is
9 probably more effective yet, because of the nature of it
10 being a dry storage medium and being welded shut.

11 In addition, under severe accident conditions,
12 because the dry storage casks are sealed and massive, they
13 should be able to withstand even more external forces, be it
14 earthquake, be it some kind of intentional destructive
15 force. The dry spent fuel storage system is probably more
16 robust yet than the spent fuel pool that is in use at
17 Trojan.

18 Portland General Electric, let me briefly explain
19 what they have proposed. Let me preface that by saying that
20 this system has been -- has been reviewed by the Nuclear
21 Regulatory Commission, has been reviewed by the technical
22 staff at the Oregon Office of Energy, approved by Oregon's
23 Energy Facility Siting Council through a publicly accessible
24 process.

25 The applicant in their tax credit application, I

1 believe, claimed 36 storage baskets to use within the
2 concrete casks to store spent fuel. My understanding is
3 their -- their current plans are to build 34. They -- they
4 needed to leave themselves a little bit of flexibility
5 earlier on in the process, and the first number, some years
6 ago, is 36, but I believe there will be 34 double sealed
7 sealed canisters that serve a rather unique purpose in the
8 American nuclear industry: They are proposed to be both
9 storage baskets and transport baskets. The only difference
10 will be the shielding container that the basket is put into.
11 It'll be stored in these concrete casks on site until the
12 material is taken possession of by the U.S. Department of
13 Energy at which time the transfer system that the company
14 has built on site will be used to transfer the baskets in a
15 shielded condition from the storage cask into a transport
16 cask that will be loaded onto a rail car -- PGE being
17 fortunate to have a rail line running through the middle of
18 their plant site. They have easy access to rail. -- and
19 shipped to wherever the final spent nuclear fuel disposal
20 site will be for the country.

21 The baskets are about 15 feet tall, about five and a
22 half feet in diameter. The outside of the basket is made of
23 stainless steel, as I mentioned, and the internal structures
24 inside the cylinder are made of high carbon steel, coated
25 with a coating to prevent corrosion.

1 Each basket can store up to 24 spent fuel assemblies.
2 That's the assemblies of 144 fuel pins each. And after the
3 basket is loaded with the fuel assemblies, and all that
4 loading happens in the spent fuel pool itself, by the way,
5 so that the spent fuel can never be unshielded. It's much
6 too radioactive to ever be in an unshielded condition. So
7 the loading of the basket happens in the spent fuel pool. A
8 shield lid and a structural lid are welded in place.

9 The applicant has also built a fuel transfer station
10 and transfer cask assemblies. If they are going to
11 decommission the spent fuel pool, which is their intention,
12 once the independent spent fuel storage facility is
13 finished, they will decommission the spent fuel pool. They
14 have to have the ability in the unforeseen chance that there
15 is a leak of one of those baskets to be able to -- or damage
16 to one of the shield containers -- to be able to transfer
17 that basket to an interim shield and then finally into a new
18 shield. So that the transfer station and the transfer cask
19 assemblies are something that the regulatory agencies have
20 insisted beyond site if the spent fuel pool will no longer
21 be there, because it would serve similar purposes.

22 The transfer cask and the -- and the transfer station
23 will also be used when it comes time to ship the fuel off
24 site, transferring these baskets into a shipping cask.

25 When the basket is removed from the transfer cask,

1 it's placed inside the dry spent fuel storage, the massive
2 structure that I described before, the concrete cask, which
3 is seventeen and a half feet tall and eleven feet in
4 diameter. The cask is lined with carbon steel, and the
5 walls are 29 inches thick to provide the massive shielding
6 necessary to contain the spent fuel.

7 The casks will have their own temperature monitoring
8 systems because the easiest way to determine whether or not
9 all is well with this kind of a system is whether or not the
10 temperature is going up. If the temperature goes up, that's
11 some indication that the provision for natural convective
12 cooling is somehow been interfered with, whether it's debris
13 of some kind blowing into the vents at the bottom of the
14 storage cask, preventing air from moving up the channels and
15 out the top, or whatever it may be; that possibility is
16 monitored for.

17 When loaded, these casks weight about 145 tons. They
18 are -- there's an example of a cask over here, and you'll
19 see on one of the examples a -- I believe the one in the
20 middle has an air pallet on the bottom of it. An air pallet
21 is essentially an inflatable heavy rubber circle open at the
22 bottom; it's pressurized and then allows the cask to be
23 repositioned floating on a cushion of air. Strap it to a --
24 to a truck, if you will, and move it around the site
25 wherever they need it with the pressurized air pallets

1 inflated. It really is pretty amazing to see 100 pounds per
2 square inch move 145 tons, but it works.

3 Then the concrete casks are placed on the -- on the
4 storage pad, 170 feet by 105 feet, for its long-term storage
5 until the U.S. Government is prepared to take it.

6 That's pretty much my explanation and presentation on
7 the site. And at this point, I would be happy to answer any
8 questions the Commission would have.

9 CHAIR EDEN: Thank you. Questions or comments from
10 the Commission? Commissioner Van Vliet.

11 COMMISSIONER VAN VLIET: In the very last statement,
12 you said, when the U.S. Government was prepared to take it.

13 MR. STEWART-SMITH: Correct.

14 COMMISSIONER VAN VLIET: Is it -- have they had a
15 site really ready to go to accept these now at all in the
16 future?

17 MR. STEWART-SMITH: No.

18 COMMISSIONER VAN VLIET: They do not?

19 MR. STEWART-SMITH: No.

20 COMMISSIONER VAN VLIET: The Nevada thing still is up
21 in the air?

22 MR. STEWART-SMITH: It is -- the -- the U.S.
23 Department of Energy is preparing an acceptance document for
24 the President's signature. I don't believe that it's
25 actually been signed yet, but the U.S. Department of Energy

1 has made it clear they feel there is no fatal flaw with the
 2 site. But the U.S. Nuclear Regulatory Commission must
 3 license this site, and site licensing is -- is some years
 4 off yet. I think an optimistic estimate of when that site
 5 might be available will be sometime after 2012, 2014.

6 COMMISSIONER VAN VLIET: So to use the current Trojan
 7 site, what you have to do is develop a series of these to
 8 store for a long period of time with guarded --

9 MR. STEWART-SMITH: Right.

10 COMMISSIONER VAN VLIET: -- fence around it and
 11 security and everything?

12 MR. STEWART-SMITH: Yes. That is PGE's plan. They
 13 could have left the spent fuel in the spent fuel pool.
 14 That's a perfectly adequate long-term storage system, but
 15 because of its active components, it -- it requires
 16 additional staff. It is a more detailed and expensive site
 17 to maintain over time, and, as I mentioned the dry spent
 18 fuel storage facility is more massive and is sort of
 19 inherently passively sa

20 COMMISSIONER VAN VLIET: More passive structure in this last
 21 session did not do anyt. and passive issue?

22 MR. STEWART-SMITH: Sure there were --
 23 other than -- other than the bill that was in to allow PGE
 24 to continue to recover a portion of its investment from the
 25 decommissioned plant, this session, I believe there were no

1 bills affecting storage of spent fuel on site.

2 Current state law requires that if spent fuel is
3 stored on site, it must be stored under the auspices of both
4 a license issued by a Nuclear Regulatory Commission and
5 site certified issued by the Oregon Energy Facility Siting
6 Council, (indiscernible), and we'll be maintaining those in
7 the future.

8 COMMISSIONER VAN VLIET: And when the people of the
9 State of Oregon voted to shut Trojan down, was there any
10 provision in that at all as to the responsibility for the
11 cost of the eventual decommissioning?

12 MR. STEWART-SMITH: Well, while there were three
13 votes that I remember, the question of which was whether or
14 not to shut down Trojan, none of them passed. And I don't
15 believe any of them specifically dealt with the monetary
16 issues. They were fairly simple measures that required the
17 closure of the plant. They all were defeated by 60-40
18 percentages or better. So I don't -- I can't quote you
19 chapter and verse on those initiatives --

20 COMMISSIONER VAN VLIET: Okay.

21 MR. STEWART-SMITH: -- but I do not believe that
22 there were any financial --

23 COMMISSIONER VAN VLIET: That's my memory too.

24 MR. STEWART-SMITH: -- components to those. The
25 company may be able to answer that more competently than I

1 can.

2 COMMISSIONER REEVE: What -- just one. You mentioned
3 that there's a decommissioning plan that has been approved?

4 MR. STEWART-SMITH: Correct.

5 COMMISSIONER REEVE: That -- and that was approved by
6 EFSC?

7 MR. STEWART-SMITH: Yes.

8 COMMISSIONER REEVE: Okay. Does the NRC review that,
9 or is that really the State?

10 MR. STEWART-SMITH: The NRC reviewed and approved
11 that plan as well, although under current NRC rules that
12 have been promulgated after that approval, the Nuclear
13 Regulatory Commission has changed their policy so that they
14 no longer require a plan for NRC approval. They have a set
15 of conditions that must be met by a utility with a closed
16 nuclear reactor, and they will inspect against those
17 conditions, but they no longer, for the next plant, for
18 example, that closes will no longer require specific
19 approval of the decommissioning of the plant, is my
20 understanding.

21 COMMISSIONER REEVE: Okay, now, is the plant -- is
22 the plan tied to the site certificate somehow?

23 MR. STEWART-SMITH: Yes. The plan -- the plan
24 recognizes the existence of both state requirements and
25 federal requirements (indiscernible). Most of our

1 requirements for the Trojan plant are in administrative
2 rules. The site certificate itself is a one-page document
3 signed by Governor McCall in 1971 and had no conditions.
4 But it did require that the company comply with all future
5 rules of the (indiscernible).

6 COMMISSIONER REEVE: Okay. So this decommissioning
7 plan, does it require this dry storage?

8 MR. STEWART-SMITH: The decommissioning plan, as put
9 together by the company, said they were going to do that,
10 and the company has held essentially to what they said they
11 were going to do. While there is no regulatory requirement
12 for a dry spent fuel storage facility, either at the state
13 or the federal level, other than tying the company to the
14 commitments they made, the Nuclear Regulatory Commission has
15 made it very clear that their preference for a closed
16 reactor is dry interim storage of spent fuel, rather than an
17 active spent fuel pool storage. They have not made that a
18 mandatory requirement but they've made it clear that that's
19 their strong preference.

20 COMMISSIONER REEVE: Okay, but in terms of the need
21 for the company to meet its obligations to the Office of
22 Energy, does PGE have to move forward and construct this dry
23 storage facility?

24 MR. STEWART-SMITH: They do today because they made
25 the commitment to do it. And we will hold them to their

1 commitment. Save for that, the Energy Facility Siting
2 Council has no requirement for dry spent fuel storage per
3 se.

4 COMMISSIONER REEVE: Per se, but if they were --
5 obviously they could come in and, with a proposal for a
6 modification or amendment or some other type of storage,
7 you'd have to review it --

8 MR. STEWART-SMITH: Correct.

9 COMMISSIONER REEVE: -- but as it stands today,
10 they've committed, and it's an enforceable commitment?

11 MR. STEWART-SMITH: Correct.

12 COMMISSIONER REEVE: Okay. And the criteria under
13 which that plan was approved, I take it they must be -- a
14 number of criteria, a number of factors, public interest,
15 health and safety, all those sorts of things, including
16 water and air pollution?

17 MR. STEWART-SMITH: Correct.

18 COMMISSIONER REEVE: But not solely limited to water
19 and air pollution?

20 MR. STEWART-SMITH: Correct. And those are contained
21 in Condition 26 or OAR Chapter 345, rules of the Siting
22 Council.

23 COMMISSIONER REEVE: Okay.

24 MR. STEWART-SMITH: The Siting Council promulgated
25 criteria by which a decommissioning plan would be reviewed

1 and approved. Then the company submitted the
2 decommissioning plan; that review was done; staff wrote a
3 review of the plan and a recommendation to Council, and then
4 Council did approve the decommissioning plan. By rule
5 (indiscernible).

6 COMMISSIONER REEVE: Thanks.

7 CHAIR EDEN: Do we have any idea, or is appropriate
8 to ask at this point, what the relative cost of the two
9 systems is? Given -- given a finite date which I realize
10 doesn't exist for removal -- final removal of the spent
11 fuel?

12 MR. STEWART-SMITH: The company's decommissioning
13 plan does keep track of both costs of decommissioning and
14 ongoing operation and maintenance costs of both the plant
15 and the independent spent fuel storage installation. And it
16 -- the annual costs of maintaining the spent fuel pool are
17 in that -- in that cost matrix is pegged, I believe, at
18 about \$10.4 million a year. The cost of maintaining the
19 independent spent fuel storage installation is pegged at
20 about \$3.6 million a year. So while there's a higher
21 initial cost, there is some point at which the costs are
22 even and -- and/or, if stored on site long enough, the cost
23 of storage in the spent fuel pool would have been more
24 expensive.

25 CHAIR EDEN: And we as a State have no control move

1 when --

2 MR. STEWART-SMITH: No.

3 CHAIR EDEN: -- the federal facility is going to be
4 ready?

5 MR. STEWART-SMITH: We do not. PGE has estimated
6 that the last of their spent fuel will be off site in year
7 2018. Given U.S. Department of Energy record to meeting
8 their deadlines, that may be optimistic in itself. It seems
9 (indiscernible).

10 COMMISSIONER VAN VLIET: At the time that this fuel
11 is safely stored, the value of that property now becomes
12 both useable as real estate, and has it got any other
13 projected uses at this current time?

14 MR. STEWART-SMITH: There are certainly possible uses
15 for the site. It is currently a site served with a -- an
16 active water right. It's a site with a switchyard and a 500
17 kilovolt power line to it. It has natural gas service on
18 Highway 30 right outside the front gate of the plant. So
19 it's a site that is situated both geographically and
20 electrically, being near the major load centers of the state
21 as an advantageous site for a power plant.

22 The company has considered putting in natural gas
23 combustion turbines on that site. They have not made the
24 decision yet to do that, but I believe it's still an option
25 they are holding open. It is a good site for a power plant.

1 And they certainly -- given the expected load growth over
2 the next 20 years, in order to maintain an healthy
3 electrical transmission system, they would be well served by
4 having electrical resources on the west side of the Cascades
5 rather than the most on the east side of the Cascades with a
6 line -- long -- very long transmission lines.

7 So, it's very possible that that site could be used
8 in the future as a power plant again. The company has also
9 offered to the Department of -- the State Department of
10 Parks to delegate on the order of 500 acres of the 640 or so
11 acre site as a state park which they currently maintain much
12 of it as a state park and wildlife refuge. But they are
13 going to be moving most of their equipment off the site,
14 then they'll looking for somebody else to take over that
15 responsibility.

16 So there are possible multiple uses for the site.
17 But for the area inside the fence, it may be in the future
18 redeveloped into a power plant, probably fueled by natural
19 gas.

20 COMMISSIONER VAN VLIET: That's interesting, because
21 in the '90's -- late '80's and '90's all we heard from the
22 legislature was the abundance of electric power in the
23 Pacific Northwest power grid, and all of a sudden now we're
24 hearing that there's a substantial shortage, which means the
25 advocates who were trying to shut down all the nuclear

1 plants in the world at the same time you're trying to get
2 rid of dams and the hydroelectric part didn't quite have the
3 scenario right as to what our needs were actually going to
4 be as the population increased.

5 So now we're faced with the fact that we not only
6 have to store this material, we no longer have the nuclear
7 plant to provide the power which doesn't give us an option
8 to do anything away with dams, but we'll have to bring
9 additional power plants back on line.

10 MR. STEWART-SMITH: That is correct. There were power
11 surpluses in the Pacific Northwest in the 1980's, but they
12 were fairly well gone by 1992. And given the anticipated
13 restructuring of the electric industry, new power plants
14 will probably come on line as closely as possible to match
15 load growth rather than building large -- very, very large,
16 like Trojan was an 1130 megawatt electric generating station
17 -- that's twice as big -- over twice as big as any power
18 plant left in the state. Most of the plants that are being
19 proposed now are either in the 260 megawatt range or the 500
20 megawatt range. And they'll come on line, you know, in a
21 fashion that the market dictates they can build the plant
22 and begin with a profit and not any time before that.

23 CHAIR EDEN: Other questions or comments? Are there
24 any questions of the company representatives?

25 COMMISSIONER McMAHAN: Madam Chair --

1 MS. VANDEHEY: Madam Chair --

2 CHAIR EDEN: Maggie has a few more comments --

3 COMMISSIONER McMAHAN: Oh, sorry.

4 MS. VANDEHEY: Madam Chair -- Madam Chair, I would
5 like to talk about the scope of the preliminary application
6 review. When the Department reviews applications, whether
7 it be preliminary or final to determine if a facility meets
8 eligibility requirements (indiscernible), first we determine
9 the purpose of the facility. Did DEQ or EPA require this
10 facility? Or is the facility's only purpose for pollution
11 control? If the answer's no to both of these questions, the
12 facility does not meet (indiscernible).

13 Secondly, we determine the purpose of the
14 installation is to prevent, control or reduce a substantial
15 quantity of pollution. If it does not, the facility does
16 not meet the eligibility criteria.

17 Thirdly, we determine if the pollution control is
18 accomplished by one of the methods used listed in the
19 statute. If the pollution control is not accomplished by
20 one of those methods, the facility does not meet the
21 eligibility criteria.

22 These three steps properly describe how the staff
23 will review PGE's preliminary application. Personally,
24 (indiscernible) purpose (indiscernible).

25 Portland General Electric Company submitted their

1 preliminary application a few days before the rules
2 implementing 1995's legislation became effective. The
3 legislation states that the Commission's approval of the
4 preliminary application's prima facie evidence that the
5 facility meets the facility eligibility criteria. The
6 legislation also states that preliminary certification does
7 not ensure that the facility will be (indiscernible).

8 Can staff rely upon the statute alone when there are
9 no (indiscernible) rules. The answer to this question is an
10 important one, because the findings (indiscernible)
11 preliminary application (indiscernible). If staff were to
12 review the preliminary application based upon the statutes
13 alone, the staff would report possible benefits
14 (indiscernible) PGE as a result of installing
15 (indiscernible) facility. Staff would answer questions such
16 as is there a reduced risk of liability to (indiscernible)?
17 Does the facility provide increased health and safety
18 benefits? Are fees, operations and maintenance costs or
19 insurance costs reduced? Is there a reduction in on-site
20 staff, inspections, reporting requirements, and monitoring
21 requirements? Does the site's unrestricted use designation
22 provide any benefits to the applicant? And finally, are
23 these benefits sufficient enough to become the overriding
24 purpose of the facility?

25 If staffs prepares the review, considering the rules

1 in effect at the time that PGE submitted their application,
2 even (indiscernible) those rules did not include a provision
3 for preliminary application. Staff would report on
4 financial benefits that may accrue to the applicant in the
5 final application phase.

6 Before I continue with the preliminary application, I
7 would like to talk a little bit about what would be
8 happening (indiscernible) final application when the
9 Commission grants a preliminary certification. The final
10 application would be -- would be received under the 1998
11 rules, the rules that came into effect just a few days
12 before PGE filed for preliminary application. The rule
13 states that if an applicant builds a facility as planned and
14 approved under the preliminary certification, then the
15 facility meets the definition of a pollution control
16 facility --

17 COMMISSIONER McMAHAN: Say that again, please.

18 MS. VANDEHEY: If the applicant builds the facility
19 as planned and approved under the preliminary application,
20 then the facility meets the definition of a pollution
21 control facility. All that remains to be -- to be performed
22 during the final review is to verify that it was built
23 according to plan and then to the permanent facility
24 (indiscernible), and percentage of the cost allocable to
25 pollution control.

1 Now, I'll continue with the preliminary application
2 process. Staff then determines that the amount of pollution
3 control prevented or eliminated is substantial. Does the
4 installation that PGE claimed on their application control
5 or prevent a substantial quantity of pollution above what
6 (indiscernible) rule currently provides. The staff would
7 ask these questions: Can all systems (indiscernible)
8 determine if they meet eligible (indiscernible) criteria
9 (indiscernible), transfer station, the concrete pads
10 auxiliary systems.

11 If the facility passes the purpose of the of
12 threshold eligibility criteria, the staff will then focus on
13 how the pollution control is accomplished. PGE claims the
14 facility as an air, water, and hazardous waste facility,
15 (indiscernible) focus on the water quality portion
16 (indiscernible). Any facility that qualifies as a water
17 pollution control facility if -- if the pollution control is
18 accomplished by the disposal or elimination of industrial
19 waste and was accomplished by the use of (indiscernible)
20 industrial waste. Tax credit statutes refer to water
21 quality, control loss and (indiscernible). The terms of
22 disposal and elimination are not defined under the water
23 pollution control laws. Industrial waste is defined, and it
24 includes radioactive waste. Treatment (indiscernible) is
25 also defined. It includes facilities used to treat,

1 stabilize or hold waste.

2 In their review, staff will address questions such
3 as: Does this interim storage constitute disposal or
4 (indiscernible) of industrial waste? I also would ask how
5 does PGE's facility compare to other facilities granted
6 certification under the same eligibility criteria? It'll
7 ask how does PGE's facility compare to other facilities
8 (indiscernible) waste, (indiscernible) waste and dispose of
9 that properly. Are their risks similar?

10 During the preliminary application review, staff will
11 determine if the facility is a replacement facility.
12 Legislative history of Senate Bill 112 shows that the
13 purpose of a replacement facility were always to eliminate
14 eligibility for facilities that have already received tax
15 credits.

16 The purpose of the minimum is make sure that the tax
17 credit (indiscernible) and was not (indiscernible). The
18 definition of a replacement facility is not clearly defined,
19 and it's not easy to determine whether a facility is a
20 replacement facility. Staff researched the location of the
21 planned facility, the source of control, the process and
22 (indiscernible) control. These may help us determine if the
23 planned facility (indiscernible).

24 The Commission certified seven pollution control
25 facilities at the Trojan (indiscernible); it was certified

1 between 1983 and 1984 for over \$40 million (indiscernible)
2 costs. None of the previously certified facilities were
3 (indiscernible). They were associated with painting the
4 building, cooling tower, radioactive emissions
5 (indiscernible), and a dechlorination facility. What
6 (indiscernible).

7 Does the facility plan to have PGE on its preliminary
8 application and replace the pollution control facilities
9 previously certified to a fully functioning nuclear power
10 plant? The Oregon legislature has not placed a limit on the
11 amount or the number of tax credits for any one applicant or
12 any one site may receive under its program.

13 Staff will address all of these questions that I've
14 raised today in their review report, and I'll bring that
15 before you again in the spring. PGE representatives will be
16 here to answer any questions at the time, and Dave and I
17 will be glad to answer any questions you may have.

18 CHAIR EDEN: Thank you. At the risk of jumping the
19 gun, is it going back to Dave again --

20 MS. VANDEHEY: It's going back to you.

21 CHAIR EDEN: Okay. Does the Commission have any
22 other questions or comments of staff or the company
23 representatives who are here?

24 COMMISSIONER VAN VLIET: I think the most interesting
25 question about this whole thing is who has the ultimate

1 responsibility at this time for controlling the pollution
2 that has been generated by the plant. Company decision or
3 is does the public still have a large interest in the
4 responsibility of it? How much of it is really entailed in
5 trying to make the site useful again? How much of it has a
6 bearing on future mergers? All of these have some
7 interesting aspects that I think will be interesting to have
8 the company people talk to us about.

9 Whether the Committee wants to entertain that today,
10 it seems to me we have to make a decision right now
11 apparently on the preliminary, is that right?

12 COMMISSIONER McMAHAN: No.

13 MS. VANDEHEY: No.

14 COMMISSIONER VAN VLIET: Don't have to? Okay.

15 MS. VANDEHEY: No, this is a briefing --

16 COMMISSIONER McMAHAN: This is a work session.

17 MS. VANDEHEY: -- for you and the decision on the
18 preliminary will be in the spring, and then subsequently
19 when the facility's completed, you would have the -- it
20 would come to you as an action for a final approval.

21 CHAIR EDEN: I perceive this work session as an
22 opportunity for us to be introduced to some of the issues
23 that we're going to face in the spring. But we don't have
24 to do anything today.

25 Any other questions?

1 COMMISSIONER REEVE: Can I ask a procedural question?
2 Just because you went over it fairly quickly, or at least
3 too quickly for my mind, in terms of when the application
4 was received and when these rules became effective? Is
5 there a question that needs to be resolved, either today or
6 in the spring, about whether we're operating under old rules
7 or new rules?

8 MS. VANDEHEY: We -- we will address that before we
9 bring the fin -- the preliminary application to you. We'll
10 address that in our report to you.

11 COMMISSIONER REEVE: Okay. Do you know -- has staff
12 taken a position, different than the applicant as far as
13 that goes?

14 MS. VANDEHEY: We have not. We have not taken a
15 position until we know all the details.

16 COMMISSIONER REEVE: Okay, has the applicant sort of
17 said we're operating under new or old or do we know?

18 MS. VANDEHEY: We know that they submitted --
19 submitted the preliminary application under the pre-1998
20 rules.

21 COMMISSIONER REEVE: Okay.

22 MS. VANDEHEY: They're looking at the definition of
23 sole purpose under the rules that were at the time, even
24 though those rules would not -- did not address preliminary,
25 (indiscernible) certain (indiscernible).

1 COMMISSIONER REEVE: Would that -- maybe I'm still a
2 little slow on it --

3 MS. VANDEHEY: Okay, they --

4 COMMISSIONER REEVE: Would that make a difference in
5 terms of procedurally how do we -- do we get to a
6 preliminary first and then go to final, or are we -- is the
7 applicant and the DEQ in agreement that this process of
8 coming first to a preliminary --

9 MS. VANDEHEY: We're still exploring that
10 procedurally.

11 MR. KNUDSEN: I think I may be able to answer some of
12 those questions, though. The -- the rules that became
13 effective after the applicant filed allow for the applicant
14 to elect to go under the new rules. Right?

15 MS. VANDEHEY: That's correct.

16 MR. KNUDSEN: And they haven't done so, so that part
17 has been answered. But -- at least today. But that doesn't
18 necessarily or probably likely control the procedures that
19 we're talking about, but it may affect some of the criteria
20 or standards by which you evaluate the application, and
21 that's what we're looking into.

22 COMMISSIONER REEVE: Okay.

23 MS. VANDEHEY: Thank you.

24 COMMISSIONER McMAHAN: And will that include a
25 determination as to whether there's a substantial difference

1 between the definition of sole purpose under the old rules
2 and the new rules?

3 MR. KNUDSEN: Yes.

4 CHAIR EDEN: Anything else from the Commission?

5 Or staff?

6 I think we're finished then with the work session.

7 MS. VANDEHEY: Thank you very much.

8 CHAIR EDEN: Thank you. Appreciate you explaining
9 that all to us. And I look forward to hearing more.

10 (Requested portion concluded)

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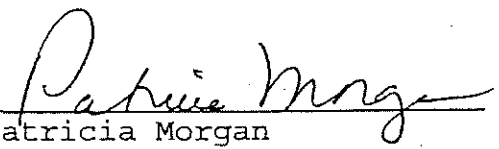
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WITNESS my hand at Oregon City, Oregon this 20th day of January, 2000.


Patricia Morgan
Official Transcriber

Environmental Quality Commission

Rule Adoption Item

Action Item

Information Item

Agenda Item B

September 29, 2000 Meeting

Title: Preliminary Certification Denial Application 5009 – Independent Spent Fuel Storage Installation Portland General Electric Company
Summary: Staff recommends the denial of tax credit application number 5009.
<p>Portland General Electric Company requested the preliminary certification of their Independent Spent Fuel Storage Installation (ISFSI) as a pollution control facility for tax credit purposes. PGE is constructing the ISFSI to replace the spent fuel storage pool that will be dismantled and decontaminated as part of the Trojan Nuclear Power Plant decommissioning plan.</p> <p>Staff recommends that the Commission deny application number 5009 because the claimed facility does not meet the definition of a pollution control facility in ORS 468.155(1) in that it does not:</p> <ol style="list-style-type: none">1. Control a substantial quantity of air and water pollution over what is currently being provided in the spent fuel storage pool.2. Have an exclusive purpose of pollution control, prevention or reduction.3. Make a significant contribution to the sole purpose. <p>Please read the transcript in Attachment C for a full description of the ISFSI.</p>
Deny preliminary certification of the facility presented on application number 5009 as presented in the Staff Report and supporting documents.
<hr/> <p>Report Author Division Administrator Director</p>

September 1, 2000

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

Date: September 1, 2000

To: Environmental Quality Commission

From: Langdon Marsh, Director

Subject: Agenda Item B, September 29, 2000, EQC Meeting
Denial of Preliminary Certification
Application 5009 -- Independent Spent Fuel Storage Installation
Portland General Electric Company

Statement of the Need for Action

This report presents staff's analysis of preliminary application number 5009 and their recommendation for Commission action. Portland General Electric Company (PGE) requested the preliminary certification of their Independent Spent Fuel Storage Installation (ISFSI) under the "pollution control facility tax credit" laws.

Legislation approved in 1995 provided for the preliminary certification of any facility that would otherwise be eligible for a pollution control facility tax credit. The Environmental Quality Commission is the authority that approves or denies preliminary certification that a claimed facility is, in fact, a pollution control facility according to ORS 468.155 to 468.190.

Preliminary Applications

On May 1, 1998 rules (new rules) became effective that implemented 1995 legislation. This legislation reinstated the preliminary certification process. The Department reviewed PGE's preliminary application according to the 1995 legislation and the 1990 rules (old rules) that were in effect on April 30, 1998 – the date PGE submitted their application.

An applicant may submit a preliminary application anytime prior to completing the construction of a facility. PGE submitted their preliminary application within this timing.

The Department reviewed the claimed facility to determine if it met the definition of a pollution control facility. The Department did not review any financial details.

The Commission's approval of a preliminary application is prima facie evidence that the facility meets the definition of a pollution control facility under ORS 468.170. However, it does not ensure that the facility will receive certification under ORS 468.170 or tax relief under ORS 307.405 or 315.304.

Should the claimed facility be approved for preliminary certification and if the applicant builds the facility as planned then the final application would be reviewed under the new rules and would

focus on the facility cost and the percentage of the cost allocable to pollution control.

Background of the Claimed Facility

PGE is constructing the ISFSI to replace a spent fuel storage pool that will be dismantled and decontaminated as part of the Trojan Nuclear Power Plant decommissioning plan.

The claimed facility is a dry storage system that will provide temporary storage of spent nuclear fuel assemblies, fuel debris, and radioactive waste materials. The ISFSI consists of the following major components.

1. Thirty-four sealed metal baskets used to store the sealed zirconium tubes containing the radioactive waste.
2. A vacuum drying system used to remove water from each basket following loading of the sealed zirconium tubes containing the radioactive waste.
3. A semi-automatic welding system used to seal-weld the baskets.
4. A ventilated concrete storage cask for each basket.
5. A transfer station and associated transfer equipment. A transfer cask is used to move a loaded basket from the spent fuel pool to the concrete cask. It is also designed to be used to transfer a basket to a shipping cask, or to a basket overpack.
6. A reinforced concrete storage pad used to support the storage system baskets.

The facility is further described in the attachments to the Staff Report.

PGE permanently ceased operating the Trojan Nuclear Power Plant in 1992 and is required to decommission Trojan. PGE must provide for the temporary safe-storage of spent nuclear fuel until the federal government provides a permanent storage site for its disposal. The U.S. Department of Energy estimates that it will not begin accepting spent nuclear fuel until after 2010. On November 18, 1999, staff briefed the Environmental Quality Commission regarding the physical aspects of claimed facility, the background of the Trojan Nuclear Power Plant, the nature of the spent fuel and PGE's decommissioning plan. The transcript from that session is in Attachment B.

Definition of a Pollution Control Facility

For a claimed facility to be certified for tax credit purposes it must meet the definition of a "pollution control facility" in ORS 468.155(1) but it must not be excluded from the definition as set out in ORS 468.155(2).

There are two parts to the definition of a pollution control facility — the first part must apply to the claimed facility before the second part is considered. The first part defines the purpose of the facility and the second part defines how the pollution control must be accomplished.

Part 1 Pollution Control Purpose

The claimed facility must have a “principal purpose” or a “sole purpose” of pollution control.

- If the Commission determines that the claimed facility or any distinct portion of the claimed facility has a pollution control purpose then the Commission must consider how the pollution control would be accomplished as described in Part 2.

Any distinct portions of the claimed facility that do not have a pollution control purpose are not eligible for preliminary certification and are not provided a second opportunity to be eligible under Part 2.

The statute also provides exclusions from the definition of a pollution control facility in ORS 468.155(2). One of those exclusions is for any distinct portion of a claimed facility that makes an “insignificant contribution” to the principal or sole purpose of the facility.

- If the Commission determines that the claimed facility does not have a pollution control purpose then the claimed facility must be denied preliminary certification as a pollution control facility. If the Commission determines that distinct portions of the claimed facility make an insignificant contribution to pollution control those portions must be removed from consideration.

Part 2 How Pollution Control is Accomplished

The pollution control must be accomplished in a specific manner.

- If the Commission determines that the pollution control would be accomplished in one of the specific manners described in statute and rule then the Commission must issue preliminary certification.
- If the pollution control is not accomplished in a specific manner described in statute and rule then the Commission must deny the claimed facility preliminary certification.

Part 1 – Purpose of the Facility

DEQ, the federal Environmental Protection Agency (EPA) or a regional air pollution authority does not require the ISFSI. Therefore, it is not a “principal purpose” facility. The applicant claimed the “sole purpose” of the installation is to control, prevent, or reduce a substantial quantity of air and water pollution. To meet the definition of Part 1 of the definition of a pollution control facility, the ISFSI must meet each of the items below.

- | | |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Media Protected</u> | The claimed facility must control ¹ air pollution as defined by air quality statute or water pollution as defined by water quality statute. |
| <u>Substantial Quantity</u> | The claimed facility must control a substantial quantity of air or water pollution. |
| <u>Exclusive Purpose</u> | The claimed facility must have an exclusive pollution control purpose. |

If items 1, 2, and 3 above are met for ISFSI as a whole then the ISFSI has a pollution control purpose.

If items 1, 2, and 3 above are met for any distinct portions of the facility that make a significant contribution to the sole purpose of pollution control then those distinct portions have a pollution control purpose.

If any one of items 1, 2, or 3 above is not met then the ISFSI does not meet the definition of a pollution control facility and must be denied certification.

Media Protected The applicant claims the sole purpose of the ISFSI is pollution control, and that it controls air and water pollution. The spent fuel assemblies in the spent fuel pool contain radioactive substances. Radioactive substances meet the definition of a water pollutant (ORS 468B.005) and an air pollutant (ORS 468A.005.) Radioactive material is specifically excluded from the definition of a Hazardous Waste in ORS 466.005.

The Department concludes that radioactive waste may meet the definition of an air pollutant as defined by the air quality statute or water pollution as defined by the water quality statute.

Substantial Quantity To meet the second “sole purpose” criteria, the ISFSI must control a substantial quantity of air or water pollution.

Dry storage controls, prevents, or reduces a substantial quantity of pollution control over no

¹ “Control” is used as a shortened form of “prevent, control or reduce.” For used oil facilities it means “to recycle or appropriately dispose of.”

storage as indicated by 10 CFR 20 (Standards For Protection Against Radiation.) However, the applicant did not provide evidence that dry storage would control, prevent, or reduce a substantial quantity of air or water pollution over what is provided by the existing wet storage system.

Policy Implication

- For final certification, the Department compares conditions that existed prior to installation of the pollution control with the conditions that exist as a result of the installation of the pollution control.
- For preliminary certification, the Department compares the conditions that currently exist to the conditions that would exist as a result of installing the pollution control.

Ignoring the conditions that existed or currently exist prior to the installation of the claimed facility would deviate from previous program implementation. The Department considers that this would expand the program.

The application requires that the applicant describe how the impact on the environment would be reduced or minimized. The application also requires the applicant provide quantitative data if it is available.

In the case of application number 5009, the applicant did not provide evidence that releases from the spent fuel pool to the atmosphere or spills to waters of the state is more than infinitesimal. In the spent fuel pool, the vast majority of any possible releases would be captured by the water treatment systems for disposal. The balance would be gaseous fission-products but the applicant did not provide a discussion of how this would pose a threat to the environment. In the ISFSI, the spent fuel assemblies would be encapsulated in the baskets and casks.

The Department did not review any part of the claimed facility from the perspective of protecting the environment from pollution occurring as a result of a catastrophic events such as earthquakes; terrorist attacks.

Policy Implication

The Department considers that it is at the discretion of the Commission to determine when protecting the environment from catastrophic events is within the scope of the pollution control facility tax credit program.

The Department considers that reviewing applications from this perspective would expand the program.

The Department concludes that the ISFSI would not control a substantial quantity of pollution as compared to what is provided by the existing wet storage system.

Exclusive Purpose

To meet the third “sole purpose” criteria, the ISFSI must have an “exclusive” pollution control purpose.

Concern for public health and safety as relates to nuclear materials was specifically separated from other types of environmental concerns:

On June 1, 1976, the U.S. Supreme Court held that pollutants subject to regulation under the Federal Water Pollution Control Act do not include source, byproduct, and special nuclear materials,...” *Train v. Colorado PIRG*, 426 U.S. 1 at 25.

10 CFR 51, Subpart A – National Environmental Policy Act – Regulations Implementing Section 102 (2)

In Oregon, the regulatory agency that applies the Federal Rules governing the release of radioactive materials into the environment is the Oregon Health Division, Radiation and Protection Services. The Health Division established the standard for levels of safety for releases of radioactive material to the atmosphere.

Safe storage of the spent and failed fuel is required under 10 CFR 20 (Standards For Protection Against Radiation.) Safe storage meets the requirements of OAR 345-026-0390 for Spent Nuclear Fuel Storage as administered by the Oregon Office of Energy. The requirements are, in part, for protection of the environment.

There is no regulatory requirement for PGE to install a dry storage system in place of a wet

storage system other than the legal obligation to implement its decommissioning plan approved by the NRC and the Oregon Energy Facility Siting Council (EFSC.) Both dry storage and wet storage meet the requirements for safe storage set out in the U.S. NRC's Standards For Protection Against Radiation, 10 CFR 20.

PGE's Decommissioning Plan includes the Independent Spent Fuel Storage Installation. The Oregon criteria under which the plan was approved are contained in Division 26 of OAR 345. Now that the plan has been approved, the applicant is legally bound to meet these conditions or request approval of an amendment to the plan from the Energy Facility Siting Council (EFSC).

As a result of the installation, most of the Trojan site would be available for unrestricted use. At that time, PGE would operate the facility under a Part 72 license – Licensing Requirements for the Independent Storage of Nuclear Fuel and High Radioactive Waste (10 CFR 72). The site is a prime Oregon location; transportation is readily available with a rail line running through the property, access to the I-5 corridor and sited on the Columbia River. The site is suitable to be used as a power plant fueled by natural gas and the applicant is considering donating most of the site for recreational purposes.

The cost savings appear to be a significant factor in PGE's decision to move from wet storage to dry storage at this time. The decommissioning plan tracks the costs associated with operation and maintenance of the independent spent fuel storage installation (\$3.6 million a year) and the spent fuel pool (\$10.4 million a year), which represent a savings of \$6.8 million per year.

The applicant is required to provide safe storage of spent nuclear fuel and high level radioactive waste, and is legally obligated to meet the conditions of the approved decommissioning plan. The financial benefits to decommissioning seem to be significant as they are set out in the Trojan Decommissioning Plan.

Part 1 - Discussion of the Significant Contribution of Distinct Portions

The applicant identified the following distinct portions of the facility and the Department reviewed each portion to determine if they each made a significant contribution to the sole purpose of the pollution control as follows.

Baskets

The purpose of 34 PWR and two GTCC sealed metal-baskets is for temporary storage of the spent fuel assemblies while in Oregon, during transportation within and outside Oregon, and then for permanent storage at the federal repository. The sealed metal-baskets would provide the secondary containment for the spent fuel pellets should the primary containment (sealed zirconium tubes) fail. Currently, the majority of any releases within the spent fuel pool would be captured by the water treatment system. The remaining releases would be gaseous fission-products but the applicant did not demonstrate that this would pose a threat to the environment.

The applicant did not demonstrate the probability and the conditions under which the current system could release contaminants to the atmosphere or spill to public waters.

Vacuum Drying Equipment

The purpose of the vacuum drying equipment is to remove residual water from each basket after they are loaded with the spent fuel assemblies within the spent fuel pool. The Department concludes that the vacuum drying equipment makes an insignificant contribution. The equipment has a one-time use. The 1998 rule formalized the Commission's practice to remove the cost of equipment purchased for the purpose of installing the pollution control because that equipment makes an insignificant contribution to the purpose of the facility — OAR 340-0016-0070 (3)(o).

Welding System

The purpose of the semi-automatic welding system is to weld the baskets closed. The Department concludes that the welding system makes an insignificant contribution to the pollution control purpose and it does not have an exclusive pollution control purpose. The 1998 rule formalized the Commission's practice to remove the cost of equipment purchased for the purpose of installing the pollution control because that equipment makes an insignificant contribution to the purpose of the facility — OAR 340-0016-0070 (3)(o).

Concrete Storage Casks

The concrete storage casks have openings in the top and bottom to allow air to circulate through the inside of the cask. They do not have the ability to prevent, control, or eliminate releases to air or water pollution should the spent fuel assemblies and baskets fail. The purpose of the concrete storage casks is to provide shielding of gamma-rays and to provide structural integrity for the baskets to withstand a man-made or natural catastrophic event such as an earthquake, flood, tsunami or tornado etc.

Policy Implication

Shielding has not previously been approved for tax credit purposes. Approval would mean medical and industrial x-ray shielding would then become eligible for a tax credit.

Tertiary containment has not been approved for tax credit purposes. —

The Department considers that providing a pollution control facility tax credit for shielding and tertiary containment would expand the program.

Transfer Station

The transfer station and associated transfer equipment provides for the safe movement of the spent fuel during the transfer of spent fuel assemblies from the spent fuel pool to the baskets and then during transportation to the federal repository. The transfer station must remain with the storage system as long as the fuel is on site. The transfer station provides an essential material handling function. Though essential, material handling is not a pollution control purpose.² The Department concludes that the transfer station provides an insignificant contribution to the pollution control purpose.

Policy Implication

The Department considers that the approval of this type of material handling system would expand the program.

Concrete Storage Pad:

The concrete storage pad is not capable of preventing, controlling or reducing releases to the air or spills to the water should the spent fuel assemblies and the baskets fail. The pad provides structural support for the casks.

Part 1 Conclusion Considering each of the factors in Part 1, the Department concludes that the claimed facility does not have a pollution control purpose. Staff also concludes that the ISFSI includes distinct portions that make an insignificant contribution to the pollution control purpose. For these reasons the Department concludes that these other purposes are more than incidental and that the applicant has not demonstrated that the exclusive purpose of the facility is pollution control.

Because the facility does not meet all three of the “sole purpose” criteria, the Department concludes that the ISFSI does not meet the definition of a pollution control facility, and recommends the Commission deny certification.

² Material handling is allowable in the material recovery or alternatives to open field burning parts of the tax credit program.

Part 2 - How the Pollution Control Is Accomplished

Should the Commission determine that the ISFSI (or any distinct portions) does have a pollution control purpose, then the Commission must also determine whether the facility accomplished the pollution control by one of the methods in statute. The statute explicitly provides five categories of pollution control. ORS 468.155(b)(A).

The Department offers the following analysis of several systems and their ability to accomplish the prescribed pollution control even though the Department concludes that the ISFSI does not have a pollution control purpose.

The applicant claimed the facility as an air and water pollution control facility that prevents spills or unauthorized releases. The pollution control facility tax credit statute specifically identifies how pollution control must be accomplished for both air and water pollution control facilities. The applicant claims that the facility accomplishes the pollution control by preventing spills and unauthorized releases as provided in rule.

Air Pollution Control

The air pollution control must be accomplished by disposing of or eliminating air contaminants, air pollution or air contaminant sources. The pollution control must also be accomplished by the use of air cleaning devices.

The Department concludes that the ISFSI does not meet the definition of an air-cleaning device because it does not remove, reduce, or render the air contaminants less noxious prior to discharge to the atmosphere. The radioactive waste is only stored until it can be removed from Oregon and rendered less noxious to Oregonians over time and distance.

Water Pollution Control

Water pollution control must be accomplished by disposing of or eliminating industrial waste. The pollution control must also be accomplished by the use of a treatment works.

Baskets

The 34 PWR and two GTCC sealed metal-baskets serve as a secondary containment for the spent fuel with the spent fuel assemblies serving as primary containment. The spent fuel assemblies will permanently reside in the baskets. The baskets would meet the definition of "disposal" because they are the permanent container for the spent fuel assemblies, though Oregon is not the permanent location for the baskets. The baskets would be considered a "treatment works" because they hold waste.

The Department determined that the baskets would accomplish pollution control as prescribed in statute.

Concrete Storage Casks

The concrete storage casks do not eliminate or dispose of industrial waste and they do not meet the definition of a treatment works. They are not capable of “holding” industrial waste should the primary and secondary containment fail.

Concrete Storage Pad

The concrete storage pad does not eliminate or dispose of industrial waste. The pad does not meet the definition of a treatment works because it does not treat, stabilize or hold wastes as required in the definition of “treatment works.”

Spills or Unauthorized Release Prevention

The applicant claims that the sole purpose of the claimed facility is accomplished by detecting, deterring, or preventing spills or unauthorized releases as provided by this rule. [OAR 340-016-0025(2)(g) – 1990] There is no longer any express authority in the tax credit statutes for this particular rule. However, legal counsel has advised the Department that the EQC may have sufficient general rulemaking authority to support such a rule and, further, that agencies must generally presume their own rules to be valid.

Other Tax Credits Issued at Trojan

The EQC certified the following seven facilities located at the Trojan site in Rainier during 1983 and 1984. Staff concludes that the ISFSI or any of its distinct portion are not considered replacement facilities as defined in ORS 468.155(2).

App. No.	Description of Facility	Certified Cost	Percent Allocable
1603	AIR POLLUTION CONTROL: Radioactive emission controls associated with the containment building.	\$13,243,985	100%
1604	WATER POLLUTION CONTROL: A 499' high natural draft cooling tower and a circulating cooling water system.	\$10,355,754	100%
1606	WATER POLLUTION CONTROL: Dechlorination system consisting of 2 sampler pumps, 2 pH sampler pumps, sulfite injection equipment, an instrument panel, piping, valves and instruments.	\$210,778	100%
1638	AIR POLLUTION CONTROL: Radioactive emission controls associated with fuel and auxiliary buildings:	\$4,774,207	100%
1639	WATER POLLUTION CONTROL: A liquid waste radioactivity control system consisting of five subsystems: <ul style="list-style-type: none"> • A clean radioactive waste treatment system • A dirty radioactive waste treatment system • A steam generator blowdown treatment system • A solid radwaste system • A liquid radiation monitoring system. 	\$6,927,850	100%
1675	WATER POLLUTION CONTROL: A water treatment filter backwash solids settling system consisting of: <ul style="list-style-type: none"> • A 70,000 gal reinforced concrete basin • A wet well discharge pumping station with two 5-hp pumps • A sludge collection system and 3-hp pumps • Electrical flow panels, flow recorders, and alarms 	\$628,971	100%
1677	AIR POLLUTION CONTROL: Certain elements of the containment building consist of containment– cleanup re-circulating units, spray system, cooling-water system and isolation valves.	\$7,263,820	100%

Conclusions

Staff concludes that the claimed facility does not meet the definition of a pollution control facility. The Department concludes that staff's recommendation is consistent with statutory provisions and administrative rules related to the pollution control facility tax credit program.

Recommendation for Commission Action

The Department recommends the Commission deny certification of the facility claimed on application number 5009 and as represented in this Agenda Item.

Intended Follow-up Actions

Staff will notify applicant of the Environmental Quality Commission's action by Certified Mail.

Attachments

Attachment A	Review Report – Application 5009
Attachment B	Department Position on PGE letter to Commission
Attachment C	Transcript from November 18, 1999 Commission Briefing
Attachment D	Relevant Citations

Reference Documents (available upon request)

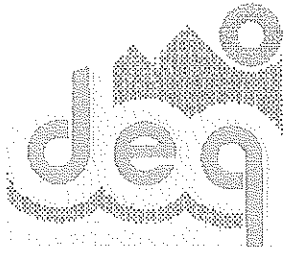
1. ORS 468.150 through 468.190.
2. OAR 340-016-0005 through 340-016-0050.

Approved:

Section: _____

Division: _____

Report Prepared by: Margaret Vandehey
Phone: (503) 229-6878
Date Prepared: September 1, 1999



PRELIMINARY APPLICATION

Director's
Recommendation: **DENY**

Applicant	Portland General Electric
Application No.	5009
<u>Estimated</u> Facility Cost	\$ 55,000,000
<u>Claimed</u> Useful Life	10 years

Tax Credit Review Report

EQC 0009

Pollution Control Facility: Water and Air
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating an **electric utility company**. The applicant's taxpayer identification number is 93-0256820 and their address is:

**121 SW Salmon Street
Portland, OR 97204**

Facility Identification

The applicant claimed the following facility:

An Independent Spent Fuel Storage
Installation.

The applicant is the owner of the facility located at:

**Trojan Nuclear Plant
71760 Columbia River Highway
Rainier, OR 97048**

Technical Information

The claimed facility consists of a vertical dry cask storage system, which will provide temporary storage of spent nuclear fuel assemblies, fuel debris, and radioactive waste materials. Sierra Nuclear Corporation designed the passive TranStor Storage System.

Fission product gamma rays, which are emitted from the spent fuel, are a continuing source of radiation after shutdown of a reactor. The spent fuel assemblies are currently stored in the spent fuel pool. The spent fuel assemblies are about one centimeter in diameter (less than 1/2 inch) and 12 feet long. Each assembly consists of 144 fuel spent fuel pins. Each pin is a zirconium alloy tube sealed at each end and filled with ceramic uranium fuel pellets. If the seal of a pin is broken, water will enter and become contaminated with radioactive materials in the form of fission products; these fission products emit gamma rays, alpha particles, and beta particles. Some of the fission products are gaseous, including krypton and xenon isotopes; therefore they may become airborne in the gaseous space above the spent fuel pool. All of the spent fuel at Trojan has been out of the reactor for over five years and is no longer required to be cooled with water.

The spent fuel pool and supporting plant systems will be dismantled and decontaminated as part of the ongoing decommissioning of the Trojan Nuclear Plant. The dry cask storage system will take the place of the spent fuel pool until the spent fuel assemblies can be transferred to a federally operated disposal site.

The applicant claimed the following major components as part of the pollution control facility.

1. Thirty-four PWR (pressurized water reactor) and two GTCC (greater than class C) sealed metal baskets used to store radioactive materials. The baskets are about 15 feet tall and 5-1/2 feet in diameter. The outside of the basket is made of 3/4-inch thick stainless steel and the internal structures are made of high carbon steel, coated to prevent corrosion. The PWR baskets are capable of storing up to 24 spent fuel assemblies. The GTCC baskets are capable of storing up to 28 individual canisters containing other radioactive waste.
2. A vacuum drying system used to remove water from each basket following loading of radioactive waste. Each PWR basket is loaded with up to 24 spent fuel assemblies in the spent fuel pool and the residual water must be removed.
3. A semi-automatic welding system used to seal weld the baskets. A shield lid and a structural lid are seal-welded in place after the contents are dried.
4. A ventilated concrete storage cask for each basket. Each cask is made of high density concrete about 21 inches thick and provides structural support for the basket. It also provides shielding of the radiation produced by the radioactive materials in the spent fuel.
5. A transfer station and associated transfer equipment. The transfer station is used for basket transfer operations. Lateral and vertical support is provided with the transfer station to prevent a loaded cask from overturning or falling during transfer operations. A transfer cask is used to move a loaded basket from the spent fuel pool to the concrete cask. It is also designed to be used to transfer a basket to a shipping cask, or to a basket overpack. An air pad system is used to move a loaded cask. Air pads are inserted under the cask and inflated with an air compressor. A specially modified vehicle would then be used to move the concrete cask from one location to another.
6. A reinforced concrete storage pad used to support the storage system baskets. The storage pad is 170 foot by 105 foot and 18 inches thick. The concrete casks will be on the pad until the U.S. Government is prepared to take the spent fuel.

Eligibility

ORS 468.155 (1)(a) The **sole purpose** of this new equipment is **not** to prevent, control or reduce a substantial quantity of air or water pollution. The applicant did not provide evidence that dry storage (ISFSI) would provide a substantial quantity of pollution control over what is provided by the existing wet storage system (spent fuel pool.) The radioactive materials that would be stored in the ISFSI are presently stored in the spent fuel pool, thereby controlling radiation releases. The applicant did not provide evidence that radiation releases result in a substantial quantity of air or water pollution being emitted to the environment from the present storage system; therefore, the ISFSI dry storage would not provide a substantial quantity of air or water pollution prevention, control, or reduction.

The ISFSI would serve purposes other than pollution control such as to facilitate decommissioning.³ The vacuum drying system; the semi-automatic welding system; the ventilated concrete storage casks; the transfer station and associated transfer equipment; and the reinforced concrete storage pad have purposes other than pollution control or they make an insignificant contribution to the claimed pollution control purpose.

ORS 468.155 (1)(b)(B) The ISFSI does not dispose of or eliminate air contaminants with the use of an air cleaning device as defined in ORS 468A.005.

ORS 468.155 (1)(b)(A) The baskets would dispose of industrial waste with the use of a treatment works as defined in ORS 468B.005. The other systems either do not dispose of or eliminate industrial waste or the control is not accomplished by the use of a treatment works.

OAR-016-0025 (2)(g) The applicant claimed the installation would be used to detect, deter, or prevent spills or unauthorized releases. The applicant did not demonstrate the probability that releases to the atmosphere or spills to waters of the state with the current system is more than infinitesimal.

Timeliness of Application

The application was submitted prior to the completion of construction.

Application Received

5/5/1998

Application Substantially Complete

4/27/2000

Reviewers: Maggie Vandehey, DEQ
SJO Consulting Engineer
Elliot Zais, PhD, DEQ

³ See Director's Letter 5/17/00 for full discussion.

**Transcript
Agenda Item B
September 29, 2000 EQC Meeting**

Melinda Eden, Chair of the Environmental Quality Commission

Next is Agenda Item B, consideration of request for preliminary certification of tax credit number 5009; which is Portland General Electric Company's Independent Spent Fuel Storage Installation. Ms. Vandehey is here.

Maggie Vandehey, Tax Credit Program Manager, Department of Environmental Quality

Good Morning Madam Chair and Commissioners. I'm Maggie Vandehey with the tax credit program at DEQ.

Portland General Electric submitted application for preliminary certification of its dry storage system. That is what is presented in Agenda Item B. It was submitted under the pollution control facility tax credit program. The facility claimed for certification is located in Rainier at the Trojan Nuclear Power Plant site. It is estimated that the cost will be about \$55 million once it's constructed. The application is numbered 5009.

The November 18, 1999, EQC work session provided background information on Trojan, decommissioning, wet storage and dry storage. And a transcript of that has been provided in the staff report. I'll cover some of that information again here today for the benefit of the Commissioners who were not in attendance at that work session.

However, first, I would like to briefly describe preliminary certification. 1995 legislation provided for the preliminary certification of a pollution control facility. New rules implementing preliminary certification went into effect on May 1, 1998. However, PGE submitted their preliminary application the day before, on April 30, 1998, under the old rules. And it is under these old rules that we reviewed this preliminary application.

According to the legislation, the department considers that the applicant submitted the preliminary application as required. And that is, prior to completion of the construction.

The review was limited to the claimed facility's ability to meet the definition of a pollution control facility. The actual cost and the percentage of the cost that could be attributed to pollution control were not considered.

The new rule provides that pre-certification means the facility meets the definition of a pollution control facility. Of course if PGE constructed it (microphone noise) ...facility presented in these documents.

At this point, a bit of background of Trojan Nuclear Power Plant may be a bit helpful to you.

The commercial production of power began in 1976. In January of 1993, PGE notified the Nuclear Regulatory Commission that they decided to stop commercial operations of the power plant. PGE based the decision on several uncertainties; uncertainties about the plant's reliability, particularly the reliability of the steam generators; uncertainty about

the cost of operation; and uncertainties about the availability of low-cost replacement power.

Once a nuclear power plant ceases to operate, the NRC requires that the plant be completely decommissioned in 60 years. And I noticed in the transcript that it said 16 years; I just want to clarify that. PGE began this process as the first large commercial power plant to undergo decommissioning. The claimed facility is part of that decommissioning plan.

In 1995, PGE moved four contaminated steam generators and a pressurizer tank to the regional commercial low-level waste disposal site at Hanford. The steam generators and the pressurizer tank contained about 10% of the nonspent fuel radioactivity.

In 1996, the NRC and the Oregon Energy Facility Siting Council approved the plan for decommissioning the Trojan plant.

And in 1999, PGE moved the reactor vessel to Hanford for disposal with about 90% of the nonspent fuel radioactivity.

Here is where the claimed facility's role in the decommissioning comes in. The spent fuel assemblies, fuel debris, radioactive waste materials still reside within the spent fuel pool at the Trojan site. As the name implies, this is a wet storage system.

The spent fuel, in the form of ceramic uranium fuel, is contained in sealed zirconium-alloy tubes. During commercial operations at Trojan, these tubes were placed in the spent fuel pool after they were removed from the reactor. The water in the pool provided for the heat transfer when the spent fuel assemblies first came out of the reactor. And the water also provides for shielding.

Less than 1% of the tubes became unsealed as a result of temperature and pressure in the reactor. For this reason, the wet storage system also includes a radioactive waste treatment system to remove the contamination from the water. This low-level radioactive waste from the treatment system is disposed of at Hanford.

The claimed facility, the Independent Spent Fuel Storage Installation, or ISFSI for short (that's a hard one to come off the tongue) provides for the dry storage of the spent fuel assemblies that are now in wet storage. It is a passive storage system with several distinctive portions.

PGE claimed thirty-four pressurized water reactors, or PWRs, capable of storing up to 24 spent fuel assemblies. They also claimed two greater than class C, or referred to as GTCC, sealed metal baskets capable of storing up to 28 individual canisters containing other radioactive waste. These baskets are about 15 feet tall and 5-1/2 (Background Noise..) They are on the inner core of the storage system. All of the elements of the storage system are shown in this second (microphone noise) from the door. The baskets are loaded with the spent fuel and radioactive waste and then moved out of the spent fuel pool.

The applicant claimed a transfer station and various transfer equipment to be used in this operation. And the station scheme is found right next to the door. The transfer station will also be used to load the basket into the concrete casks. It will also be used to transfer to shipping casks or to a basket overpacks. The applicant also claimed various equipment for moving the concrete cask from one location to another.

Once the baskets are out of the spent fuel pool, a vacuum drying system would remove any of the residual water. The vacuum drying system will be contaminated after this one-time use and then it would be disposed of as radioactive waste.

The applicant also claimed a semi-automatic welding system to seal weld the baskets closed after the contents are dried. After its one-time use, the welding system will most likely be contaminated. If it is, then it would be disposed of as radioactive waste.

Each basket is then placed in its own ventilated concrete storage cask. These casks, they are giants. They are about 17 feet tall, 11 feet in diameter, their walls about 21 inches thick. And they weigh about 145 tons once they are fully loaded. The casks provide structural support for the basket and shielding of the radiation. After use, the casks will be contaminated and disposed of as radioactive waste.

As you might guess, it will take a pretty hefty pad to hold those 32 to 34 casks. And I say 32 to 34 because PGE, I think, has probably adjusted the number of casks that will actually be needed. The applicant claimed a reinforced concrete storage pad for this purpose. The concrete casks will remain on the pad until the U.S. Government is prepared to take the spent fuel.

All together, these distinct portion make up the ISFSI.

Before I talk about the Department's recommendation for preliminary certification, I would like to emphasize that I am not talking about the importance of the Independent Spent Fuel Storage. I am not talking about its importance to decommissioning Trojan. I am not talking about the importance to PGE's ratepayers. I am only talking about the relationship of the claimed facility to the pollution control facility tax credit regulations. (Background Noise.)

Kitty Purser, Assistant to the Director and Commission

Can you speak up a little bit?

Ms. Vandehey

Okay. For the ISFSI to meet the definition of a pollution control facility it must have a pollution control purpose. It must not include distinct portions that make an insignificant contribution to that purpose. (Microphone noise.) And if the facility does have a pollution control purpose then the facility must accomplish the pollution control in one of the manners describe in law.

Here today, I'm only going to address the purpose portion of the definition. I won't go into how the pollution control is accomplished. The staff report contains the full discussion of that.

The ISFSI was not required by DEQ or EPA. Therefore, it does not have a "principal purpose" of pollution control.

The applicant claimed the facility would have a sole purpose addressing a substantial quantity of air and water pollution. The Department reviewed the application from this perspective.

The statute provides, in part, that the sole purpose of the installation must be to prevent, control or reduce a substantial quantity of air or water pollution. Both the old and new rules gave additional meaning to mean "exclusive" purpose.

I'll describe the criteria contained in the sole purpose portion of the definition and I'll relate them to this facility.

One, the claimed facility must control air pollution as defined by air quality statute, or it must control water pollution as defined by water quality statute. The amount controlled must be a substantial quantity of air or water pollution. The facility purpose must be exclusively for pollution control.

The Department concluded that the claimed facility meets the first sole purpose criterion in that radioactive waste is included in the definition of an industrial waste as defined in water quality rule. The Department also concludes that radioactive waste could meet the definition of an air pollutant as defined by the air quality statute.

The Department was not able to conclude that the second and third sole purpose criteria were met. The ISFSI, in the Department's consideration would not control a substantial quantity of water or air pollution. And the purpose of the ISFSI is not exclusively pollution control.

In reviewing this second criterion, the applicant did not provide evidence that dry storage would control a "substantial quantity" of water or air pollution over what is currently provided in the wet storage system.

The applicant is required to provide safe storage of spent nuclear fuel and high level radioactive waste. Both dry storage and wet storage meet the requirements for safe storage.

The applicant disagrees with the Department's comparison of the conditions that would exist as a result of the dry storage system with the conditions that currently exist with wet storage system. Both the existing system and the claimed system provide for the storage of spent fuel – the same spent fuel – not a new waste stream. Both systems provide safe storage according to the Nuclear Regulatory Commission's Standards for Protection Against Radiation.

Looking at the quantity of pollution controlled under the current conditions is consistent with the program implementation. Using that information as a benchmark to determine if,

in fact, the facility would provide substantial quantity of pollution control is consistent with program implementation.

I'd like to mention here that staff did not review any part of the claimed facility from the perspective of protecting the environment from pollution occurring as a result of any catastrophic event such as earthquakes or terrorist attacks. The Department does not consider that it has the discretion to determine when the protecting the environment from catastrophic events is within the scope of this tax credit program. Staff considers this perspective expands previous program implementation.

The Department does not consider that the ISFSI controls a substantial quantity of air or water pollution over what is currently being provided by the spent fuel pool. The recommendation to deny preliminary certification of application 5009 is based on this criterion.

If the Commission determines that the ISFSI controls a substantial quantity of pollution, the Commission must then consider the the third sole-purpose criterion. However, if the Commission determines that the ISFSI does not control a substantial quantity of air or water pollution then the Commission must deny the application.

Under the third sole-purpose criterion, the ISFSI must have an exclusive pollution control purpose.

Looking at the entire claimed facility rather than its distinct portions; the cost savings appear to be a significant factor in PGE's decision to move from wet storage to dry storage at this time.

The evidence available to the Department came from PGE's decommissioning plan. I noticed that the excerpt at the last page of attachment "B" was missing the last page. However, that did show, it did track the costs associated with operations and maintenance of both the existing system and the claimed facility.

According to the plan, the ISFSI would provide a \$6.8 million per year savings in operating and maintenance costs.

The staff report also includes an analysis of each distinct portion of the claimed facility. The Department concludes that distinct portions of the claimed facility make an insignificant contribution to the sole and exclusive purpose.

The vacuum drying equipment, the welding system, and the transfer station and various transfer equipment are used for installation and material handling. Including equipment purchased for the purpose of installation is not consistent with previous program implementation.

The concrete storage casks have openings in the top and bottom to allow air to circulate through the inside of the cask. They do not have the ability to prevent, control, or eliminate releases should the zirconium alloy tubes and baskets fail. The casks do provide shielding of gamma rays and they do provide structural integrity for the baskets to

withstand a man-made or natural catastrophic events. Likewise, the concrete pad provides structural support for the casks.

The purpose of the sealed metal-baskets is for temporary storage of the spent fuel assemblies while in Oregon, during transportation within and outside Oregon, and then for long term storage at a federal repository. The Department considers that these baskets provide secondary containment and the tubes provide the primary containment.

To recap, staff concludes that the ISFSI does not control a substantial quantity of air or water pollution over what is currently being provided by the spent fuel pool. And on this point recommends denial of preliminary application number 5009. Additionally, the claimed facility would provide a \$6.8 million savings, sufficient enough to keep the facility from having an exclusive pollution control purpose. Staff also concludes that distinct portions of the ISFSI have purposes other than pollution control.

Chair Eden, I'd be glad to answer any questions. Also Dave Stewart-Smith from the Office of Energy is also here to answer any questions. And PGE representatives are also here.

Chair Eden

Thank you. First, let me ask counsel if there was any problem with PGE representatives speaking to us. Three people have signed up from the corporation.

Larry Knudsen, Legal Counsel to the Environmental Quality Commission

No, I think that it's fine and probably appropriate.

Chair Eden

Are there questions or comments from the Commission at this point?

(Background Talk.)

Commissioner Tony Van Vliet

(Indistinguishable.)

...and the Department of Energy. (Indistinguishable.)

Chair Eden

Do you have questions for him? Is Mr. Stewart-Smith available?

(Background Talk.)

Good Morning.

Dave Stewart-Smith, Oregon Office of Energy

Good Morning, Madam Chair. My name is Dave Stewart-Smith, Oregon Office of Energy.

I'd be glad to answer any questions the Commission may have.

Chair Eden

(Background Talk.)

Do you have any questions?

Commissioner Tony Van Vliet

No, not at this point.
(Background Talk.)

Chair Eden

Three folks from PGE have signed up to address us on this issue. Well, they signed up for the eleven thirty public forum. And let me back up a little bit. We do have a public forum at eleven thirty and anyone who wishes to speak to us on any issue except on those on which public comment has closed are free to do so at eleven thirty.

However, I think it's appropriate for the PGE folks to address us at this point. And that would be Mr. Lei, Mr. Dursek, and Mr. Quennoz. I'm sorry if I'm butchering those names. Please join us. Please introduce yourselves for the record.

(Background Talk.)

I don't know if everyone has seen the video; I have seen the video. Have you seen the video?

Unidentified Person

This is as an outline the presentation...
(Indistinguishable.)

Chair Eden

I'm going to give you about fifteen minutes.
(Background Talk.)
That doesn't include questions.

Steve M. Quennoz, VP of Nuclear and Thermal Operations at Portland General Electric.

Madam Chair, Commissioners, thank you for this opportunity. For the record, I'm Vice president of Nuclear and Thermal Operations at Portland General Electric. I have responsibility for the Trojan plant. In addition to that, Boardman, Beaver-Coyote, ownership share of (indistinguishable.) A plant person, I've been responsible for the Trojan decommissioning throughout the shutdown period. So, I think I'm in a good position to try to explain the motivation behind the construction of the dry storage facility.

Feel free to ask any questions at any point. We have a summary that we handed out and also, a presentation. With me today I have Dr. Wayne Lei, who is the Director of Environmental Policy at Portland General Electric. Lanny Dursek, who's behind to work the slides. Lanny is the Manager of Nuclear Regulatory Affairs at the Trojan Plant. And also in the audience is Denise Saunders, who is outside counsel for the company.

The first slide just shows you a picture of the ISFSI. And the emphasis here is that it's a new facility comprised of sealed containers that are ready for disposal purpose. We put this in just to show you the comparison of this facility with the next slide; which is the spent fuel pool. We want to emphasis here that this pool was our fact of normal operations. It's designed to be open to facilitate the transfer of between the reactor and the pool. When we built the plant it was to support a closed-in fuel cycle where fuel was being continually discharged on a periodic basis from the reactor and sent to a

reprocessing facility where it was, the fissile material was reclaimed and put back into the fuel. So, it was to support the operational aspect. It was designed under that basis.

We don't feel, on the next slide, that there's evidence to justify a comparison between the two facilities. They have two very different purposes. The ISFSI is for storage, which is more than temporary, of the spent fuel. And it's a disposal system. It packages those fuel assemblies in a medium and a manner that is acceptable to an off-site geological (indistinguishable) where the pool is an operational component of the plant. It was forced into service to store this fuel because of lack of performance by Department of Energy.

So, to point out here that DEQ does agree that the ISFSI is not a replacement facility and the DEQ sites no statute or rule requiring comparison. But if there is a comparison to be made, I think the company has submitted sufficient evidence in the record to that it does reduce a substantial quantity of air and water pollution.

I go back to this, these values, it eliminates 50 curies of radioactive gases and Tritium that's released annually to the atmosphere. Having an ISFIS would totally eliminate that source of radiation. The spent fuel pool at this point in time is the only source of off-site release left at the plant, especially after we finish this year of the decommissioning process. So, it would be a big advantage to bring about this system. It also eliminates the need to dispose of about 1200 gallons of contaminated resins annually that we use to process the water that circulates through this pool. And it does prevent pollution from catastrophic occurrences.

So, let me just give you some level of where we're at as a company with regard to substantial because I think that it's conceded that it does control pollution itself as far as the purpose of the facility. I go back to Admiral (indistinguishable) who started this whole nuclear power program. One of his basic tenants that we learned as an officer in his program was to respect even small amounts of radiation. And it continues in the commercial nuclear industry with a tenant or a doctrine called "as low as reasonably achievable." That we have a duty (indistinguishable) to reduce radioactive discharges, the effects on the environment and our occupational workers; as low as reasonably achievable, as low as practical. This is consistent with orders of excellence of the nuclear industry. So, we have a long history of operating under this type of doctrine.

Another thing that I think you want to take into account is the fact that this 50 curies – I do think that we underestimate environmental impact of this spent fuel. It is very serious and we take it very seriously. It is the single most potential environmental hazard that resides within the state. The proper operation and care of that fuel is tantamount to the protection of the general public. To say that it is not substantial, if you invite a comparison between the spent fuel pool and dry storage. I don't think I want to be on the record to say that it is not substantial. Fifty curies of radiation over a short duration say over a year or two could probably make that argument but the fuel is going to be here for 30 years, 40, perhaps 50 years or more. Those add up. So, I just want to emphasize that I think we're looking a short-term analysis where we're looking at a much longer term and it is substantial. Radiation is unique and among the substances that you deal with. And, in fact, it not only interacts with body on a chemical basis such as other pollutants through chemical reactions, oxidation that would cause cellular damage. But also directly, the fact

that it can directly impinge upon genetic material. So, most of the substances that you deal with outside of radiation, there is a threshold value where the body can accommodate that level of pollutant; it can repair itself. Radiation is not; even small amounts of radiation can cause genetic damage, latent to the individuals or succeeding generations. There is a distinct difference there that requires us to go lower than regulatory limits.

I again do not want to go on the record to say that this is not substantial. I mean our necessity to earn the trust of the general public would require me to disagree with that assessment, that this is not substantial.

To give you example after example, but one of them would be that of that 50 curries, 24 of that is Tritium. Tritium is a just a hydrogen molecule. It is common to the body. The body can't differentiate between Tritium and regular hydrogen within a water molecule. That Tritium, that 24 curries if diluted in water would contaminate about 300 million gallons of water above the federal limits. It is a significant amount of radioactivity. With that said, I want to go on the record that I disagree with the assessment that it is not substantial as compared to the spent fuel pool. And that the company believes strongly in this aspect.

The last bullet on this slide, I want to go back to it because there was a comment that the Commission has or the DEQ is not or would not allow comparisons with catastrophic occurrences. I think the precedence has already been made. It is not going to expand the program. I pointed out the double hulling of barges and the diapering of substations; all of which have been approved and are strictly there for catastrophic-type occurrences. So, we're not setting precedence that we can't deal with catastrophic occurrences.

The next series of pictures, is one that I think you had a great presentation last time about this system. The first one just shows the baskets and the transfer casks. Again, we are the first to come through with a system. It's quite a good technology and offers a significant reduction in pollution.

The next slide is the concrete casks. There was an assertion that it was only there for shielding. Quite the contrary, it is there for structural integrity. A by-product of that is shielding. I know, I asked my engineers if we just did it for structural integrity would it look any different? And they said, "no." No, because for a right circular cylinder to have proper stability against tip-over from ground motions, it has to have a certain height-to-width ratio for that. So, you get the, you have, you achieve first the structural stability of this integrated package first and then you get shielding.

The pad and the transfer station again, I want to emphasis there that you would want these system unshielded sitting out in the gravel in the lower portion of the site. This system will work. It's one integrated package that is needed to achieve the purpose. So, the pad is important to us. The transfer station is important and even the final equipment, the welding and the vacuum drying equipment is integral to achieving the integrity, the confinement, the containment that is the hallmark of this system. Contrary to what is said, they are not a one-time use system, we will keep these things, these pieces of equipment throughout the life of ISFSI. Because they would be use in an over-pack

situation if we had problems with a basket on the pad. They have a design feature that we would encapsulate it in another (indistinguishable.) So, we would expect to evacuate that container with the vacuum drying system and also weld it up with that automatic welding system. So it is, these systems have no use outside of the ISFSI and they have more than a one-time use.

Go back to the heart of the matter on the next slide, the sole purpose again is pollution control and we think we have met the dual criteria. The fact that it does have the purpose and that it does meet the requirement for the acceptable manner which it meets that purpose.

I don't think I need to read those. I hope that I have justified the substantial. I think you all agree that it does prevent pollution. Maybe a little more emphasis on the two acceptable manners that this is a disposal system and it does qualify as a treatment works. A treatment works is to treat, hold or stabilize waste. And it is certainly holding. It is consistent with past approval of tanks as treatment works. It does meet the treatment works definition and it is a disposal system. Its only purpose is to facilitate the disposal of this high-level waste.

The second tenant there is 2g and that it's used to detect, deter or prevent spills and unauthorized releases. And again this is the air pollution prevention from this stream and other radioactive gases. I think we disagreed with the conclusions in there that it needed to be prior to the discharge to the atmosphere. We felt that that was not a correct reading of the rule and that only had to be read in conjunction with rendering such gases as less noxious before discharge. So I think we feel we are on the side of the angels on both of those two requirements as far as acceptable methods for accomplishing pollution control purpose.

Again, this next slide is a reiteration...

Tape Change

This slide again reiterates our position that it does accomplish pollution control because it is a disposal system. And it does accomplish pollution control because it does prevent spills and a release of air contaminates.

The next slide again is to clarify our position on insignificant contributions. Because it was asserted that portions of this system have no significant contribution to the purpose of the facility. I'd just like you to revisit the ORS on what is an insignificant contribution and it does reference parking lots, and road improvements, landscaping, external lighting, signs and things of that nature. I honestly feel these supporting systems to this ISFSI do not meet that. I think we're well within statute with regard to insignificant contribution. We take exception (indistinguishable) with certain aspects would make an insignificant contribution. They are all needed exclusively to support that ISFSI, to provide the containment and the integrity that the system would enjoy.

In the next slide really is the heart of the matter...

Commissioner Van Vliet

Let me interrupt you. Are you saying that those are included in your request or are not included in your request?

Mr. Quennoz

They are. What we've included we feel are well within...

Commissioner Van Vliet

All of those things right there?

(Background Talk.)

Those are not included in your ori...?

Mr. Quennoz:

They are not, excuse me. What we have included meets that test. They are not landscaping and lighting.

Commissioner Van Vliet

Those are out?

Mr. Quennoz

Those are out.

Chair Eden

But they've included the pad and the welding ...

Commissioner Van Vliet

I understand...I just want to make sure

Mr. Quennoz

It gets down to the assertion of the exclusive purpose of this system. And I think there has been a lot of statements that have sent mixed-messages and I'll gladly clarify them here.

The purpose again is not to comply with regulations. This is not a principal purpose facility. It is not required. We did not have to do it other than (indiscernible) beyond regulations. The purpose is not for economic benefit. There is a focus in the denial that shows there was some O & M gains, I think missing a big part of the picture. You know, when a company, when it spends capital money up front does not just look at those cash flow (indiscernible). It has to look at the whole project. Normally you look at the payback period on a project like this of 5 years. With deregulation of the industry those metrics have been down to one to three years. Just an easy mental arithmetic on this, if it costs \$55 million and it's saving you six million a year then the pay-back period is nine years. Actually, we know we can drive that down. So the payback period is much longer than ordinarily would be acceptable for a company to invest those capital dollars. It's not because of financial considerations that we built this ISFSI.

I want to say here that it's, we're driven as our core value of our company on environmental stewardship. That's our business tenant and to make a decision strictly on

financial considerations is generally a wrong decision. (Indiscernible) It generally costs you more money. So, we didn't do this because of financial considerations.

Another one that was mentioned, lower insurance costs. We provided evidence that it won't reduce our insurance costs.

Another assertion was that it was done to facilitate decommissioning. Again, I want to point out we have 60-years (indiscernible) various methods equally acceptable as far as decommissioning. When we went into decommissioning process we looked at the economics of either path -- either safe storage or prompt decom and from a net present value both of them were the same. There was no financial gain between one or the other. Our motivation to go into prompt decommissioning was primarily, besides environmental stewardship, to bring Trojan into conclusion because it was our responsibility and not some other generation's responsibility. But other than that it was strictly to protect the company and the ratepayer against burial costs. And those burial costs are predicated on curie content and volume. And even with the spent fuel in the pool as it is, we've got rid of 99 point (indiscernible) percent of all non-fuel radioactivity on the site. We've just worked around the spent fuel pool and we've gotten rid of 80% of the volume that has to be sent off for burial. Of the 20% left most of that can be sent to a de minimis landfill by a waste processor at a much-reduced price. So, we have, without putting the spent fuel in dry storage, accomplished those objectives of decommissioning. Again, we can sit back, revise our decommissioning plan and go into a safe store, let nature, mother nature work on the rest of the site for a number of years and then come back and finish it. So, I don't see where people can say we that we did this to facilitate decommissioning.

Chair Eden

I want to ask you a question then. I understand that part of the fuel that part of the fuel that is in the spent fuel pool can be reused or (microphone interference) correctly. If this was just strictly for just operational purposes or if this was a pollution control system, why didn't you build this storage slash disposal system for the fuel that you couldn't reuse initially? Other words, why didn't you think this storage and disposal facility was important at the time the plant was operational -- important enough to build then?

Mr. Quennoz

One thing is when we did start it up (microphone interference). We were mandated by the Department of Energy, for nuclear proliferation concerns, that we have to take all the fuel and put it in a repository. So, those options really weren't open. We didn't have the latitude. At that point, all of the fuel had no economic value once it was discharged from the reactor. We can manage our flux within the reactor from cycle to cycle by reusing more and more of the fuel in different loading patterns but it really had no commercial value as far as reclaiming the isotopes or fissile materials once the decision was made by the Department of Energy. So, we were just stuck and no economic value to the fuel after that (indiscernible.)

Chair Eden

Well, that kind of begs my question or I'm not understanding your response. Why didn't you build this dry storage facility at that time if you had fuel that could no longer be...?

Mr. Quennoz

Oh, because...

Chair Eden

... had commercial value, could no longer be used. I mean as a country we're in the same place as we were then...

Mr. Quennoz

Exactly, and...

Chair Eden

...we still don't have a repository.
(Background Talk.)

Dr. Lei

Commissioner Eden, if I may, the longer history is actually very interesting. We just started (indiscernible) most recently. I can show you actual textbook that communicated that the spent fuel in a spent fuel pool will be held there for about six months and they'd do something else with it. In fact what they could have done as something else was actually reprocess the fuel. About two-thirds of the uranium was actually unused (indistinguishable.) The idea there of reprocessing was to reclaim it. As well as reclaim some of the plutonium that was actually created during the fission process. And then reuse that back into the nuclear fuel cells. As late as 1980 these kinds of possibilities were still on the table. At that time you wouldn't have built a structure that would load this stuff in a deep hole in the ground until the United States actually assumed the responsibility for the fact that was probably the best thing to do. (Indiscernible)

(Background Talk.)

Dr. Lei

...and also to follow along...

Langdon Marsh, Director of Department of Environmental Quality

Excuse me, could you identify yourself for the record?

Dr. Lei

I'm Wayne Lei, Director of Environmental Policy for Portland General Electric

Mr. Quennoz:

This technology didn't exist until most recently and there were some prototype configurations in the late '80s where utilities had one of these storage canisters on their site and were evaluating it. It wasn't until the time of about '92 there were a couple of other facilities, nuclear facilities that had ordered these systems. At the time we started, there were no licensed dual-purpose systems today, presently. We're the only ones that, well, there are about six of them in the process of being licensed. The technology just didn't exist. But now that the technology exists, I think it's again our duty to build a system like that because it offers an advantage.

What I'm trying to emphasize here is that there's a confusion, I believe, between benefits and the purpose of the facility. Hopefully, I've eliminated the fact that these benefits, they may or may not exist, but the only purpose of the facility is to control pollution. I think it would be poor policy on the part of the Commission to nullify the structure just based on concerns over those benefits. Cause if there are economic benefits, they certainly don't qualify for tax credits and I think that you can direct the staff to eliminate such benefits through the return-on-investment calculations, if you should agree that this is a facility that qualifies on the merits of purpose and acceptable methods. That's what we're trying to get at. I think we need to be very clear on the purpose. And hopefully, there is no purpose cited. There are only benefits.

Chair Eden

Commissioner Bennett

Commissioner Harvey Bennett

Back on your spent fuel pool (microphone noise)

Chair Eden

Can you speak up please?

Commissioner Bennett

Yes, back on you spent fuel pool (microphone noise.) It says that you need to eliminate 1200 gallons per year. Where do those go?

Mr. Quennoz

Those are resins (microphone noise). They are put in a high integrity container, and de-watered and packaged properly and transported by an exclusive carrier to Hanford and there they are buried in a low-level facility.

Commissioner Van Vliet

I take it the NRC has been interested in the various techniques of doing this. Have they been watching this particular design at all?

Mr. Quennoz

Yes.

Commissioner Van Vliet

... and they've passed on it as an acceptable design?

Mr. Quennoz

We're still, we have a storage license. There's a two part because it's a dual-purpose facility. You need to license it for storage. You need to license it for transportation. We have the storage license. We need to gain the transportation license and that's the responsibility of our vendor. That requires them to construct a part scale models and (indistinguishable) ensure that it can meet the hypothetical and normal conditions of transport accidents that you'd expect on transportation over public highways. We haven't got that yet and it looks like it's going to be a year, several years before we can get that.

Commissioner Van Vliet

I was going to say with that kind of tonnage in that container you probably couldn't get it on a semi, you're going to put it on a rail-car, aren't you?

Mr. Quennoz

Exactly.

Commissioner Van Vliet

Second question was, there's been a lot of talk about encapsulating this in glass over the years and putting it in salt. Where is Yucca Flats now ready to take it? Do you have any indication from the NRC, which hasn't been greatly helpful in disposing of waste? How far are you going to have to store this stuff on your site before you can look at storing it at the national level?

Mr. Quennoz

Well, we know that their latest schedule for implementation of Yucca Mountain was based on 2010 date. They are ten years off before they can fully construct (microphone noise) at Yucca Mountain. One of the interesting things that you may not know is that fact that the commercial industry paid into a fund to support this facility. So we put in \$45 (indistinguishable million/billion) dollars worth of private money to build this facility. But everybody wants access to it and the DOE has said that it would accept fuel on oldest fuel first basis. It won't accept all our fuel at anyone time. There is a cue and based on a 3,000 metric ton per year acceptance rate, it would take approximately twenty years for them to accept all fuel within our spent fuel pool and clear the pool out. So, that would mean ten years plus twenty years – a thirty-year period. Now the DOE because of funding considerations has most recently stated that it can only accept fuel on a 900-ton per year acceptance schedule because of, even though it is fund separate it is still a budget item and there is still budget consideration. So, with 900 you can expect that twenty years will expand out, I really haven't analyzed that; but it's at least going to double it. So, you're talking, honestly, forty, fifty years before all fuel...

Commissioner Van Vliet

You've gone way beyond your pay-back period of nine years because you're going to have maintenance of those for a long, long time. Is that calculated in your cost?

Mr. Quennoz

That pay-back period, we would expect to recover moneys for damages for nonperformance of DOE and to off-set those extended delays but I think it would be speculative how much money we will capture. But I think, one thing I can say, when we look at the economics of this project, it doesn't go to the corporate books. What it does is serve to reduce the cost of service to our ratepayers. That's our ratepayer's money that's constructing this facility. So, it reduces the cost of service, reduces (indistinguishable), reduces our prices. So, we're not looking at this as a windfall for the corporation. It is good for the ratepayers. I'm here today to really to meet our fiduciary responsibility to the ratepayers to get value for the money that they have.

Commissioner Van Vliet

Well, I understand that (indistinguishable.) The question is if you didn't have the tax credit, as you know, the tax credits have been under fire for a long time as maybe not being viable anymore. But, if you didn't have the tax credit would you be pursuing this particular technological avenue?

Mr. Quennoz

Well, you (indistinguishable.) I would say, I probably should ask my accountant (indistinguishable), but I would say we're going to do it anyway. Because no matter what, it is quite (indistinguishable.) It's going to pay off one way or another, whether it's tax credits or whatever reasons because it's the right thing to do for the people of Oregon. I think in my mind, I remember very distinctly at that time there was a big crisis with the (indistinguishable) basins at Hanford. And we interact with the people at Hanford quite a bit, for the Columbia Generating Station and also because our waste disposal site is there. That was really on my mind that the people of Oregon deserve something better than those (indistinguishable) where you have fuel that is disintegrating in those pools that are very close to the Columbia River. The company, you know you're dealing with a company that is going to do the right thing. But I think from those incentive basis, companies that are not regulated and driven by the bottom line, they need those incentives. So, those incentives, I don't think you should discount them. If you want people to go beyond regulation and you want environmental benefit for people of Oregon, those incentives are powerful motivators.

Dr. Lei

Commissioner Van Vliet, if I may add also, there is a draft environmental impact statement that's been issued by the Department of Energy out now for Yucca Mountain. It is expected to be finalized next year. That would be quite a milestone when that moves forward. The DOE expects to have licensing application in sometime around 2003 to the Nuclear Regulatory Commission. This is a facility that has to be licensed by the NRC. And an optimistic but a certainly doable date is somewhere around 2010 (indistinguishable) if you're subscribing to the question of pay-back and how long you'd have to (indistinguishable.) The DOE, and certainly this country has not had a great record in trying to close this nuclear fuel cycle. And so, but you can always get lucky, I mean that's part of the point there. I should add that this is the only fuel cycle out of all the others out there that actually is trying to be closed.

Commissioner Van Vliet

And that technology if you had to store it for fifty years on your hard pad would hold?

Mr. Quennoz

(indistinguishable) ...designed for forty years (indistinguishable.) It would have to re-licensed but we feel comfortable that we can re-license but it can't be re-licensed forever but one of the virtues of our system is that we can take and handle it and put it in new over-pack. And meet the re-licensing (indistinguishable.)

Chair Eden

Commissioner Malarkey?
(Background Talk)
Excuse me?

Lanny Dursek, Manager of Nuclear and Regulatory Affairs for PGE

Lanny Dursek speaking. The system is designed to for fifty years (indistinguishable) licensed for forty years. Typically what would happen when you get to the end of the forty years is to do a reassessment of (indistinguishable.)

Mr. Quennoz

(Indistinguishable)...what happens to an operating reactor I(microphone noise) ...many of them are coming on to a protracted process of re-evaluating components and seeing if they are acceptable to continued operation. We've had several that have been brought up to re-licensing. (Indistinguishable) ...feel comfortable that people understand the effects of radiation on metals and (microphone noise)...

Chair Eden

Commissioner Malarkey

Commissioner Deidre Malarkey

I think I understand (indistinguishable) what I'm going to repeat Mr. Stewart-Smith said this last year at the hearing...

Ms. Purser

Commissioner Malarkey could you speak up?

Commissioner Malarkey

I'm sorry. Mr. Stewart-Smith said this last year at the 1999 meeting on this point; which is while there is no regulatory requirement for dry spent fuel facilities either at the state or federal level, other than time (indistinguishable.) The Nuclear Regulatory Commission has made it very clear that their preference for a closed reactor is dry interim storage of spent fuel rather than an active spent pool storage. So you can see the quandary, there's no specific regulatory requirement.

The fact that you may be extending your storage time there for longer than we expected does that eliminate the opportunity using for using the additional lands for either the park and recreation (indistinguishable) speaking of for an additional power source?

Mr. Quennoz

Yes and that's (indistinguishable.) There was a mention that we were doing this so we could release the land for unrestricted use and possible sell it. Maybe, I can clear that up. We have tried very hard to develop that land. There is six hundred acres. We work there and it's a very good site. Unfortunately, we have had no success in trying to attract tenants on that site. (Indistinguishable,) It's just too far from the current population sources. We've had a couple of tenants, small time people that have leased buildings or, excuse me, rooms within building. But we have tried very hard even attracting our own people to come out within Portland General Electric to locate at the site. We have not been successful.

So, the site from a commercial value is very low. It has probably the most value as a park. And there was mention that we would want to develop that part of the site for future generations. Well, with SB 1149 and electric restructuring of the Oregon electrical

industry, it's very clear that our large industrial customers want choice. And want to go on the market to buy what they think would be a cheaper source of power and long-term contracts for supplies of power from energy providers.

So, we're in the process of looking at our future load and finding that we have right now much more generation than we ordinarily need because of the expected loss of these customers.

So, I don't think re-powering is in the future for us at that site anytime this decade. That's just, you know, me speaking. But I do follow that. I don't think we could sell the site to a developer because the real money that's being made on developing the (indistinguishable) project is the natural development itself and also the marketing of that power. Just the land itself, most of these developers come in, they want the land free. In addition, they want a bunch of tax cuts. Other wise, they'll go to someplace else. So, we're not going to make a lot of money for our ratepayers on the land itself. So,

Commissioner Malarkey

A gas-fired plant is not an option (indistinguishable?)

Mr. Quennoz

It's an option we preserve and it's just for prudence (indistinguishable.) We've got excellent infrastructure there but the fact of it is we're submitting our rate case for 1149 this next month and we realize that we're not going to be building a lot more generation because have more generation currently than we need to supply our residential customers.

So, maybe in conclusion then, hopefully I have eliminated any of these other assertions that we are doing these for reasons other than pollution control. I really think that we need the letter of the law and we need the spirit of the law. And it's really consistent with Governor Kitzhaber's desire to provide incentives for people who go beyond the regulation. This is what we've done and we've provided substantial evidence. This has been our claim. (Indistinguishable) on the merits of it and not be concerned about the benefits of it because you'll have ample opportunity to control those concerns.

Chair Eden

Thank you. Are there other questions of Portland General Electric representatives at this time? Ms. Vandehey do you have any response?

Ms. Vandehey

I would like to emphasis that radiation or radioactivity is not a recognized pollutant – it is not regulated by air quality rules – it is not regulated by water quality rules. To have a sole purpose the pollution control, the facility must reduce, control or eliminate air or water pollution.

I would like to briefly discuss replacement facilities. The Department did not, as PGE mentioned, did not consider that the Independent Spent Fuel was a replaced facility according tax credit regulation. Replacement facilities are a term reserved for those facilities that have been previously certified. That is not the criterion on which the

Department compared the spent fuel pool and the claimed facility. The department made that comparison based on the fact that we're looking at the same spent fuel. We made the comparison on the fact that the department looks at conditions as they currently exist to determine if a substantial quantity of pollution will be controlled as a result of the claimed facility.

Chair Eden

So, are you saying that 50 curries and 1200 gallons of resin are not substantial quantities because they don't have air or water pollution or because those amounts are not substantial?

Ms. Vandehey

Madam Chair, may I ask Dave Stewart-Smith to address the quantities.

Mr. Stewart-Smith

Thank you Madam Chair, again, my name is Dave Stewart-Smith, Oregon Office of Energy. Maybe some perspective will help. It's kind of hard to get your arms around measurements like curries. It's not something that all of us deal with on a regular basis. PGE has stated that about half of 50 curries a year released from the spent fuel pool is Tritium. Tritium is a radioactive isotope of hydrogen. Most of the Tritium in the environment is naturally produced in the upper atmosphere. About three curries an hour of Tritium in the Columbia River, I estimate, flow by the Trojan plant as a result of the natural amount of Tritium that there is in surface water in the state of Oregon.

The rest of it is a noble gas, Krypton 85; it's a gas with about a ten-year half-life. Twenty-five curries a year of Krypton 85 is probably similar to the amount of noble gases released from a larger metropolitan area medical facility. But they release a different radioactive isotope primarily Xenon 133 – it's a radioactive noble gas used in medical imaging systems – probably on the order of the same radioactivity of the material of a shorter half-life material.

The 1200 gallons of resin is low-level radioactive waste. Part of a radioactive waste treatment system that PGE has had in place to extract radioactive isotopes from the water in the spent fuel pool. There's perhaps on the order of one percent of the spent fuel in the spent fuel pool, the individual pins are no longer hermetically sealed. That's typical for spent nuclear fuel. That's a pretty harsh environment inside a reactor in terms of temperatures and pressures. Some of the pins are no longer hermetically sealed and that results in a small amount of radioactive fission products leaching from the spent fuel ceramic into the surrounding waters. That's also the source of the Krypton 85 – it is also a fission product. But the material that is dissolved in that water is removed from it through a low-level rad-waste treatment system. It's similar to a water softener – ion exchange resins that take dissolved components out of aqueous solution and concentrate them in styrene matrix beads; small plastic beads that have an affinity for absorbing dissolved chemicals in solution.

Commissioner Mark Reeve

The one percent of the fuel rods that may be leaking; is there a design life, is there an expectation over like 5, 10 perhaps even 50 years if we were to stay with the fuel pool that that number would increase substantially?

Mr. Stewart-Smith

I don't believe so. Most of the damage to spent fuel pins happens in the active nuclear energy process – in the reactor itself. Once it is in the spent fuel pool, the purpose of the spent fuel pool is to provide, initially, cooling for the spent fuel. There is enough residual heat in spent radioactive fuel that it must remain in an active aqueous cooling system for five years. After five years the amount of residual heat in the spent fuel could be dealt with through air circulation which is what the dry spent fuel storage cask is designed to do – to keep the fuel cool through air circulation. But for the initial five-years, it must be done with water because water is more efficient for transfer. But in the spent fuel pool, I would not expect there would be any additional damage to the spent fuel.

Commissioner Van Vliet

So what you are saying is that that is basically a very safe structure for forty years in the water of the spent fuel.

Mr. Stewart-Smith

Properly maintained, there is no reason why the spent fuel pool could not continue to store spent fuel like it does. It is an active system. It requires ongoing staff, ongoing maintenance to keep the pump and radioactive waste treatment system operating properly. So, it has the disadvantage over the dry spent fuel storage in that it takes active maintenance on the part of Portland General Electric. That's one of the advantages of dry storage that once the baskets are welded shut and placed inside the concrete silos, it is much more of a passive protective system. It is not completely without active intervention, for example, there are air vents at the bottom and the top of the spent fuel storage casks that must be kept clear. There are active radiation detection and heat detection sensors that must be kept in proper working order. And there are security requirements. So, it's not without, it's not like you can put it in the cask and walk away from it. But it requires less active intervention on the part of staff than the spent fuel pool does. But the spent fuel pool functions well. It's similar to spent fuel storage at active reactor sites around the country – over a hundred of those.

Commissioner Reeve

How about in terms of comparing the low-level (microphone noise) generation – obviously with a fuel pool your looking at whatever, however many years of use or service times the 1200-gallons or what ever it turns out to be as far as the resin generation? And it appears to me that the transfer to the ISFSI would likely result in a one-time creation or generation of a low-level waste, what with the vacuum system, etc. Has any comparison been made with the two competing systems as far as the waste generation?

Mr. Stewart-Smith

It is correct that the spent fuel pool will continue to generate low-level radioactive waste. Although the amount of radioactivity in that waste, even if the volume stays the same will continue to go down over time as fission products in the spent fuel undergo natural radioactive decay. They will reach a point of diminishing returns and I don't think they've reached that yet. Some years in the future, they will reach a point where there will be little decrease in the concentration of radio-nuclides in the rad-waste treatment storage resin over time. But it would generate a low-level radioactive waste stream for as long as the spent fuel pool were kept in active operation. I think your analogy is correct; keeping the spent fuel in operation results an annual production of low-level radioactive waste. By putting the spent fuel storage in dry storage casks would not have an annual amount. And the spent fuel pool itself would become decommissioned and become a low-level radioactive waste stream and that would be roughly a one-time event.

Commissioner Van Vliet

We have dealt a lot in the last several years with catastrophic events (indistinguishable) scenarios such as Umatilla and things like that. Talk about earthquake and pump and redundant systems going down in the waste pool.

Mr. Stewart-Smith

The spent fuel pool, I don't think we have a graphic of it available. I don't know if there is one available or not. The spent fuel pool is a substantial structure. The walls of the spent fuel pool are about 5' thick, the base is about 8' thick reinforce concrete and it's built on solid basaltic bedrock. Trojan is built on a basalt outcropping adjacent to the Columbia River. There is no cover over the top of the spent fuel except for about 20', or so, of de-ionized water. The de-ionized water both serves as a cooling medium and as shielding for the radiation given off by the spent fuel. Twenty feet of water is a pretty good radiation shield as is the concrete in the dry spent fuel casks. The spent fuel pool is a substantial structure. PGE has estimated what kind of earthquake energy that it would take to damage the structure. And I can't recall it right off hand but it would take, I believe more that a credible earthquake in the Trojan area to actually damage the spent fuel pool. Now you'd probably slosh a lot of water out of it in the event of a significant earthquake with a significant amount of horizontal acceleration gravity. If the earth under the spent fuel pool moved sideways, quickly, you would loose a fair amount of water out of it. And that water would need to be replaced. It could result in damage to the equipment, the pumps, perhaps some of the piping that connect the rad-waste treatment system to the spent fuel pool itself. But it is a substantial structure and I would expect that any natural event, the spent fuel pool would withstand this kind of forces.

Tape 3

Commissioner Bennett

... covering radiation in general. So if you want to think about it in terms of ambient radiation, that's not with your purview (microphone noise) definition of pollutants for the purposes for this program.

Mr. Stewart-Smith

I think that's what Maggie's position is.

Unidentified Person

If I could just (indistinguishable.) I think radioactive substances such as the Tritium that we're talking about (indistinguishable), that does come within (indistinguishable) of an air pollutant under this Department's rules.

(Microphone Noise.)

Mr. Stewart-Smith

...that the Krypton, Tritium and solid waste – these are all materials that are radioactive materials. It is not radiation, it is the actual energy that's being emitted by these radioactive substances (indistinguishable) that radiation...

Unidentified Person

... and so, it is our position that the radioactive substances given off by the pool (indistinguishable) are significant and obviously the Department has a different (microphone noise).....

Chair Eden

... and so the Department is saying that (microphone noise) are not. Is that correct?

Ms. Vandehey

That's correct. We were not able to determine that those amounts were significant with the information that we have.

Chair Eden

Maggie, you sound like an attorney.

Ms. Vandehey

Thank you – or maybe not.

Mr. Stewart-Smith

Again, my name is Dave Stewart-Smith, Office of Energy. When Maggie asked me to help her understand some of these issues. One of the questions she had for me was, "Well, so what?" "What's a curie and how can a curie be significant?" One of the things I told her was that not all curies are created equal.

A curie of Tritium, which is a radioactive isotope of hydrogen, is much less significant from an environmental and public health standpoint than a curie of iodine 131; which is a biologically significant radioisotope – concentrates in a portion of the body – and per unit of radioactivity taken into the human body can produce a great deal more radiation dose and potential biological damage than Tritium does. So not all curies are the same. And that's one of hard things to get your arms around.

The same can be said of noble gases. A noble gas has little or no biological significance. By that I means if you are surrounded by a cloud of air that contains a

concentration of noble gases, and we all are because there are natural isotopes of noble gases that we breathe all the time. The noble gas itself is inhaled and exhaled. It's not the type of chemical that has a great deal of biological significance. That probably doesn't have much to do with your rules but she was trying to get a handle on what's significance.

So, 50 curies sounds like a big number and if it were 50 curies of Strontium 90 or Iodine 131, or Radium 226, I'd be real excited. Taking a look at 50 curies of Tritium and Krypton 85, primarily, being released from the surface of the spent fuel pool, it would be difficult to estimate the amount of radiation dose from the general public from that amount of material. Now I applaud Portland General Electric for taking actions to reduce that. I am a radiation protection professional. And I too live by the maxim begun by the early nuclear industry that we are to maintain radiation doses and releases to the environment as low as reasonably achievable. And I believe that PGE is taking responsible action by proposing a facility like this. Were I to try and do a calculation for the amount of radiation dose to a member of the public from that 25 (or so) of Tritium and that 25 (or so) of noble gases released from the spent fuel pool, it would be a very small number and a very difficult calculation to do because of the nature of those isotopes.

Chair Eden

Dr. Lei

Dr. Lei

Again, Wayne Lei with Portland General Electric.

I'll expand on some of his comments. I'll even expand a little bit more graphically, if I may. If you were to bring 50 curies in here, and Dave would react the same way, and didn't tell us what the 50 curies were, our very first inclination would be to get very far away from it. The reason is, precisely what he just said, you just don't know what it is. It could be very (indistinguishable) you just can't sense it otherwise. The underlying scientific principal that all of the standards and regulations in the United States as radiation protection, together with the world in fact, is this theory is that the only safe exposure is zero. And any incremental piece beyond that can be deleterious. It's very arguable scientifically as low dosage, that in order to be conservative and protective, the scientific body in this country, and it was done 45-50 years ago. And then world came to the agreement that this would be the conservative principal in which case, all protection standards. And in fact, this only operating philosophy that I know of for any industry that is actually mandated by law. You'll find that in 10 CFR 20. In fact when I worked at Trojan for five years, that actually was the department that I ran. There is called as low as reasonably achievable department by the way. (Indistinguishable) Every nuclear power plant will have one of these. In fact it even specified how many staff you have to have at a minimum to address these issues. There's a lot of science in how you do it, plenty of engineering, and a little bit of art in how you do that. (Indistinguishable.) That is in the philosophy of radiation (indistinguishable.)

Chair Eden

Commissioner Bennett.

Commissioner Bennett

(Indistinguishable.) Are we listening to good on the one hand, a policy on the other-hand, and the question of opening a policy beyond where the funding structure works? Is that what we're listening to here? I mean it sounds like no one would want to suggest that we want to build facilities less than what is going on here. On the other-hand we have a policy that doesn't fit this process and in that process we have other agencies or institutions which would come under this same opening. I think we could go on and on about trying to define whether this is good or not, I don't hear anyone challenging whether that's the case. I'm just wondering where we go in a one day meeting with this project – how much further?

Chair Eden

Commissioner Van Vliet.

Commissioner Van Vliet

Talk about the general public understanding what we're talking about today. They don't understand the difference between fusion and fission and they are only interested in whether they will glow in the dark, so to speak, from some kind of facility. But one of the things that interests me about this because it doesn't fit tightly in our requirements. It is new technology which we have tried to foster in our outlook. And, I hate to be talking on the positive side of this because I have been anti- tax credits for a long, long time. But also, there is a factor of what I consider environmental safety that has to be considered that is a little difficult with radiation than it is with other types of pollutants that we deal. One of the questions that was in Maggie's first statement, "If the Commission determines that the claimed facility or any distinct portion of the claimed facility has a pollution control purpose then the Commission must consider how the pollution control would be accomplished as described in 2." And I fall under that particular area of thinking that it has a pollution control purpose. Then if you look under 2, "If the Commission determines that the pollution control would be accomplished in one of the specific manners described in statute and rule" and that's where I think the hang-up is right now is on that number 2.

And, I guess we could argue about whether it meets the letter of the law in all the particular areas but I do feel that it basically is a jump into new technology, which meets one of our requirements – the one on recoverable materials, it does not. But then when dealing with radiation, you're dealing with diminishing materials basically overtime and so you have a different kind of standard that we never addressed in the law. So how do we dance on the head of a pin?

Commissioner Bennett

On the edge.

Chair Eden

I want to move to the next issue for a few minutes and that is if you could tell me how you determine what is sufficient to persuade you that the saving is part of the purpose.

Ms. Vandehey

What I used, (microphone noise) the evidence that was before us in the decommissioning plan. In the decommissioning plan it listed the O & M costs for both the dry storage and the wet storage. That was from 1997 figures; of what we had available to us. That shows \$6.8 million savings.

Chair Eden

I can do the math. And I have done the math and I've figured out that over the period of what we're talking about, 40 or 50 years, there's a net savings of \$217 million. And my question is, "What's the standard by which the Department is saying that something is sufficient enough or something is large enough to move into the realm of that's the real purpose rather than the exclusive purpose being pollution control?" I just want to understand your thinking.

Ms. Vandehey

The thinking is based on past Commission discussions, past Commission direction. And we looked at the amount of the entire facility and looked at the amount of \$6.8 million over 10 years. That was within the bounds of what the Commission has directed the Department before. We did not look at specific cost analysis. That is beyond the scope of this preliminary application process.

Chair Eden

And what specific are you talking about when you say previous Commission direction? I mean, I hate it when you throw it back at us where it belongs. But I mean in terms of is there some kind of percentages?

Ms. Vandehey

No, there is not a percentage...

Chair Eden

... you're just talking about past cases and...

Counsel

... Again, I don't know if this will be helpful but let me give it a shot, this has come up in previous cases, in Tidewater, for example, and others. And I think the Commission has taken the position that when you're operating under the sole purpose test, you can only have one purpose. And so if there are any other benefits, they must truly be incidental. And I think you've also taken the position previously, that in making that determination, you would apply an objective test – what a reasonable person might find incidental or not. And beyond that I don't think I can provide any assistance but I do believe that is true.

Chair Eden

Maybe incidental might have been decreased insurance premiums for the double-hulled barges as opposed to the purpose that we ultimately decided.

Counsel

Well, actually, I believe the Commission's view was that a decreased insurance premium was more than incidental and would have controlled the matter. But in Tidewater, we actually had affidavits establishing that it wasn't going to affect the insurance premiums.

Chair Eden

Okay.

Mr. Quennoz

Madam Chair, Steve Quennoz again. I just want to try to clarify the idea of cost savings. The company does not earn any return on cost of service – only on investment in that plant. So whether the cost of operating the facility is ten million dollars or four million dollars, it is irrelevant to the corporation. There is no saving in it for the corporation. There is a savings associated with the ratepayer. And the ratepayer, we're going to proceed (indistinguishable) against the Department of Energy to make them whole (indistinguishable), in any case. But it's not about the money because it doesn't enter into the equation.

Commissioner Bennett

It's got to be about money. That's what we've been talking about all morning. Cost to build or tax credits or something else.

Chair Eden

Are there other questions or comments?

Ms. Saunders

I'd just like to add, Denise Saunders again (microphone noise) ...the cost savings, the statute says, when it talks about sole purpose it asks you to look at primary purpose and it does specifically, the rules (indistinguishable) were filed under says there may be other economic benefits and that's not going to be tracked from the sole purpose requirement. Those are going to be taken into account when you do the return on investment calculations. In terms of looking at whether this qualifies as a sole purpose, the economic benefits shouldn't come into play; those need to be looked at in the next round when you do final application.

Counsel

As your legal counsel, I'm not sure I concur with that advice. Certainly, I don't disagree with the notion that there may be incidental benefits. And that those incidental benefits can be addressed through the cost allocation equation if it's a qualifying tax credit facility. But it is clear under the sole purpose test that you can have only one purpose and if those other benefits are sufficient to become a purpose then you are not a sole purpose facility. If we loose sight of that then we loose sight of the statutory distinction between the primary purpose test and the sole purpose test.

Chair Eden

We've been at this for an hour or more – two hours. And so, we need to table this or we need to (indistinguishable.)

Commissioner Bennett.

Commissioner Bennett

We had a very brief statement somewhere in this that said, I believe from PGE, that said review it and take the business gain out of it and see what's left. I thought I heard that somewhere in the discussion.

Counsel

I think what you heard was the notion that the company believes that this facility qualifies under the sole purpose test. And if you do that and if you make that determination and then when they come back for their actual tax credit, you will be able to back out these economic benefits, O & M savings and what not, you'd be able to back them out at that time. I think that was the point of those comments.

Commissioner Malarkey

How would that mean, in a sense the motion would be to approve or deny the preliminary (indistinguishable.)

Counsel

Yes, today, you'd need to either approve it or deny it or send it back to us with some instruction to get you some more information.

Ms. Vandehey

I would like also like to clarify that if you do approve it then we will not revisit any of the distinct portions. We will not revisit it if this facility is built as planned then it meets the definition of a pollution control facility. We will review the cost of the facility and we will review the percentage of that cost that is properly allocable to pollution control.

Counsel

My recommendation would be quit frankly that we address this in segments. Both in terms of whether or not it meets the sole purpose test and then also the other two points: how it does so or does not and the issue of divisible components. I think we should address all those in an order.

Chair Eden

Well, assuming the preliminary certification is approved, then we would have a separate motion on each of the components?

Counsel

Yes.

Chair Eden

What's the pleasure of the Commission?

Commissioner Malarkey

Prior to the, following the (Indistinguishable.) Correct? Not within the motion?

Counsel

For example, you might find that it qualifies as a sole purpose, that it does so in the following ways and that each of the components contribute significantly or that only some of the components contribute significantly. I think that is what we are looking for.

Ms. Vandehey

That's correct. We would have to look at all the distinct portions. Distinct portions are eliminated under what is not included as a pollution control facility. It states that any distinct portions that does not contribute to the sole purpose of the facility should be eliminated as being eligible.

Commissioner Van Vliet

You want to get the ball rolling Madam Chair? I'll move that we accept preliminary certification of application 5009.

Commissioner Malarkey

Seconded.

Chair Eden

It has been moved and seconded that we approved preliminary certification of tax credit application number 5009. Is there further discussion?

Commissioner Reeve

Madam Chair?

Chair Eden

Commissioner Reeve

Commissioner Reeve

I'll put my thoughts on the table for a moment here. I would not be able support the motion simply because, although I applaud PGE for what it is trying to do, I can't in good conscience under our statutes and rules as written, believe that this is a qualifying facility. I think they are doing the right thing but under our current statute, I don't think they are entitled to a tax credit for doing so. I think that at least when we looked at the Tidewater application and I think a couple of others, but certainly Tidewater comes to mind. We did at that point look closely at the statute and the sole purpose section of the statute really does require an exclusivity of purpose and it does require reduction of a substantial amount of pollutants. I'm persuaded by the Department's analysis and I concur in it that essentially we are not dealing with a facility that qualifies under the statute as a sole purpose facility.

I think it would be a much different analysis if for example, the NRC got off its tail and said, "All these pools all over the country are not quite as safe as they ought to be. They are not as low as reasonably achievable. And that we should not have pools; we should

have dry cask storage" in the regulation. Then we'd be looking at the primary purpose. They haven't done so.

I'm persuaded by Mr. Stewart-Smith's analysis of the radiation and the fact that the rules don't require the dry storage and that what is occurring in the pool is safe even if it isn't as safe as possible.

Just in summary, I don't think this facility qualifies as (indistinguishable.)

Commissioner Van Vliet

If the argument is over sole purpose, I think I would be probably be long gone if I wait for the NRC to take any kind of definitive action. And I'm not prepared to probably subject the people of State of Oregon to waiting for the NRC, which hasn't been forthright in their actions for getting things done. Sole purpose to me, in this particular case, is the general protection of the public by sealing up radioactive material. That's as simple as I can put it. And I think that under sole purpose, and I think that's where the argument comes in our definition between what is how we call the shots as far as the law is stated now. I guess the question is whether that is a valid conclusion that the safety of the general public in dealing with radioactive material can be classified as a sole purpose and I look at...(microphone noise.)

Chair Eden

Comments? Are we ready to vote? It's been moved and seconded the Commission approved preliminary certification of tax credit application number 5009. We'll probably need a role call.

Director Marsh

Commissioner Malarkey – Aye
Commissioner Van Vliet – Aye

Commissioner Reeve – No
Commissioner Bennett -- Aye
Chair Eden – No

Chair Eden

So, that's three to two. So, the preliminary certification has been approved. What's the next step?

Counsel

Madam Chair, we need to understand whether or not that applies to all the components of the facility or not?

Ms. Vandehey

Additionally, Madam Chair, I would like to know if this extends to medical and industrial applications – if it sets precedence?

Chair Eden

Well that's a question that will be determined as we go down the road.

So, if you want to make a motion on each particular component or if you want to make a motion that indicates that all of the components in (indistinguishable.)

Counsel

Are we all clear what the components are?

(Background Talk.)

Ms. Vandehey

Would you like me to? The vacuum drying station, the welding system, the transfer station and the associated equipment (the vehicles), the pad...

(Background Talk.)

Counsel

Perhaps the best way to do it would be to see if there is a motion to exclude any of those items on the theory that it doesn't contribute a significant amount.

Chair Eden

Commissioners? I won't be making that motion.

Commissioner Van Vliet

I need an explanation on the transfer station whether that is something that is really into the future or whether that is something basically an integral part of the system right now.

Ms. Vandehey

(Microphone Noise.)

(Background Talk.)

Yes, the transfer station and auxiliary materials will be used to move the casks.

Madam Chair, there is also another policy decision inherent in approving the transfer station. And that policy decision is that in the past the Department has not allowed costs associated with material handling. Also inherent in the decision for all of the equipment, with the exception of the baskets and the casks, those components used for the installation or during the movement of the facility have not been allowable.

Chair Eden

Like air ducts?

Ms. Vandehey

Like air ducts. Like conveyor belts.

Commissioner Van Vliet

But you would do that in your analysis as you go through it.

Ms. Vandehey

No, I would not be able to. According to the 1998 rules, as you have approved certification of this facility, we will not look at the individual parts because you would have already approved the purpose of the facility.

Denise Saunders

Madam Chair, if I might make a suggestion. It might be better to put this off until the next meeting and then we can address each one of the components. It might be more helpful to you to do that. For example, we do disagree that they haven't granted certification for facilities like these in the past. (Indistinguishable) at our Boardman plant we have (indistinguishable) certification for our ash handling system. There are a number of considerations that go into looking at the individual components. The one option might be to put that off to the next meeting. Just a suggestion.

Commissioner Van Vliet

Is the next meeting 2005?

Chair Eden

The next meeting is November 30th – December 1st. And what does that meeting look like?

Ms. Purser

It's horrible.

Chair Eden

So we either do it today – it doesn't sounds like we don't have time to do it next time. So we either do it today or we do it in the meeting after that.
(Background Talk.)
And the Department is indicating displeasure with that decision.

Lydia Taylor, Deputy Director

Could we go into it later in this meeting and we could come back to you? And see if that would be satisfactory for you to look at a little more detail, so we could map it out?

Commissioner Van Vliet

Great.

Chair Eden

Sure. At the end of the end of the agenda, is that what you want to do? Like 3:00 o'clock in the afternoon?

Ms. Vandehey

You set the time and we'll be ready with what we can (indistinguishable.)

(Background Talk.)

Commissioner Van Vliet

Two forty-five.

Helen Lottridge, Administrator Management Services

We could come – Helen Lottridge – if we could have an hour or more that would be good.

(Background Talk.)

Ms. Vandehey

After the rest of the tax credits.

Chair Eden

Right, we have to do the rest of the tax credits and...

(Background Talk)

...then we'll probably want an hour after that. And then the corporation would rather...

(Background Talk)...

we put this off so they can come back.

Ms. Saunders

We're willing to come back this afternoon. Whatever your pleasure is.

Chair Eden

All right. Then why don't we take this up at one o'clock; right after lunch.

Ms. Purser

You have a time-certain public comment at one o'clock.

(Background Talk.)

Chair Eden

Time certain public comment is... oh, we can do it right after that though. Can we not?

Okay. So right after the public comment on Agenda Item "J", we can take up this tax credit again.

Ms. Lottridge

Okay.

Commissioner Bennett

Madam Chair?

Chair Eden

Commissioner Bennett?

Commissioner Bennett

Before we leave, the Environmental Quality Commission memo that was sent on September 29th, on page 2. You outline six items. Are there more than six items.

Ms. Vandehey

Those items are what PGE identified as the distinct portions.

Commissioner Bennett

So, is there either six or fewer?

Ms. Vandehey

Well, no, there are more, less-distinct components within these.

Commissioner Bennett

Thank you.

Chair Eden

Okay. So, let's take a break until 10:15 on the clock at the back of the room.

(Background Talk.)

Application 5009 Reconvened

Chair Eden

Okay, are we back to Agenda Item B?

Ms. Purser

I've got to switch the tape before we do this.

TAPE 7

Counsel

... if that's okay with her.

Ms. Purser

Okay then.

Chair Eden

Counsel?

Counsel

Yes, I want to just clarify what you decided in our earlier proceedings. And what I think were decided by implication but I'm not sure, so I'd like to get it on the record. The earlier vote, you determined that the facility did meet the sole purpose of pollution control. But there is still an issue about which method allowed by statute was used to meet that purpose. And I'm assuming, there are three, it could have been air pollution air cleaning device, it could have been water pollution treatment works, or a solid waste process. And my understanding, based upon what is in the staff report, is that the Commission was assuming that this would be a water pollution treatment works. Because the staff report it essentially said that if you were to make the earlier determination that it was a pollution control facility that staff didn't believe that it could meet the air pollution air cleaning device test or the material recovery process test. So, for purposes of drafting an order

when we get there, I'd like to know whether or not I can assume this is a water pollution treatment works method.

Ms. Saunders

Madam Chair, can I just say something? I think there is another method that we...

Chair Eden

Identify yourself, please.

Ms. Saunders

I'm sorry. Denise Saunders, counsel for PGE. There was another method that we identified in our various letters and that was under the rule, I don't know exactly which one, it was subpart "g" under the rules that were in effect at the time we filed our application. It said that is it could be accomplished by detecting, deterring, or preventing (indistinguishable.) And that's the portion that we maintain that it falls under.

Chair Eden

Counsel?

Counsel

Counsel for PGE is correct, although the statute doesn't encompass another test, there is one in the rules for spill prevention. My recollection is that the staff report did not recommend the acceptance of that on the notion that this really not really the type of product that would spill in the traditional sense of the word. But counsel for PGE is correct that that is forth method that is at least envisioned by the rule.

Ms. Saunders

It doesn't just talk about spills, it talks about released too. And if you'll recall the discussion this morning, we have a lot of (indistinguishable) releases such as Tritium from the spent fuel pool. (Indistinguishable.) We think it falls under all three but we think that is the most evident. (Indistinguishable.)

Commissioner Malarkey

We (indistinguishable) motion, person (indistinguishable) made the motion. (Background Talk.)

Chair Eden

I can't hear what you are saying.

Commission Malarkey

Oh, I'm waiting... Tony made the motion (indistinguishable.)

Commissioner Van Vliet

Well, it goes to releases and spills, it changes really what the Department has looked at as their particular interpretation of this. I personally like releases and spills but it doesn't include both air and water. The more narrow interpretation is to look at the water only. And so, I think that so be a decision by the Commission here, which one they want to operate under on this.

Ms. Lottridge

For the record, my name is Helen Lottridge, I'm the Administrator of the Management Services Division for DEQ. Would you want to hear from staff at this point?

Chair Eden

Certainly.

Ms. Vandehey

Considering that the Commission determined that the sole purpose was pollution control...
(Background Talk.)

Ms. Lottridge

Madam Chair, let me clarify, I understood that wanted to know what staff's consideration was as far as the spill portion of the regulation. Is that the clarification that you would like at this point?
(Background Talk.)

Ms. Vandehey

I had asked counsel to help me come up with where the spill portion of the rule was derived. We were not able to tell where the authority came through. Our best guess is that it is a left over from when spills had an eligible component under the pollution control tax credit law. However, that is still a part of the rule. And by that, we thought that spills came under water quality versus under air. And that is why we looked at the water quality component.

Commissioner Van Vliet

And you didn't look at air at all...
(Background Talk.)
...under the release part?

Ms. Vandehey

Yes, we did. However, we could not track back to the authority.

Commissioner Van Vliet

You just tracked the water side.

Ms. Vandehey

That's right because we had clearer indications that it came out under (microphone noise) spills to waters of the state (microphone noise.)

(Indistinguishable. Background Talk.)

Chair Eden

... Well, it's the wish of the Commission probably is that this was the method in the state that probably was applicable. But it sounds to me as though we need a motion.

Counsel

It would be helpful. Otherwise, I will have to suppose when I draft this order. And I would prefer not to.

Commissioner Bennett

I so move.

Ms. Purser

What is he moving?

Chair Eden

Yes, what are you moving? That the method by which the Commission is applying the...

Counsel

... that the sole purpose of pollution control is accomplished by virtue of this being a treatment works by disposing of or eliminating water pollution.

Chair Eden

That would be your motion?

Commissioner Bennett

Yes.

Commissioner Malarkey

I second it.

Chair Eden

Okay, it has been moved and seconded that the rationale for meeting the sole purpose test under the previous action by the Commission was under the water pollution portion of the statute.

(Background Talk.)

Do we need a roll call again? All those in favor signify by saying "aye." Opposed?

Vote from Written Record

Commissioner Malarkey – aye

Commissioner Van Vliet – aye

Commissioner Reeve – no

Commissioner Bennett – aye

Chair Eden – no

Chair Eden

Three to two.

(Background Talk.)

Chair Eden

Do you wish to continue? Counsel?

Ms. Lottridge

Thank you counsel. Chair Eden, we appreciate your taking the time to give us that clarification on the actions that were taken this morning. So, we'll move now then to the request, as we understood it, of the Commission that the Department come back with a recommendation on each of the discrete elements of the pollution control facility. And in order to approach that recommendation, the question that needs to be answered is, "Does this distinct portion of the facility make a significant contribution to the sole purpose of pollution control?" So, that's the question really to be asked of each of the distinct portions, each of the six. And so I'm going to ask Maggie to present the Department's recommendation for each of the six elements of the facility. And I think you'll find those six elements listed in your staff report. I'm sorry, I don't have the page number.

Chair Eden

Let me ask a question of Larry first. Should we do a separate motion for each of these distinct components?

Counsel

It would be helpful. I hate to have you take the time but I think it would be helpful.

Chair Eden

Okay. We'll do it that way then.

Ms. Vandehey

We did look at how pollution control was accomplished for each of the distinct portions of the facility.

Number one, we looked at the baskets. The baskets are a clear fit under the pollution control tax credit regulations considering that you determined that the sole purpose of the facility is pollution control. They provide secondary containment of spent fuel, debris, and other radioactive waste. The baskets control industrial waste with the use of a treatment works as allowed in the tax credit regulations and water quality statutes. The reason that it's defined as a treatment works is because it "holds" the waste.

Chair Eden

Questions or comments of staff regarding the baskets? ... Let's do them one-by-one. (Background Talk.)

Commissioner Van Vliet

(Background Talk.)...move to accept the baskets.

Ms. Saunders

Madam Chair (indistinguishable) ...

Chair Eden

Why would you object to this?

Ms. Saunders

We're not objecting. It's just in terms of the process. Our fundamental premise in this is that you can't break it up into individual components. And that you need to look at it as a whole. So, we kind of put together an outline based on that premise. So, if I might ask that we present our whole thing as one piece after they get done and then maybe you vote individually on each component after you've had a chance to see it.

Chair Eden

I'll go along with that but I'm going to give you five minutes at the end of this presentation. Staff.

Ms. Vandehey

Number two - the casks. The casks provided structural support for the baskets. Structural support of pollution control facilities are allowable costs. However, the casks do provide shielding of radiation. Radiation is not a pollutant regulated by DEQ, it's not a pollutant that is eligible under the tax credit regulations. Shielding is required by the NRC (indistinguishable) Siting Council. Therefore, the casks do not have an exclusive pollution control purpose.

Number three – the pad. The pad provides structural support of the cask. However, the casks do not have an “exclusive” pollution control purpose.

Items 4, 5 and 6 -- the vacuum drying system, the welding system and the transfer station are equipment used to install the baskets. It is difficult for us to determine where the pollution control begins and ends. We have brought that before the Commission many times. Where is the beginning and end of a pollution control? Inclusion of items used to install a pollution control facility is beyond current program practices. Upon final application, the Department would not be able to include this equipment because it will no longer be in use at that time – with the facility having been constructed already. These items make an insignificant contribution to the sole and exclusive purpose of water pollution control.

Thank you Madam Chair, Commissioners.

Chair Eden

Is that all you have to say about these individual components? (Indistinguishable.) Okay. Counsel? (Background Talk.) I thought this was going to take a lot longer. They have five minutes

Mr. Quennoz

Okay. I'll improvise here. Madam Chairman, Commissioners. Thanks again for the opportunity to come back and actually present more information with regards to the major components.

Chair Eden

Would you identify yourself again, please for...

Mr. Quennoz

Yes, Steve Quennoz, Portland General Electric. We did take the time to during this interim period to look at the ISFSI major components and we addressed all six of them; the same components that DEQ has mentioned.

I would like to show again a slide or at least talk to you on the Oregon statute regarding insufficient contribution. And it's very clear what level, what threshold is presented by those statute with regard to what is and what is not within the letter of the law regarding insufficient contribution. And again I don't need to mention, it's landscaping and company related signs and things like that. I don't think any of the components associated with this fall into that range.

With that being said, I'd like to go back. The sole purpose again is to prevent pollution all based on integrity. If you provide integrity, you prevent the pollution. So, when we get into baskets, again the baskets I think we are in agreement there. We acknowledge that the baskets meet the disposal definition, that they are considered a treatment works, and they function by providing integrity preventing pollution.

Now the vacuum drying system. It is the next one on your list and it removes water, residual water, evacuates the baskets and also allows, facilitates the helium. All of those are need to provide the integrity of the baskets. Without it, you have corrosion. Without the helium, you have overheating of the pins. High stresses and strains due to (indistinguishable), a phenomenon, it would jeopardize the integrity of the fuel pins if we didn't have the proper thermal coupling.

The welding system again, it's a seal. You need to have that system to provide that seal. Without the seal, without the integrity, you're not preventing pollution.

The storage casks, I do agree that there is a provision there, incorporated in the design with regard to shielding. But the primary purpose of those casks are to provide structural integrity included natural circulation cooling. Without the cooling, you're going to overheat the pins and you're going to have a problem. Without the structural integrity, you're going to have a problem. Again I want to mention that you wouldn't want to have these things unshielded on the lower portion of the sight in a pole barn. It's just not integral to the safety of that system.

The transfer system, something that we use as far, if you consider it a disposal system that it processes the fuel from the reactor building to the pad then also to eventual shipment to a geological repository. Those supporting systems such as the transfer station, such as the transfer casks are all integral to the safe and pollution free handling of that package through that disposal process. We also feel there that the approval of the transfer station won't expand the tax credit program. The Commission has already approved the handling such as the Boardman fly-ash transfer system.

The concrete pad. I'll make the same appeal to logic there. Without that pad, you're subjecting the system to tip-over and other types of events due to external. It would jeopardize the integrity of the package and jeopardize the pollution free nature of it.

So, the conclusion we have, again, I applaud you because I know you are struggling with some policy issues and I know you have concerns with the overall dollar amounts that you are approving. But I think you have been extremely judicious by looking at the statutes and seeing if it meets the statutes and voting on its merit. I just ask you again to please consider these on its merits. And if there is the concern about costs and I would say, and I wouldn't disagree that there is incidental benefits that need to be eliminated by the staff through their return-on-investment calculations. But this is not the process to do it. If you want to be consistent and you want to be fair, you need to understand that all of these work as an integral package. By consistency and fairness, I mean that when you voted for vehicles, for example, you didn't say just the engine, we're going to just allow the tires and headlights. I think you look at insignificant along those lines. You look at it as a package. And I encourage you to do the same way. We've look at other things that have been approved and I think you don't disallow it because of the structural integrity. If you've approved a waste neutralization system, you approved it as a package. The approval was through things of hydraulics and pneumatics and instrumentation and charts. And I think to be consistent and fair, you need to do that here. So, integrity is the only, the primary function of this system we've designed. And all these directly support this.

Chair Eden

Thank you very much.

Commissioner Malarkey

Madam Chair?

Chair Eden

Yes, Ma'am, Commissioner Malarkey.

Commissioner Malarkey

As I see it and I'm not a physicist and I can't give any argument you. But you speak of the structural integrity and the prevention of over-heating. To me these are the elements that are at issue as far as the potential of water pollution. But the very fact that, as Maggie say's, that radiation shielding is not part of the rules, limits us (indistinguishable) how we view (indistinguishable.) Myself, I see three things in here that are acceptable in how I (indistinguishable) but which would limit some of the others in the integrity of (indistinguishable.)

Mr. Quennoz

Yes, I know you're concern there and again, there may be some off-set and balance between integrity and shielding. One follows the other in my mind. I mean, we designed the system for structural integrity, it provides for shielding. Other designs use all metals, for example. And do that for (indistinguishable.) You can use a number of materials. But to have a robust design, you're not going to come up with a package that is much different from what we have here. Because, when we designed it, we designed it strictly for structural considerations and then we go back and analyze it for the shielding effects. Those calculations, we have never have had yet to revise that, the structural design to get adequate shielding.

Chair Eden

Dr. Lei.

Dr. Lei

Wayne Lei, Director of Environmental Policy, Portland General Electric.
I should have addressed that point for you because this is probably one of the most fundamental pieces of confusion about radioactivity and radiation. There is kind of a serious disconnect about how you view these kind of things because if you're worried about the radioactivity, which this certainly contains. Fundamentally, following that, you're worried about the toxic nature of it. And the relatively unique nature of it is the radiation comes off it. That's just the fact of the matter here. And it does make radioactivity a unique pollutant in that regard. It is the only pollutant that I know that has (indistinguishable) that can literally penetrate (indistinguishable.) And that's pretty much what you are worried about. So that (indistinguishable) toxicity. So, you're really worried about one, contain the one, really you have to understand the quality of it (indistinguishable.)

Chair Eden

Other questions or comments? Thank you very much. Then if the Commission is to move forward on this then we need a motion with respect to each of these components that staff has, despite the companies position, that staff has delineated.

Commissioner Van Vliet

I think we have already done number one, the baskets. (Background Talk.)

Chair Eden

We stopped, didn't we?

Counsel

The motion was made. (Background Talk.)

Ms. Purser

I don't have it down.

Chair Eden

I don't think we did baskets, I think we figured out the method of pollution control. So we haven't done any of the components. Is that correct?

Ms. Purser

Yes.

Chair Eden

So, is someone moving to approve?

Commissioner Van Vliet

I'm moving to approve baskets.

Commissioner Malarkey
Second.

Chair Eden
To include baskets under the tax credit application ...

Counsel
I think to make the baskets make are a significant contribution... (Background Talk.

Chair Eden
Do you want to read back Tony's motion to him?

Commissioner Van Vliet
You just said make a significant contribution.

Chair Eden
Okay. All those in favor signify by saying "aye."

Vote from Written Record
Commissioner Malarkey – aye
Commissioner Van Vliet – aye
Commissioner Reeve – no
Commissioner Bennett – aye
Chair Eden – no

Chair Eden
Number 2 – Casks.

Commissioner Van Vliet
I move that we accept casks as making a significant part of the pollution control.

Chair Eden
Second?

Commissioner Malarkey
Second.

Chair Eden
(Indistinguishable.) Discussions? All those in favor signify by saying "aye." How many is that? Three? Opposed?

Vote from Written Record
Commissioner Malarkey – aye
Commissioner Van Vliet – aye
Commissioner Reeve – no
Commissioner Bennett – aye
Chair Eden – no

Chair Eden
Pad.

Commissioner Van Vliet

I don't think you can store those things without the pad, Madam Chair. So, I'll move that the pad be accepted (indistinguishable) contribution.

Chair Eden

Contribution?
(Background Talk.)
Is there a second?

Commissioner Bennett

Second.

Chair Eden

Discussion? All those in favor signify by saying "aye." Opposed?

Vote from Written Record

Commissioner Malarkey – no
Commissioner Van Vliet – aye
Commissioner Reeve – no
Commissioner Bennett – aye
Chair Eden – no

Chair Eden

That one failed, 3-2

Chair Eden

Vacuum-drying system.

Commissioner Van Vliet

Since you're drawing water out of there, Madam Chair. I move that we accepted the vacuum drying system as part of the significant purpose.

Chair Eden

Is there a second?

Commissioner Malarkey

Second.

Chair Eden

Discussion? All those in favor signify by saying "aye." Opposed?

Vote from Written Record

Commissioner Malarkey – aye
Commissioner Van Vliet – aye
Commissioner Reeve – no
Commissioner Bennett – aye
Chair Eden – no

Chair Eden

Transfer station.

Commissioner Van Vliet

(Indistinguishable) from “A” to “B”, Madam Chair. I move that the transfer station is part of the significant process.

Chair Eden

Is there a second?

Commissioner Bennett

Second.

Chair Eden

Discussion? All those in favor signify by saying “aye.” Opposed?

Vote from Written Record

Commissioner Malarkey – no
Commissioner Van Vliet – aye
Commissioner Reeve – no
Commissioner Bennett – aye
Chair Eden – no

Chair Eden

That one failed. The welding system.

Commissioner Van Vliet

(Indistinguishable.) Madam Chair, without putting the lid on, I move that we accept it as part of the process.

Chair Eden

Is there a second?

Commissioner Malarkey

Second.

Chair Eden

Discussion? All those in favor signify by saying “aye.” Opposed?

Vote from Written Record

Commissioner Malarkey – aye
Commissioner Van Vliet – aye
Commissioner Reeve – no
Commissioner Bennett – aye
Chair Eden – no

Chair Eden

That one passed. Is there anything more to be decided, or discussed or be asked about, or voted upon?

Counsel

Only one more, I'm afraid. I need to have you decide if you want to do the order or if you would like to delegate the Director to sign the order on this since there is possibility of appeal we want to prepare a formal written order.

Chair Eden

I'd like to see the order.

Counsel

So, we'll bring it back at the next meeting.

Chair Eden

Yes. Tony wants to see it, too.

Commissioner Van Vliet

In writing that order, I think there ought to be some wording in there that we were dealing with a special kind of pollution in this particular case that would somewhat explain why we deviated probably from the strict interpretation of some of the previous interpretation of the statute.

Chair Eden

Commissioner Bennett

Commissioner Bennett

Would you just review quickly, what we did and didn't pass (indistinguishable)?

Counsel

My understanding is that the Commission determined that this was a sole purpose pollution control facility. It accomplishes pollution control as a water pollution treatment works. That baskets, casks and vacuum drying systems were significant components but that the pad, transfer station and welding system were not.
(Background Talk)

Chair Eden

No, the welding system was approved as making a significant contribution.

Counsel

I'm sorry. Yes, the transfer system and the pad were not. (Indistinguishable.)

An aside on the order denying of the Willamette Industries tax credit ensued.

Chair Eden

This was a difficult decision, we appreciate your coming down here and arguing with us about it. (Indistinguishable) your information, it's very helpful. We don't always decide what you want us to and sometimes we do. This is a first, in my tenure on this Commission.

Mr. Quennoz

I'd just like to equally extend the company's gratitude. In my observation, this is the first time I've been before this Commission. And I'm very impressed with your deliberations and time (indistinguishable) time you've taken. Thank you for all consideration on this (indistinguishable.)

Chair Eden

Yes, and thank you for the materials. I think they were quite helpful.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

IN THE MATTER OF THE
TAX CREDIT APPLICATION OF
PORTLAND GENERAL ELECTRIC
COMPANY

APPLICATION NO. 5009
FINDINGS OF FACT, CONCLUSIONS OF LAW
AND FINAL ORDER

I. INTRODUCTION/CONTENTS

This order provides final agency disposition of an application by Portland General Electric Company (PGE or the applicant) for preliminary certification of a pollution control facility. The contents of the order are as follows:

II. BACKGROUND AND PROCEDURES

- A. The 1995 Legislation and Implementing Rules
- B. Agency Review of and Decision on the Application

III. FINDINGS OF FACT

IV. LEGAL STANDARDS, CONCLUSIONS AND STATEMENT OF REASONS

- A. Sole Purpose Test and Alternative Methods
- B. Exclusions, Including "Insignificant Contribution"

V. CONCLUSION AND ORDER

II. BACKGROUND AND PROCEDURES

- A. The 1995 Legislation and Implementing Rules

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1 In 1995, the Oregon Legislative Assembly amended the pollution control tax credit
2 statutes to include an optional preliminary certification process.¹ 1995 Or. Laws, Chapter 746
3 (the new statutory provision, which is codified as ORS 468.167, is set forth in its entirety in
4 Appendix A).

5 The EQC adopted new rules implementing the 1995 legislation, and the rules became
6 effective on May 1, 1998. PGE filed this application for preliminary certification the day before,
7 on April 30, 1998. Therefore, DEQ reviewed PGE's application under the "old" rules. DEQ's
8 position is that the rules on preliminary certification, although not legally binding, may still be
9 examined for guidance.
10

11 B. Agency Review of and Decision on the Application

12 DEQ received PGE's application for preliminary certification on April 30, 1998. DEQ
13 met with representatives of PGE, explained the scope of review for a preliminary certification,
14 and informed them about the type of questions staff would be asking during review of the
15 application. On November 18, 1999, the EQC held a work session to learn about the project in
16 question and to provide initial guidance to staff. The EQC heard presentations from Maggie
17 Vandehey, Tax Credit Manager for DEQ, and Dave Stewart-Smith with the Oregon Office of
18 Energy. After receiving additional information from PGE, DEQ determined that the application
19 was substantially complete on April 27, 2000.
20

21 The application was then scheduled for consideration and possible action at the
22 September 29, 2000, meeting of the EQC. After hearing further from staff and PGE
23
24
25

26 ¹ The 1995 legislation primarily uses the term "precertification," although the term "preliminary certification" is used at least once. ORS 468.167(2)(c). The agency preferred the term "preliminary certification." Although the two terms should be considered interchangeable, this order uses the term "preliminary certification."

1 representatives, the EQC deliberated on the matter and ultimately voted (3-2) to approve the
2 application with the exclusions discussed below. This final order memorializes that decision.

3 III. FINDINGS OF FACT

4 1. The claimed facility consists of a vertical dry cask storage system, which will provide
5 temporary storage of spent nuclear fuel assemblies, fuel debris and radioactive waste materials.

6 2. Fission product gamma rays, which are emitted from the spent fuel, are a continuing
7 source of radiation after shutdown of a reactor. The spent fuel assemblies are currently stored in
8 the spent fuel pool. A spent fuel assembly typically consists of 264 spent fuel pins. The spent
9 fuel pins are about one centimeter in diameter (less than 1/2 inch) and 12 feet long. Each pin is a
10 zirconium alloy tube sealed at each end and filled with ceramic uranium fuel pellets. If the seal
11 of a pin is broken, water will enter and become contaminated with radioactive materials in the
12 form of fission products. These fission products emit gamma rays, alpha particles and beta
13 particles. Some of the fission products are gaseous, including krypton 85 and xenon isotopes,
14 primarily tritium. Tritium is a radioactive form of hydrogen that is chemically indistinguishable
15 from regular hydrogen, so it easily forms water molecules. Therefore, the fission products may
16 become airborne in the gaseous space above the spent fuel pool. The total amount of radioactive
17 gaseous effluents amount to about 50 curies per year.

18 3. Radiation is unique and different from the substances regularly encountered by DEQ
19 in the tax credit program. It not only interacts with the body on a chemical basis, it directly
20 impinges upon genetic material. The scientific principle underlying radiation protection is that
21 the only safe exposure is zero. Radiation causes genetic damage that may be latent in some
22 individuals but still threatens several succeeding generations.

23 4. The spent fuel pool and supporting plant systems are being dismantled and
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1 decontaminated as part of the ongoing decommissioning of the Trojan Nuclear Plant. The dry
2 cask storage system will take the place of the spent fuel pool until the spent fuel assemblies can
3 be transferred to a federally operated disposal site. The dry cask storage system eliminates
4 approximately 1200 gallons of contaminated resin used annually to process the water that
5 circulated throughout the pool.

6 5. The applicant claimed the following major components as part of the pollution control
7 facility:
8

- 9 a. Thirty-four PWR (pressurized water reactor) and two GTCC (greater than class
10 C) sealed metal baskets used to store radioactive materials. The baskets are about
11 16 feet tall and 5-1/2 feet in diameter. The outside of the basket is made of
12 3/4-inch thick stainless steel. The PWR baskets are capable of storing up to 24
13 spent fuel assemblies. The GTCC baskets are capable of storing up to 28
14 individual canisters containing other radioactive waste.
- 15 b. A vacuum drying system used to remove water from each basket following
16 loading of radioactive waste. Each PWR basket is loaded with up to 24 spent fuel
17 assemblies underwater in the spent fuel pool, and therefore each has residual
18 water.
- 19 c. A semi-automatic welding system used to seal weld the baskets. A structural lid
20 is welded onto the baskets and a shield lid is welded on after the contents are dry.
21
- 22 d. A ventilated concrete storage cask for each basket. Each cask is made of high
23 density concrete about 29 inches thick and provides structural support for the
24 basket. It also provides shielding of the radiation produced by the radioactive
25 materials in the spent fuel.
26

1 e. A transfer station and associated transfer equipment. The transfer station is used
2 for basket transfer operations. Lateral and vertical support is provided with the
3 transfer station to prevent a loaded cask from overturning or falling during
4 transfer operations. A transfer cask is used to move a loaded basket from the
5 spent fuel pool to the concrete cask. It is also designed to be used to transfer a
6 basket to a shipping cask or to a basket overpack. An air pad system is used to
7 move a loaded cask. Air pads are inserted under the cask and inflated with an air
8 compressor. A specially modified vehicle would then be used to move the
9 concrete cask from one location to another.
10

11 f. A reinforced concrete storage pad used to support the storage system baskets.
12 The storage pad is 170 foot by 105 foot and 18 inches thick. The concrete casks
13 will be on the pad until the U.S. Government is prepared to take the spent fuel.
14

15 6. The ISFSI is not required under any law. PGE voluntarily chose to decommission and
16 once that decision was made, it was then required to comply with applicable statutes and
17 regulations to provide safe storage of spent nuclear fuel and high level radioactive waste. While
18 not required, ISFSI-type dry interim storage of spent fuel is preferred over active spent fuel
19 storage by the NRC. It is also being installed to comply with Chapter 26 of OAR 345,
20 administered by the Oregon Office of Energy for spent nuclear fuel storage.

21 7. Even when compared to the wet storage system (the spent fuel pool) rather than no
22 storage facility, elements of the ISFSI significantly decrease the risk of the radioactive material
23 polluting the waters of the state. The Columbia River provided a source of emergency cooling
24 water during operation. Sealing the radioactive spent fuel waste in the ISFSI stainless steel
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26

1 canisters eliminates the source of perpetual generation of liquid and gaseous radioactive waste.
2 While the ISFSI reduces this aspect of the risk, some risk remains as long as there is any
3 radioactive waste on site. The risk is elevated by the fact that, because of problems in siting a
4 permanent disposal site, a dry storage facility is going to be needed at this site for 30-50 years
5 and possibly more.

6 **IV. LEGAL STANDARDS, CONCLUSIONS AND STATEMENT OF REASONS**

7 **A.1. Sole Purpose Test and Alternative Methods**

8 The applicant asserts that the ISFSI is an eligible pollution control facility by virtue of the
9 “sole purpose” test of the tax credit statutes. Under this test, a facility is eligible if its “sole
10 purpose” is “to prevent, control or reduce a substantial quantity of air, water or noise pollution or
11 solid or hazardous waste” ORS 468.155(1)(a)(B). The applicant asserts that it meets the
12 sole purpose test by controlling, preventing or reducing a substantial quantity of air and water
13 pollution.
14

15 In addition to the sole purpose test, the applicant must demonstrate that the pollution
16 prevention, control or reduction is achieved by one of the alternative methods recognized by the
17 tax credit statutes and rules. In this case, PGE contends that it complies with the method of
18 disposal or elimination of industrial waste and the use of treatment works for industrial waste.
19 OAR 340-016-0025(2)(a). PGE further contends that the claimed facility will be used to detect,
20 deter or prevent spills or unauthorized releases, a method recognized in the EQC rules.
21 OAR 340-016-0025(2)(g).
22

23 **A.2. EQC Conclusion**

24 A majority of the Commission concludes that the sole purpose of the facility is to prevent
25 and control a substantial quantity of water pollution. Such prevention and control is
26

1 accomplished by the disposal and elimination of industrial waste and the use of treatment works
2 for industrial waste.

3 A.3. Statement of Reasons/Analysis

4 DEQ and the EQC have tried to distinguish between the basic purpose of a facility and
5 the secondary or incidental benefits that commonly come with projects, such as the operation and
6 maintenance cost savings often associated with controlling pollution. In this case, the claimed
7 facility appears to have a number of “pluses,” including significant financial savings over the
8 long term. Nonetheless, a majority of the Commission is persuaded that these pluses are the
9 secondary benefits to the facility’s sole purpose of preventing, controlling or reducing water
10 pollution.
11

12 A majority of the Commission is satisfied that the approved elements reduce a substantial
13 quantity of water pollution, especially when compared to the spent fuel pool. The ISFSI
14 eliminates 50 curies of radioactive gases and tritium released annually into the atmosphere by the
15 spent fuel pool. The ISFSI would encapsulate both the source and the means of production of
16 these radioactive substances. Without this encapsulation, the radioactive gases will continue to
17 form into water molecules that will then fall back to the surrounding waters, primarily the
18 Columbia River. Tritium is especially susceptible to forming water molecules as it is a
19 radioactive form of hydrogen that easily forms water molecules. In addition, the ISFSI
20 eliminates approximately 1200 gallons of contaminated resin used annually in the spent fuel
21 pool. Finally, the ISFSI reduces the risk of pollution from catastrophic occurrences, and such
22 occurrences should be a legitimate concern in appropriate cases. In this case, because of the
23 unique dangers in a release of radioactive material, such concern is appropriate. It is these
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1 circumstances that distinguish this case from other cases in which the EQC has declined to
2 approve facilities with limited pollution control function.

3 B.1. Exclusions, Including “Insignificant Contribution”

4 In the definition of “pollution control facility,” the statutes expressly exclude certain
5 items from eligibility. In addition, the statutes eliminate from eligibility “[a]ny distinct portion
6 of a pollution control facility that makes an insignificant contribution to the ...sole purpose of
7 the facility” ORS 468.155(3)(d).

8
9 B.2. EQC Conclusion

10 A majority of the Commission concludes that the ISFSI’s baskets, concrete storage casks,
11 vacuum drying equipment and welding system make a significant contribution to the pollution
12 control purpose. At the same time, a majority of the Commission concludes that the ISFSI’s
13 concrete storage pad and transfer system do *not* make the requisite contribution.

14 B.3. Statement of Reasons/Analysis

15 The purpose of the concrete storage pad is to maintain structural integrity for the weight
16 of the casks and to provide structural integrity for the baskets in the event of a natural event such
17 as an earthquake or flood. The pad does not contribute significantly to any pollution control.

18 The purpose of the transfer system is to provide for material handling during the transfer
19 of PWR baskets from the spent fuel pool to the concrete casks and from the concrete casks to the
20 transportation containers. Material handling is not a pollution control purpose, and therefore, the
21 transfer system is excluded from eligibility.
22

23 The other elements of the ISFSI, specifically the baskets, the concrete storage casks, the
24 vacuum drying equipment, and the welding system, are more integral to the pollution control
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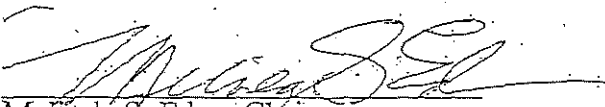
1 purpose and therefore make the requisite contribution.

2 V. CONCLUSION AND ORDER

3 A majority of the Commission has determined that Portland General Electric Company
4 and the elements of the ISFSI will be eligible for tax relief under ORS 307.405 or 315.304 if the
5 elements are erected, constructed, reconstructed, added to, installed, improved or used in
6 accordance with this application for preliminary certification. Therefore, under ORS 468.167(3),
7 the EQC hereby grants preliminary certification for the facility by approving the designated
8 elements of the application with the exceptions and conditions discussed above.
9

10 It is so ordered:

11
12 Dated this 15th day of March, 2001.

13
14 
15 Melinda S. Eden, Chair
Environmental Quality Commission

16 NOTICE OF JUDICIAL REVIEW: You are entitled to judicial review of this order. Judicial
17 review is pursuant to the provisions of ORS 468.167(5), 468.170(3) and 468.110.
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APPENDIX A

468.167 Application for precertification. (1) Any person proposing to apply for certification for tax relief under ORS 468.155 to 468.190 may apply, before the completion of a pollution control facility, for precertification of the facility with the Environmental Quality Commission.

(2)(a) The application shall be made in writing in a form prescribed by the Department of Environmental Quality. The application shall contain the following information:

(A) A statement of the purpose of prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or recycling or appropriate disposal of used oil served or to be served by the facility.

(B) A description of the materials for incorporation into the facility or incorporated into the facility, machinery and equipment to be made or made a part of the facility and the proposed or existing operational procedure of the facility.

(C) Any further information the Director of the Department of Environmental Quality considers necessary before precertification is issued.

(b) The application need not contain information on the actual cost of the facility or the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil.

(c) The application shall be accompanied by a fee as provided under ORS 468.165 (5). The fee may be refunded if the application for preliminary certification is rejected.

(3) If the commission determines that the person and the pollution control facility will be eligible for tax relief under ORS 307.405 or 315.304 if the facility is erected, constructed, reconstructed, added to, installed, improved or used in accordance with the application for precertification, the commission shall precertify the facility by approving the application.

(4) If the facility is erected, constructed, reconstructed, added to, installed, improved or used as proposed in the application for precertification, the commission's approval of the application shall be prima facie evidence that the facility is qualified for certification for tax relief under ORS 468.170. However, precertification shall not ensure that a facility erected, constructed, reconstructed, added to, installed, improved or used by the precertified person will receive certification under ORS 468.170 or tax relief under ORS 307.405 or 315.304.

(5) If the commission fails or refuses to precertify a person and facility, the person may appeal as provided in ORS 468.170 (3). [1995 c.746 s.6]

GEN70755

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

WORK SESSION ON:

Portland General Electric
Company's independent spent fuel
Storage installation at the
Trojan Nuclear Power Plant.

TRANSCRIPT OF PROCEEDINGS

October 22, 2004

BEFORE:

COMMISSIONERS:

Mark Reeve, Chair
Deirdre Malarkey
Lynn Hampton
Ken Williamson

Helen Lottridge, Administrator, Management Services, DEQ
Paul Slyman, Deputy Director, DEQ
Maggie Vandehey, Manager, Tax Credit Program, DEQ
Larry Knudsen, Legal Counsel to the Environmental Quality Commission
Denise Saunders, Legal Counsel to Portland General Electric Company

EQC Meeting – October 22, 2004 Transcript of Audio Tape (Tape 8, Side B)

Mark Reeve, Chair of the Environmental Quality Commission

J, at this point.

Helen Lottridge, Administrator, Management Services, DEQ

Thank you, Mr. Chair. Once again, for the record, Mr. Chair and members of the Commission, my name is Helen Lottridge. I am the Administrator of the Management Services Division at the Department of Environmental Quality, and to my left is Maggie Vandehey, Manager of the Tax Credit Program at DEQ. Excuse me, I have a little cough, so forgive me for these pauses. The purpose of this agenda item is for DEQ to receive your guidance on the scope of the discussion that will take place at the December EQC Meeting on this tax credit. The reasons that we decided to come and ask for your guidance on this are listed there on the first page of the Staff Report: that quite a bit of time has elapsed since the preliminary Certification Application; there was a split vote on September 29 of 2000; the Commission membership has changed; the current Commission may wish to explore the full range of legal option and the size of the claim cost – it's the second largest tax credit in the 37-year history of the program. So, those are the reasons that we come to ask your guidance. I want to be very, very clear that we are making no recommendation on what we think the discussion ought to be at the December meeting. We are asking you what you wish for us to do, and that is what we will do. Nor are we making any recommendation as to what the final decision should be in December. So I just wanted to clarify what that list really is representing.

So, today, what I'm planning to do here is just go through a very brief discussion, and what I'll cover during that time is a little bit of background on this tax credit application, the facility that PGE has now constructed, some potential options for the December 9 discussion – there are several representatives of PGE here who are available to make comments and/or answer your questions at your discretion – and then, following that, we would circle back in and present you with the question and take your guidance from there.

Mr. Reeve

OK, I've received a request to testify from Denise Saunders, and I will provide that opportunity, but first we'll hear from you, and then we'll hear from Denise, and then move forward that way.

Ms Lottridge

Thank you, Mr. Chair. So, on the background, just a very high-level background. Preliminary Certification, definition and purpose – the Preliminary Certification provides decision-makers with some assurances that a proposed pollution control facility would qualify as a pollution control facility if constructed as planned. The 1995 Legislature reinstated the preliminary certification provision, and since then, the Environmental Quality Commission has pre-certified four applications. That's how many have been

submitted. Three of those four companies, including this one, have applied for final certification, and the Environmental Quality Commission has approved two of those final certifications.

The effect of pre-certification, or preliminary certification, is that it provides prima facie evidence that the facility meets the technical qualifications for final certification as a pollution control facility, and I'll ask counsel to speak more about that in just a few minutes. It does not ensure that the facility will receive the final certification under the DEQ tax credit regulations.

So, what did PGE build, and what did that facility replace? PGE constructed an Independent Spent Fuel Storage Installation, or "ISFSI." ISFSI. I'll probably say that twice every time I come to it, I always have, so far. Oh, thank you, Paul, that'll be very helpful. And, this is at the Trojan Nuclear Power Plant site in Rainier, Oregon. This claimed facility is part of the decommissioning of the Trojan plant itself, and is part of the approved decommissioning plan that, that plan was approved by the Nuclear Regulatory Commission and the Oregon Energy Facilities Siting Council. And, in that plan that was approved, PGE specified moving the spent nuclear fuel assemblies, fuel debris, and radioactive waste from wet storage to dry storage.

The ISFSI is a dry storage system. This dry storage system is passive and requires less maintenance, less security, and less monitoring than the wet storage pool that it replaced. The wet storage pool was a functioning storage system that was in use for the duration of the time that the plant was producing power and since, and it is a storage system since then as well. The purpose of both of these systems is to provide safe storage and shielding for radioactive waste that was generated during the plant's energy production years between 1975 and 1992. Portions of this dry storage installation will also be used to transport the radioactive waste, the spent fuel, to a permanent facility whenever one is available. That is to be provided by the federal government, and that will, no doubt, be many, many years into the future.

PGE requested that the Commission preliminarily certify the six major components of this dry storage system, and I'm going to just briefly name what those six components are. There are stainless steel canisters to hold and shield the spent fuel. There are concrete casks that provide structural support and shielding for the canisters. There is a concrete pad that provides support for the canisters and casks. There is a transfer station for moving the canisters. There is welding equipment to seal the canister lids, and there's drying equipment to remove water from the spent fuel before it's sealed. So, that's a very, very superficial listing of the six major components of this facility.

At the meeting in September 2000, DEQ recommended denial of the preliminary certification of this facility. This was based on our interpretation of the tax credit regulations and our determination that the claimed facility did not meet the definition of a pollution control facility. The main reasons for that were Sole Purpose, the sole purpose requirement, and substantial quantity component. During that meeting, on September 29 of 2000, the Commission heard several hours of testimony from the DEQ, the Office of

Energy, and PGE, and you have copies of that testimony. At that meeting, a majority of the Commission concluded that the sole purpose of four of the six components of the facility is to prevent and control a substantial quantity of water pollution. So, the four components that a majority of the Commission granted preliminary certification on were the canisters, the casks, the drying equipment, and the welding equipment, by a split vote of three to two. The Commission denied preliminary certification for the concrete pad and the transfer station, also by a split vote of three to two. You have the final order in your attachments.

Since that time, PGE has completed constructing the ISFSI. That was completed on September 3, 2003. And PGE did construct the four pre-certified components as preliminarily certified, as was laid out in the Preliminary Application, at the cost of \$62.6 million. PGE submitted the Application for Final Certification on October 15, 2003, meeting the timely filing requirement. Since October 15, 2003, PGE and DEQ have engaged in further exchanges of information that Maggie has needed to analyze the application. Our last request for data was given out on September 20 of 2004, and PGE is working on a response right now. PGE, during this time, since submitting the Application, has been very cooperative in providing us with information.

Now, to the piece on options for EQC decision on the Final Certification, December 9. The extent of our review on that day will be consistent with whatever your direction is to us today. There are a couple of options that you can consider – I'm sure there are others besides these two, but just laying these out to clarify the nature of our question – one option is that DEQ could restrict its analysis to only those factors needed for final certification. Now, if this is the direction that you provide us today, our analysis for December 9 will focus on determining if the Applicant constructed the ISFSI according to the EQC's Order, and determining the eligible facility cost and the percentage of those costs allocated to pollution control. So, that's one possible option.

Another possible option is that we could revisit, layout a presentation that would include revisiting whether the facility meets the definition of a pollution control facility. This would be revisiting issues that were covered in September of 2000. If the Commission provides DEQ with this direction, then our presentation would include an analysis of whether the claimed facility meets the definition of a pollution control facility, including questions of sole purpose and substantial quantity of pollution. We, with the help of counsel, your counsel, would also present and explain various legal options available to the Commission. These would likely include options for approving all or some of the six components, or denying all or part of those components. And, right now, I'd like to turn to Mr. Knudsen, and ask for him to provide you with a legal discussion of these options and any other issues that he would like to cover.

Larry Knudsen, Legal Counsel, Department of Justice

Thank you, Mr. Chairman. Obviously, the issue, or, the key legal issue that we're going to run into, or have run into, with this item, is what does the statute mean, what does ORS 468.167(4) mean, when it speaks to your prior approval as being prima facie evidence, and the pre-certification as not ensuring that the facility will ultimately receive

a tax credit. As you know, you've received a letter already from the Applicant, sort of setting out what it believes its view is, and I assume we'll hear some more discussion on that point from Ms. Saunders later. But also, as you know, we at DoJ have advised you that it's likely a court would uphold a Commission interpretation of the statute that allows you to reach a different decision with respect to the qualification of the facility for final certification, subject to two important limitations that we think you need to keep in mind.

First is that the statute clearly does shift the burden of proof away from the Applicant on this issue of qualification. So, it's going to be incumbent upon the state to establish that the facility is not qualified, otherwise, you should assume that it is. The other, under established principles of administrative law, we think that if you are going to propose revisiting some of the issues that you've established, some of the decisions that were established in the preliminary certification, it's incumbent on us to give PGE notice of that intent, and an opportunity to provide rebuttal evidence or arguments. But, essentially, that's where we're at, and leave it to you to decide where you want to be.

Mr. Reeve

Thanks.

Ms Lottridge

With that, if you have questions, we'd be very happy to answer them. Otherwise, the PGE representatives are here and ready to

Mr. Reeve

Were there questions or comments?

Lynn Hampton, Commissioner

Not at this point.

Denise Saunders, Legal Counsel to Portland General Electric

Good afternoon, Commissioners. My name is Denise Saunders, I'm an attorney, and I'm here representing Portland General Electric Company. And, first of all, I'd like to thank you for giving us a few minutes to talk about this topic. It's clearly something that's very important to us. Earlier this week, we sent to each of the Commissioners and to Mr. Knudsen, and to the Department, a copy of a letter that contained our written comments on this issue. And, if you didn't receive that, or you don't have that, I have extra copies here if you'd like to have them. OK, and we've asked that those comments be put into the record as part of this proceeding. And I don't want to spend a lot of time right now repeating what I've said there. But I do want to focus on three issues that I think are important for you to consider when you make your decision.

First, PGE disagrees with the Department's conclusion that the Commission has the discretion to revisit its decision that it made in 2001. In that Order, the Commission stated that the ISFSI would qualify for tax relief if the elements were constructed, added to, improved, and so forth, in accordance with our Preliminary Application. That was a final order, and it was not appealed by anyone. As such, it's binding on the Commission.

Now, we recognize that the statute says that pre-certification does not ensure that a facility will qualify for tax relief if it's constructed as set forth in the Preliminary Application. And that makes sense, because there are cases, I believe you've had some cases in front of you, where a facility received pre-certification and was constructed, but after it was constructed, it generated revenues, so that the cost allocation was such that there were no costs that were attributable to pollution control, so that it didn't qualify for final certification. And we believe that it's those types of circumstances that the statute was intended to cover. So, we think that the only issues left with regard to PGE's application are: one, whether or not it was constructed in accordance with our Preliminary Application, and two, to determine the appropriate cost allocations.

But the second point I want to make is that, even if the Commission decides that it does have the discretion to revisit its earlier Order, that doing so just doesn't make good policy sense. As the Department pointed out in its memo, one of the purposes for the whole pre-certification process is to give an Applicant some confidence before it constructs a facility that if it goes ahead and constructs that facility that it will qualify for tax relief. And this purpose will be completely negated if the Department can go back and revisit an earlier decision after an Applicant has already constructed a facility. So we would urge you to uphold the integrity of the pre-certification process and respect your earlier decision.

And then, finally, even if the Commission were to go ahead and revisit the decisions it made, and even if the burden of proof shifts to the Commission, there has to be something new or different to allow it to make a different decision the second time around. The record from PGE's preliminary certification process is several inches thick, and it spans three years. And you can imagine, from the time that we filed our original Application in April of 2001, I mean, April of '98, 1998, to the time that the Commission issued its final order in March of 2001, that there was a great deal of correspondence back and forth between PGE and Staff concerning our Application and the facility. We also conducted site visits with DEQ Staff at the facility, we provided videos describing the facility, the Commission held a work session in 1999 devoted to the facility, and then, at the final meeting, the final hearing on our Application, we spent several hours going through each and every component of the facility, discussing its pollution control purpose. So, you know, the issue of whether or not the ISFSI is a pollution control facility has been fully examined and vetted. And when the Commission issued its final Order, and it wasn't appealed, PGE assumed that it could rely on that order, and we did rely on that order. We constructed the facility, and we took care to construct it in accordance with our Preliminary Application. So it seems to me that, you know, revisiting that decision now would be kind of the ultimate in both inefficiency and inequity, and we urge you not to do that.

So, again, we believe that the only two issues left are to decide whether or not our facility was constructed in accordance with the Preliminary Application, and to determine the cost allocation issues. We would also ask that if there isn't any controversy with regard to those two issues – and we believe there isn't – that this item be put on the Consent Agenda at your December meeting, along with other similarly situated applicants.

Mr. Reeve

Questions? [pause] One question that relates to the two components that were denied preliminary certification. Is PGE's view that that denial is a final order, since not appealed, would that ruling be subject to any further review?

Ms Saunders

That's our position now, that's why we haven't filed, you know, we didn't file again to receive, you know, tax relief with regard to those two. But, I guess, if the Commission decides to reopen the record, I would think that would be fair game as well. I mean, we consider your 2001 Order a final and binding order, but if, now the Commission decides to go back and revisit that order and the decisions it made then, I think all of the issues would be open again.

Mr. Reeve

OK.

Ms Hampton

I do have one question. Did I understand your position to be that ORS 468.167(4), that the portion after the "however" applies only if the facility pre-certified is not built in accordance with the Application?

Ms Saunders

Well, it would apply in that instance, and also in the instance where – it's our position that after a facility receives pre-certification, there's two issues left to be decided. The one is, whether or not it's constructed in accordance with the Preliminary Application, and the second one is the cost allocation issue. So, you could have, in two cases, you could have facilities that qualified for pre-certification, but didn't qualify for final. And that would be, one, if they were not built in accordance with their Preliminary Application, and two, if the cost allocation was such that there weren't sufficient costs attributable to pollution control.

Ms Hampton

So you're saying, not built in accordance, and the cost allocation subsequently would disqualify.

Ms Saunders

Right, right.

Mr. Reeve

I didn't see in your letter any specific reference to statutory history or other means of getting at the meaning of that, and I'm not inviting argument right now, but I was just curious as to whether you've run across legislative history on that specific language there.

Ms Saunders

Well, this issue came up just a couple of weeks ago. And I did go back, we had done, when we were considering the pollution control purpose of the facility, we had looked at the legislative history of parts of the legislation at that time, so we already had that in our files, I went back and took a look at that, and didn't find anything addressing this issue. But, to be completely thorough, I'd probably want to go back and look at it for this issue.

Mr. Reeve

Because these were '95 amendments, is that right?

Ms Saunders

I think so, yeah.

Mr. Knudsen

That's correct, and, while we certainly would love to hear whatever we could find out about that subject, it does not appear there's much legislative history.

Ms Hampton

Is that still the current form of the statute? There's not been any sort of change or proposed change?

Mr. Knudsen

Yes, that's the way the statute continues to read.

Mr. Reeve

Larry, I had a question for you, and that is, if we were to take, sort of, the second option, in terms of the two options that have been laid out, in terms of . . . I'm sorry . . . yeah, sort of taking the broader view of evidence, is there a particular procedure that we'd be required to follow in terms of, you know, back and forth, or is this – what sort of a procedure is this?

Ms Hampton

Well, the statute, I don't believe the statute or the rule sets out any particular type of procedure, but as I'd indicated before, I think it would be incumbent upon the Department – well, I assume that you would ask the Department to come back with a full briefing and recommendation, that's what you're talking about, and I would assume that if we would do that, we would want to present that to PGE some period of time prior to your actual consideration of the item. And then I assume that you would want to schedule sufficient time when you hear that to allow them to present a rebuttal. But other than that, I don't believe that we've got anything established. As you know, with tax credits, we typically, as indicated, there's a consent agenda, where you approve them, and then if items seem to create issues, then they're either pulled or discussed. But I think in this case, because it's preliminary certification, it's different, in that we do actually need to provide that rebuttal opportunity.

Mr. Reeve

Right, and there's no requirement that any of the factual matters go to an Administrative Law Judge

Mr. Knudsen

That's correct, at least so far as I'm aware, there's no requirement to take these to the Office of Administrative Hearing, because they're not contested case hearing. Having said that, and bearing in mind that I haven't researched the issue, I do believe you probably could schedule a contested case hearing on this issue. If you were to do so, though, then it would go to the Administrative Hearings panel.

Ms Saunders

Let me just respond to what you had said. I think, if you do take the second option, just to be fair and let you know, we would probably ask that the transcript, and all the correspondence, and the degree of record that's already been developed, be put into the record for subsequent hearing. Because, you know, as we said, we believe all of the issues have already been fully litigated.

Mr. Knudsen

I wouldn't disagree. I think that's certainly within their right to do that.

Mr. Reeve

Yeah, it seems consistent with the statute that talks about prima facie evidence, that if we're reviewing evidence, that that's a large part of the evidence to be reviewed, as well as any other evidence. That's why I wanted to know the procedure for getting additional evidence, it could be Department recommendation and review,

Mr. Knudsen

Yeah, essentially, we'd have to present that to you. And we'd have to present to you any new evidence and any new analysis, and we'd have to give them an opportunity to rebut that.

Ms Lottridge

Mr. Chair?

Mr. Reeve

Yeah.

Ms Lottridge

Maggie has pointed out to me that I made a very confusing statement earlier when I referred to the options to approve or deny all or part of the components. And the fact is that I don't want to pretend that I know what the options are on either the – particularly the two components for which preliminary certification was denied. So I just want to point out that it's really someone else who should answer that question, not me.

Mr. Reeve

Discussion?

Deirdre Malarkey, Commissioner

I feel it should be up to the three of you.

Ms Hampton

Well, I don't know that I agree with that, because I think that the decision about Preliminary Certification is a different decision than either what do we now, as we contemplate final certification, or depending on what we were to decide here, what is our final decision. I think those are discrete steps. So, my feeling is that both of you who have participated in the earlier decision can participate fully in this decision. But, Larry, is there any reason to think that that's not correct?

Mr. Knudsen

No, I think that's correct.

Ms Malarkey

Were you talking about the final decision, I wasn't talking about that.

Ms Hampton

Oh, OK. I'm sorry, maybe I misunderstood.

Ms Malarkey

. . . the decision on whether or not you want the full opportunity . . . [unintelligible]

Mr. Reeve

You know, I think, Ms. Saunders makes some good points. I also think that this is, that there are sufficient questions still about the evidence in the initial decision, and additional evidence that might come in, and – there are enough concerns and questions that I think it's fair to have a fuller briefing and hearing, to make a decision in December with everything in front of us. I'm not suggesting we go one way or another, that'll depend on what we hear, but it seems like it's going to . . . it will be a lot of work, I understand, so I'm not suggesting it lightly. It'll be a lot of work for the Department for PGE, and for us in reviewing it. But it's my view that we should go ahead and look at the issue and take, I guess, the second option. But, I am one of four here.

Ms Hampton

Well, frankly, I'm torn. I really need to think about it for a minute.

Ken Williamson, Commissioner

The advantages of that would be? Can you expand that a little bit?

Mr. Reeve

I think the advantage is that we clarify the standards that we're going to apply to these types of final certifications, and make sure that we get it right. And, whichever way it goes, I'm not convinced that we did that clearly and correctly for the Preliminary

Certification. As I read the statute, that preliminary is prima facie evidence, and it does shift the burden, but it's not the last word, and it's, I guess, subject to additional evidence and additional consideration, which I think we have a responsibility to do.

Ms Hampton

Well, it's apparent that this is something that doesn't come before the Commission very often. I am thinking that Helen was saying there were four pre-certifications done. Three have asked for final approval, or certification. Two have been approved, leaving this the only case thus far where it has been previously, it's got the pre-certification and is still awaiting final certification. They are applying for final certification – we have one pre-certified facility that has not yet applied for final certification.

Maggie Vandehey, Manager, Tax Credit Program, DEQ

That facility has not been constructed and will not be constructed.

Ms Hampton

Oh, so it's sort of evaporated. OK. So, is this the case where we want to explore what the real meaning of ORS 468 is? Or, you know, who knows when the next facility is going to come down the line, and we should know what this means and how we're going to operate under it. Is that kind of what you're thinking, Mark, or is that not a fair statement?

Mr. Reeve

I think we, it would be good for the Commission to be clear and consistent, recognizing that that's probably, that PGE's suddenly thinking, "My God, how could he say we weren't consistent in this context?" But in terms of looking at the standards that apply to sole purpose facilities and the process for pre-certification and final certification, I think it behooves, it would be good for the Commission to take the second option, and to look at all the evidence before making a decision on final certification. Voluminous though it may be.

Ms Hampton

Sounds like it would be, yeah.

Mr. Knudsen

Mr. Chair? If I may . . .

(Tape 7, Side A)

Mr. Knudsen

...types of information they might bring back at the December meeting. I think you're concerned a little bit about the amount of information, how voluminous it would be, how much work it might be for the department, as well as PGE, as well as for the four of you to review it. Would it be of any help if they described the types of information they

would research? It might be old news to two of the commissioners that were on the commission four years ago, but it might be helpful at least to two of the other commissioners. Or do you just need to ponder?

Mr. Williamson

I don't think it makes much difference to me. The real issue is basically, in the departmental briefings, Stephanie says that, I mean, it's the Department's opinion that we can look at all these issues and I think the question is whether we want to or not. Is that interpretation. My sense is, we probably want to. Serving this two-step process, I think we're almost obligated to, in a sense.

Mr. Reeve

At least at some level.

Mr. Williamson

Right

Mr. Reeve

Yep. It's arguably, that we argue, about how deeply we go in the second stage.

Ms Hampton

Well, I think we have a good sense, having read the transcript of the work session and the transcript of the previous meeting, when that was the agenda item where they approved it. I sort of have a sense of what Ms Saunders may be talking about when she talks about all of the material that will need to come into the record, if we take a broader view of what our task is in front of us, so...

Mr. Reeve

Deirdre, do you have any thoughts?

Ms Malarkey

No, I purposely believe that it should be up to the new ones because my vote was cast.

Mr. Reeve

Well, again I think Lynn has disagreed with you and I will also disagree with you as to your responsibility as to this decision.....

Ms Hampton

Respectfully, respectfully disagree..

Mr. Reeve

This is a procedural decision....

Ms Malarkey

No, I recognize that.

Mr. Reeve

This is not a substantive decision.

Ms Malarkey

(unintelligible) If that's what she's requesting, I think that's fine.

Mr. Reeve

Okay, let me restate it and see if we're on the same page. Are we on the same page in terms of the commission requesting or directing the, essentially, the second option as laid out in the staff report? Start looking at the full range of issues and evidence when we meet again in December?

Ms Hampton

Yes

Mr. Williamson

Yes

Ms Malarkey

Yes

Mr. Reeve

Yes. Is that sufficient Larry, do we need a motion, or is that it?

Mr. Knudsen

No, I think that's all we need. We'll start putting together the information.

Ms Malarkey

May I just ask a question? Are you, is it going to be open to all evidence and arguments that, or is it just new evidence and arguments that weren't available at the time we first heard it or is it (unintelligible)

Mr. Reeve

Unless Larry says no, I think everything comes in, all evidence. Do you have a different view?

Mr. Knudsen

No, I think that's right. All evidence, all arguments. Bearing in mind that what decision you made is already prima facie evidence and it's qualified.

Ms Hampton

But I don't think that the applicant should be limited. The applicant can bring forward, old material, new material, all is fair.

Mr. Knudsen

I certainly think that's right, that the applicant has that authority. But the applicant doesn't have any obligation.

Ms Hampton

Exactly

Ms Vandehey

Chair Reeve, I'm not sure if this is the right place to ask this, but, does that extend to the two denied components – the pad and the transfer station? They have not been a part of the final application.

Mr. Reeve

I'd say potentially yes, so because it's potentially yes, say yes for now. But, I guess that's subject to argument as to whether it's open or not. Larry, I don't know if you want to weigh in on that or think about.

Mr. Knudsen

Well, it probably bears more thought, but I tend to think that it is open to all issues. I mean, it doesn't seem logical to (unintelligible)...

Mr. Reeve

I guess the parties are free to argue as to any of the evidence that might come in, that either it's relative or it's excluded, or irrelevant or what-have-you. You know, just in terms of procedurally moving forward, I would not try to impose any artificial limitations here on what might be considered.

Ms Vandehey

Thank you, Chair Reeve

Mr. Reeve

Anything relevant to certification of a facility of this type.

Ms Vandehey

Okay, thank you.

Ms Saunders

So, I guess just to be clear, I mean, we submitted our final application based on the order you issued in 2001, which applied to only four of the components.

Mr. Knudsen

I'm sorry, Chair, could we have her speak into the microphone in case we need to transcribe this.

Mr. Reeve

Yeah, we should get it transcribed. (background noise)

Ms Saunders

Thank you. I was just going to say that we submitted our final application based on your order that you issued in 2001 which granted certification for some of the components. We relied on that order in putting together our final application, but now if you're telling us that you're going to go back and revisit that order, then we're going to have to look at amending our final application to take into account all of the components. I mean, that's the whole point I was trying to make, we believed we could rely on that order and that's why we built the facility like we did and that's why we filed our final application like that, and now, you know, you're telling us you're going to re-examine that order so we're going to consider whether we need to amend our final application.

Mr. Reeve

Understood. Anything further?

Paul Slyman, Deputy Director, DEQ

If I may, Chair Reeve, I just want to insure that our staff have enough clarity of direction for what you need to do before the December meeting.

Ms Vandehey

I'm okay, yes.

Ms Lottridge

Yes, we do.

Mr. Slyman

Thank you.

Ms Lottridge

Thank you, Paul.

Mr. Reeve

If there is, I guess, Maggie, I would suggest that you be in contact with PGE and find out if they're amending the final application, this could have impact in terms of the presentation of all this stuff. But, maybe you can talk with them. It's probably -- they'll want to think about it a little bit and maybe the Department wants to think about it a little bit. I don't want to make decisions at this point.

Ms Vandehey

I appreciate that. I appreciate that.

Mr. Reeve

We understand. Thanks.

Ms Vandehey

Thank you, Chair. Thank you, Commissioners.

Tax Credit Regulations

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Chapter 468 — Environmental Quality Generally

2003 EDITION

POLLUTION CONTROL FACILITIES TAX CREDIT

468.150 Field sanitation and straw utilization and disposal methods as “pollution control facilities.” After alternative methods for field sanitation and straw utilization and disposal are approved by the Department of Environmental Quality, “pollution control facility,” as defined in ORS 468.155, shall include such approved alternative methods and persons purchasing and utilizing such methods shall be eligible for the benefits allowed by ORS 468.155 to 468.190. [1975 c.559 §15; 1999 c.59 §136]

Note: 468.150 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

468.153 Legislative findings and declarations. (1) The Legislative Assembly finds that the concept of environmental responsibility has matured beyond basic compliance with regulatory requirements to one in which citizens and businesses voluntarily implement innovative solutions to achieve shared environmental goals.

(2) The Legislative Assembly declares that a pollution control tax credit that shifts the majority of the incentive away from compensation for basic regulatory compliance and toward encouraging voluntary investment is an effective way to achieve environmental goals.

(3) The Legislative Assembly finds and declares that it is the policy of this state to promote sustainability and provide incentives for the voluntary prevention, elimination, reduction or control of air pollution, water pollution, solid waste and hazardous waste through the voluntary application of innovative solutions to achieve the environmental goals of this state.

(4) The Legislative Assembly declares it to be the policy of this state to promote social, economic and environmental principles of sustainability by providing incentives to individuals and

businesses that support social, economic and environmental sustainability goals. [2001 c.928 §9]

Note: 468.153 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

468.155 Definitions for ORS 468.155 to 468.190. (1)(a) As used in ORS 468.155 to 468.190, unless the context requires otherwise, “pollution control facility” or “facility” means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if:

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

(B) The sole purpose of such use, erection, construction or installation is to prevent, control or reduce a substantial quantity of air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil.

(b) Such prevention, control or reduction required by this subsection shall be accomplished by:

(A) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468B.005;

(B) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468A.005;

(C) The substantial reduction or elimination of or redesign to eliminate noise pollution or noise emission sources as defined by rule of the Environmental Quality Commission;

(D) The use of a material recovery process which obtains useful material from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 459A.555; or

(E) The treatment, substantial reduction or elimination of or redesign to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005.

(2)(a) As used in ORS 468.155 to 468.190, “pollution control facility” or “facility” includes a nonpoint source pollution control facility.

(b) As used in this subsection, “nonpoint source pollution control facility” means a facility that the Environmental Quality Commission has identified by rule as reducing or controlling significant amounts of nonpoint source pollution.

(3) As used in ORS 468.155 to 468.190, “pollution control facility” or “facility” does not include:

(a) Air conditioners;

(b) Septic tanks or other facilities for human waste;

(c) Property installed, constructed or used for moving sewage to the collecting facilities of a public or quasi-public sewerage system;

(d) Any distinct portion of a pollution control facility that makes an insignificant contribution to the principal or sole purpose of the facility including the following specific items:

(A) Office buildings and furnishings;

(B) Parking lots and road improvements;

(C) Landscaping;

(D) External lighting;

(E) Company or related signs; and

(F) Automobiles;

(e) Replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued under ORS 468.170, except:

(A) If the cost to replace or reconstruct the facility is greater than the like-for-like replacement cost of the original facility due to a requirement imposed by the department, the federal Environmental Protection Agency or a regional air pollution authority, then the facility may be eligible for tax credit certification up to an amount equal to the difference between the cost of the new facility and the like-for-like replacement cost of the original facility; or

(B) If a facility is replaced or reconstructed before the end of its useful life then the facility may be eligible for the remainder of the tax credit certified to the original facility;

(f) Asbestos abatement; or

(g) Property installed, constructed or used for cleanup of emergency spills or unauthorized releases, as defined by the commission. [Formerly 449.605; 1975 c.496 §1; 1977 c.795 §1; 1979 c.802 §1; 1983 c.637 §1; 1987 c.596 §4; 1989 c.802 §4; 1999 c.826 §1]

468.160 Policy. In the interest of the public peace, health and safety, it is the policy of the State of Oregon to assist in the prevention, control and reduction of air, water and noise pollution and solid waste, hazardous wastes and used oil in this state by providing tax relief with respect to Oregon facilities constructed to accomplish such prevention, control and reduction. [Formerly 449.615; 1975 c.496 §2; 1977 c.795 §2; 1979 c.802 §2]

468.163 Commencement of construction or installation of facility. For purposes of ORS 468.155 to 468.190, the construction or installation of a facility is commenced when the person constructing or installing the facility has obtained all necessary preliminary approvals and has begun continuous on-site modification, construction, installation or other activity, the completion of which will cause the person to be able to obtain certification under ORS 468.155 to 468.190. Interruptions and delays resulting from natural disasters, strikes, litigation or other matters beyond the control of the owner shall be disregarded in determining whether the actions undertaken by the person are continuous. The burden of demonstrating that construction or installation of a facility is commenced shall be borne by the person filing an application for certification under ORS 468.165. [2001 c.928 §8a]

468.165 Application for certification of pollution control facilities; fees. (1) Any person may apply to the Environmental Quality Commission for certification under ORS 468.170 of a pollution control facility or portion thereof erected, constructed or installed by the person in Oregon if:

(a) The air or water pollution control facility was erected, constructed or installed on or after January 1, 1967.

(b) The noise pollution control facility was erected, constructed or installed on or after January 1, 1977.

(c) The solid waste facility was under construction on or after January 1, 1973, the hazardous waste or used oil facility was under construction on or after October 3, 1979, and if:

(A) The facility's principal or sole purpose conforms to the requirements of ORS 468.155 (1) and (2);

(B) The facility will utilize material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005 or used oil as defined in ORS 459A.555 by mechanical process or chemical process or through the production, processing including presegregation, or use of, materials which have useful chemical or physical properties and which may be used for the same or other purposes, or materials which may be used in the same kind of application as its prior use without change in identity;

(C) The end product of the utilization is an item of real economic value;

(D) The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and

(E) The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

(d) The hazardous waste control facility was erected, constructed or installed on or after January 1, 1984, and if:

(A) The facility's principal or sole purpose conforms to the requirements of ORS 468.155 (1) and (2); and

(B) The facility is designed to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005.

(2) The application shall be made in writing in a form prescribed by the Department of Environmental Quality and shall contain information on the actual cost of the facility, a description of the materials incorporated therein, all machinery and equipment made a part thereof, the existing or proposed operational procedure thereof, and a statement of the purpose of prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or recycling or appropriate disposal of used oil served or to be served by the facility and the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil.

(3) The Director of the Department of Environmental Quality may require any further information the director considers necessary before a certificate is issued.

(4) The application shall be accompanied by a fee established under subsection (5) of this section. The fee may be refunded if the application for certification is rejected.

(5) By rule and after hearing the commission may adopt a schedule of reasonable fees which the department may require of applicants for certificates issued under ORS 468.167 and 468.170. Before the adoption or revision of any such fees the commission shall estimate the total cost of the program to the department. The fees shall be based on the anticipated cost of filing, investigating, granting and rejecting the applications and shall be designed not to exceed the total cost estimated by the commission. Any excess fees shall be held by the department and shall be used by the commission to reduce any future fee increases. The fee may vary according to the size and complexity of the facility. The fees may not be considered by the commission as part of the cost of the facility to be certified.

(6) The application shall be submitted after construction of the facility is substantially completed and the facility is placed in service and within one year after construction of the facility is substantially completed. Failure to file a timely application shall make the facility ineligible for tax credit certification. An application may not be considered filed until it is complete and ready for processing. The commission may grant an extension of time to file an application for circumstances

beyond the control of the applicant that would make a timely filing unreasonable. However, the period for filing an application may not be extended to a date beyond December 31, 2008. [Formerly 449.625; 1974 c.37 §2; 1975 c.496 §3; 1977 c.795 §3; 1979 c.802 §3; 1981 c.359 §1; 1983 c.637 §2; 1989 c.802 §5; 1995 c.746 §2; 1999 c.826 §2; 2001 c.928 §1]

468.167 Application for precertification. (1) Any person proposing to apply for certification for tax relief under ORS 468.155 to 468.190 may apply, before the completion of a pollution control facility, for precertification of the facility with the Environmental Quality Commission.

(2)(a) The application shall be made in writing in a form prescribed by the Department of Environmental Quality. The application shall contain the following information:

(A) A statement of the purpose of prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or recycling or appropriate disposal of used oil served or to be served by the facility.

(B) A description of the materials for incorporation into the facility or incorporated into the facility, machinery and equipment to be made or made a part of the facility and the proposed or existing operational procedure of the facility.

(C) Any further information the Director of the Department of Environmental Quality considers necessary before precertification is issued.

(b) The application need not contain information on the actual cost of the facility or the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil.

(c) The application shall be accompanied by a fee as provided under ORS 468.165 (5). The fee may be refunded if the application for preliminary certification is rejected.

(3) If the commission determines that the person and the pollution control facility will be eligible for tax relief under ORS 307.405 or 315.304 if the facility is erected, constructed, reconstructed, added to, installed, improved or used in accordance with the application for precertification, the commission shall precertify the facility by approving the application.

(4) If the facility is erected, constructed, reconstructed, added to, installed, improved or used as proposed in the application for precertification, the commission's approval of the application shall be prima facie evidence that the facility is qualified for certification for tax relief under ORS 468.170. However, precertification shall not ensure that a facility erected, constructed, reconstructed, added to, installed, improved or used by the precertified person will receive certification under ORS 468.170 or tax relief under ORS 307.405 or 315.304.

(5) If the commission fails or refuses to precertify a person and facility, the person may appeal as provided in ORS 468.170 (3). [1995 c.746 §6]

468.170 Action on application; rejection; appeal; issuance of certificate; certification. (1) The Environmental Quality Commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil. The actual cost or portion of the actual cost certified may not exceed the taxpayer's own cash investment in the facility or portion of the facility. Each certificate shall bear a separate serial number for each such facility.

(2) If the commission rejects an application for certification, or certifies a lesser actual cost of

the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil than was claimed in the application for certification, the commission shall cause written notice of its action, and a concise statement of the findings and reasons therefor, to be sent by registered or certified mail to the applicant before the 120th day after the filing of the application.

(3) If the application is rejected for any reason, including the information furnished by the applicant as to the cost of the facility, or if the applicant is dissatisfied with the certification of actual cost or portion of the actual cost properly allocable to prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil, the applicant may appeal from the rejection as provided in ORS 468.110. The rejection or the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the commission.

(4)(a) The commission shall certify a pollution control, solid waste, hazardous waste or used oil facility or portion thereof, for which an application has been made under ORS 468.165, if the commission finds that the facility:

(A) Was erected, constructed or installed in accordance with the requirements of ORS 468.165 (1);

(B) Is designed for, and is being operated or will operate in accordance with the requirements of ORS 468.155; and

(C) Is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and 468B and rules thereunder.

(b) No determination of the proportion of the actual cost of the facility to be certified shall be made until receipt of the application.

(c) If one or more facilities constitute an operational unit, the commission may certify such facilities under one certificate.

(d) A certificate under this section is effective for purposes of tax relief in accordance with ORS 307.405 and 315.304 if, on or before December 31, 2007, erection, construction or installation of the facility is completed, the facility is placed in service and the application for certification is filed with the commission under ORS 468.165.

(5) A person receiving a certificate under this section may take tax relief only under ORS 315.304, depending upon the tax status of the person's trade or business except that:

(a) A corporation organized under ORS chapter 65 or any subsequent transferee of the corporation shall take tax relief only under ORS 307.405; and

(b)(A) A corporation organized under ORS chapter 62 or any predecessor to ORS chapter 62 relating to the incorporation of cooperative associations or the subsequent transferee of the corporation may make an irrevocable election to take the tax relief under either ORS 315.304 or 307.405. The corporation shall make the election at the time of applying for the certificate, except that a corporation receiving a certificate prior to December 31, 1995, may make the election at any time on or before December 31, 1995. If a corporation elects on or before December 31, 1995, to take the tax relief under ORS 315.304, any income taxes, penalties or interest otherwise payable by the corporation for improperly taking the tax relief under ORS 315.304 in a taxable year prior to making the election shall be waived.

(B) In the case of a corporation making the election under subparagraph (A) of this paragraph,

the election applies to:

(i) All existing or future facilities that are certified under this section, if the corporation claimed a credit under ORS 315.304 for a tax year beginning prior to December 31, 1995; or

(ii) All future facilities that are certified under this section, if the corporation did not claim a credit under ORS 315.304 for a tax year beginning prior to December 31, 1995.

(6) If the person receiving the certificate is a partnership, each partner shall be entitled to take tax credit relief as provided in ORS 315.304, based on that partner's pro rata share of the certified cost of the facility.

(7) Certification under this section of a pollution control facility qualifying under ORS 468.165 (1) shall be granted for a period of 10 consecutive years which 10-year period shall begin with the tax year of the person in which the facility is certified under this section, except that if ad valorem tax relief is utilized by a corporation organized under ORS chapter 62 or 65 the facility shall be exempt from ad valorem taxation for a period of 20 consecutive years.

(8) Portions of a facility qualifying under ORS 468.165 (1)(c) may be certified separately under this section if ownership of the portions is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification. The actual cost certified for all portions of a facility separately certified under this subsection may not exceed the total cost of the facility that would have been certified under one certificate. The provisions of ORS 315.304 (8) apply to any sale, exchange or other disposition of a certified portion of a facility.

(9) A certificate issued under this section shall state the applicable percentage of the certified cost of the facility, as determined under ORS 468.173.

(10) If the construction or installation of a facility is commenced after December 31, 2005, the facility may be certified only if the facility or applicant is described in ORS 468.173 (3). A facility described in ORS 468.173 (2) for which construction or installation is commenced after December 31, 2005, may not be certified under this section. [Formerly 449.635; 1974 c.37 §3; 1975 c.496 §4; 1977 c.795 §4; 1979 c.531 §6; 1979 c.802 §4; 1981 c.408 §3; 1983 c.637 §3; 1987 c.596 §5; 1989 c.802 §6; 1991 c.877 §37; 1995 c.746 §3; 1999 c.826 §3; 2001 c.928 §2]

468.172 "Environmental management system" defined. As used in ORS 468.173, "environmental management system" means a continual cycle of planning, implementing, reviewing and improving the actions undertaken at the facility to meet environmental obligations and improve environmental performance that meet:

(1) The standards established by the International Organization for Standardization under ISO 14001;

(2) The standards established in the Green Permit program established under ORS 468.501 to 468.521; or

(3) Other standards that meet criteria established by the Environmental Quality Commission by rule. [2001 c.928 §6a]

468.173 Applicable percentage of certified cost of facility eligible for tax credit. For purposes of ORS 315.304, the applicable percentage of the certified cost of a facility shall be one of the following:

(1) If the facility is certified under ORS 468.155 to 468.190 (1999 Edition) or if construction or installation of the facility is commenced prior to January 1, 2001, and completed prior to January 1,

2004, 50 percent.

(2) Except as provided in subsection (1) or (3) of this section, if the facility is certified pursuant to application for certification filed on or after January 1, 2002, and:

(a) Construction or installation of the facility is commenced on or after January 1, 2001, and on or before December 31, 2003, 25 percent; or

(b) Construction or installation of the facility is commenced after December 31, 2003, and on or before December 31, 2005, 15 percent.

(3) If certified pursuant to application for certification filed on or after January 1, 2002, 35 percent if:

(a) The applicant is certified under International Organization for Standardization standard ISO 14001;

(b) A Green Permit that applies to the facility has been issued under ORS 468.501 to 468.521;

(c) The facility is a nonpoint source or is regulated as a confined animal feeding operation under ORS 468B.200 to 468B.230;

(d) The facility is used for material recovery or recycling, as those terms are defined in ORS 459.005;

(e) The facility is used in an agricultural or forest products operation and is used for energy recovery, as defined in ORS 459.005;

(f) The certified cost of the facility does not exceed \$200,000;

(g) Construction or installation of the facility is entirely voluntary and no portion of it is required in order to comply with a federal law administered by the United States Environmental Protection Agency, a state law administered by the Department of Environmental Quality or a law administered by a regional air pollution authority;

(h) The facility is, at the time of certification, located within an enterprise zone established under ORS 285C.050 to 285C.250 or within an area that has been designated a distressed area, as defined in ORS 285A.010, by the Economic and Community Development Department; or

(i) The applicant demonstrates to the Department of Environmental Quality that the applicant uses an environmental management system at the facility. In order for the department to determine that the applicant uses an environmental management system at the facility:

(A) The applicant must have the environmental management system used at the facility reviewed by an independent third party familiar with environmental management systems and submit a report to the department stating that the provisions of this paragraph have been met. The report shall be accompanied by supporting materials that document compliance with the provisions of this paragraph. The report shall include certification from a registered or certified environmental management auditor employed by, or under contract with, the independent third party that reviewed the environmental management system; or

(B) The department shall contract with an independent third party familiar with environmental management systems to review the environmental management system employed at the facility. The third party shall review the environmental management system, and, if the third party determines that the environmental management system meets the provisions of this paragraph, a registered or certified environmental management system auditor employed by, or contracted with, the third party shall certify that determination to the department. The department shall recover from the applicant the costs incurred by the department as prescribed in ORS 468.073. An applicant shall be liable for the costs of the department under this subparagraph without regard to whether the department certifies the facility as a pollution control facility. The department may not certify a

facility to which this subparagraph applies until the department has received full payment from the applicant. [2001 c.928 §6; 2001 c.932 §13]

468.175 [1973 c.831 §2; 1975 c.496 §5; 1977 c.795 §5; 1979 c.802 §5; repealed by 1989 c.802 §8]

468.180 Conditions for issuance of certificate under ORS 468.170. (1) No certification shall be issued by the Environmental Quality Commission pursuant to ORS 468.170 unless the facility, facilities or part thereof was erected, constructed or installed in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B and the applicable rules or standards adopted pursuant thereto.

(2) Nothing in this section is intended to apply to erection, construction or installation of pollution control facilities begun before October 5, 1973. [1973 c.831 §3; 1975 c.496 §6; 1977 c.795 §6; 1979 c.802 §6; 1989 c.802 §7]

468.183 Revocation of certification for loss of Green Permit. (1) If a person has obtained pollution control facility certification in which the applicable percentage is 35 percent because of issuance of a Green Permit described under ORS 468.173 (3)(b) that applies to the certified facility and the Green Permit is revoked, the applicable percentage for any remaining tax credit to be claimed under ORS 315.304 shall be the applicable percentage described under ORS 468.173 (2). If the construction or installation of the facility is commenced on or after January 1, 2006, the pollution control facility certification shall be revoked.

(2) The Department of Environmental Quality shall inform the Department of Revenue of the revocation. [2001 c.928 §7]

468.185 Procedure to revoke certification; reinstatement. (1) Pursuant to the procedures for a contested case under ORS chapter 183, the Environmental Quality Commission may order the revocation of the certification issued under ORS 468.170 of any pollution control or solid waste, hazardous wastes or used oil facility, if it finds that:

(a) The certification was obtained by fraud or misrepresentation; or

(b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil as specified in such certificate.

(2) As soon as the order of revocation under this section has become final, the commission shall notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.

(3) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to subsection (1)(a) of this section, all prior tax relief provided to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405 and 315.304.

(4) Except as provided in subsection (5) of this section, if the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to subsection (1)(b)

of this section, the certificate holder shall be denied any further relief provided under ORS 307.405 or 315.304 in connection with such facility, as the case may be, from and after the date that the order of revocation becomes final.

(5) The commission may reinstate a tax credit certification revoked under subsection (1)(b) of this section if the commission finds the facility has been brought into compliance. If the commission reinstates certification under this subsection, the commission shall notify the Department of Revenue or the county assessor of the county in which the facility is located that the tax credit certification is reinstated for the remaining period of the tax credit, less the period of revocation as determined by the commission. [Formerly 449.645; 1975 c.496 §7; 1977 c.795 §7; 1979 c.802 §7; 1987 c.596 §6]

468.187 [1981 c.710 §2; repealed by 1984 c.1 §18]

468.190 Allocation of costs to pollution control. (1) Subject to subsections (2), (3) and (4) of this section, in establishing the portion of costs properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil for facilities qualifying for certification under ORS 468.170, the Environmental Quality Commission shall consider the following factors:

(a) If applicable, the extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

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

(c) If applicable, the alternative methods, equipment and costs for achieving the same pollution control objective.

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

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

(2) The portion of actual costs properly allocable shall be from zero to 100 percent in increments of one percent. If zero percent, the commission shall issue an order denying certification.

(3) If the cost of the facility (or facilities certified under one certificate) 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.

(4) In the case of a business described in ORS 315.304 (4)(a)(C)(i), the Environmental Quality Commission shall consider the factors listed in subsection (1) of this section as if the person operating the facility or conducting the trade or business that utilizes property requiring such a facility were the applicant for the credit, regardless of whether the person is the lessee or lessor of the facility.

(5) The commission may adopt rules establishing methods to be used to determine the portion of costs properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil. [Formerly 449.655; 1974 c.37 §4; 1977 c.795 §8; 1983 c.637 §4; 1995 c.746 §4; 1999 c.1101 §2]

**The Oregon Administrative Rules contain OARs filed through
October 15, 2004**

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 16

POLLUTION CONTROL TAX CREDITS

340-016-0005

Purpose

The purpose of these rules is to prescribe procedures and criteria to be used by the Department and Commission for issuance of tax credit certificates for pollution control facilities. These rules are to be used in connection with ORS 468.150 to 468.190. These rules become effective upon filing with the Secretary of State or on February 1, 2001 whichever is the later date and apply to all applications received by the Department on or after that date except where otherwise noted herein. An applicant with an application pending Commission action on the date these rules become effective may elect to proceed under these rules by informing the Department in writing.

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 12-1984, f. & ef. 7-13-84; DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98; DEQ 1-2001, f. 1-30-01, cert. ef. 2-1-01

340-016-0007

Facilities certified under the 1999 Edition

For the purposes of ORS 468.173(1), a facility may be certified under the 1999 edition of ORS 468.155 to 468.190 if the facility was substantially completed on or before December 31, 2001, and an application was filed with the Department within two years after the date of substantial completion.

Stat. Auth.: ORS 468.020 & 483.335(5)

Stats. Implemented: ORS 468.155-468.190

Hist.: DEQ 16-2002, f. 10-28-02 cert. ef. 11-1-02

340-016-0009

Certification of wood chippers

For the purpose of subdelegating authority to approve and issue final certification of pollution control facilities under OAR 340-016-0080(2):

(1) The Environmental Quality Commission authorizes the Director of the Department of Environmental Quality or the Director's delegate to certify wood chippers as provided in OAR 340-016-0060(4)(h)(C) if:

(a) The Department determines the facility is otherwise eligible under OAR 340-016-0060; and

(b) The claimed facility cost does not exceed \$50,000 as set forth in OAR 340-016-0075(1).

(2) The Department may elect to defer certification of any facility to the Environmental Quality Commission.

(3) If the Department determines the facility cost, the percentage of the facility cost allocable to pollution control, or the applicable percentage under ORS 468.173 is less than the applicant claimed on the application then the Department shall:

(a) Notifying the applicant in writing; and

(b) Include a concise statement of the reasons for the proposed certification of a lesser amount or percentage; and

(c) Include a statement advising the applicant of their rights under section (4).

(4) Applicants that receive a notification under section (3) may elect to defer certification to the Environmental Quality Commission by notifying the Department within 30 days of the notification date.

(5) The Department shall defer certification to the Environmental Quality Commission according to sections (2) and (4).

(6) The Director or the Director's delegate shall certify facilities that otherwise qualify under this rule and have not been deferred according to sections (2) or (4).

Stat. Auth.: ORS 468.020 & 483.335(5)

Stats. Implemented: ORS 468.155-468.190

Hist.: DEQ 16-2002, f. 10-28-02 cert. ef. 11-1-02

340-016-0008

Clarification

For the purposes of Oregon Laws, 2001, Chapter 928, Section 6(1), a facility may be certified under the 1999 edition of ORS 468.155 to 468.190 if the facility was substantially completed on or before December 31, 2001 and an application was filed with the Department within two years after the date of substantial completion.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 315.304 & ORS 468.150 – ORS 468.190

Hist.: DEQ 12-2001, f. & cert. ef. 10-9-01 thru 4-7-02

340-016-0007

Facilities certified under the 1999 Edition

For the purposes of ORS 468.173(1), a facility may be certified under the 1999 edition of ORS 468.155 to 468.190 if the facility was substantially completed on or before December 31, 2001, and an application was filed with the Department within two years after the date of substantial completion.

Stat. Auth.: ORS 468.020 & 483.335(5)

Stats. Implemented: ORS 468.155-468.190

Hist.: DEQ 16-2002, f. 10-28-02 cert. ef. 11-1-02

340-016-0009

Certification of wood chippers

For the purpose of subdelegating authority to approve and issue final certification of pollution control facilities under OAR 340-016-0080(2):

(1) The Environmental Quality Commission authorizes the Director of the Department of Environmental Quality or the Director's delegate to certify wood chippers as provided in OAR 340-016-0060(4)(h)(C) if:

(a) The Department determines the facility is otherwise eligible under OAR 340-016-0060; and

(b) The claimed facility cost does not exceed \$50,000 as set forth in OAR 340-016-0075(1).

(2) The Department may elect to defer certification of any facility to the Environmental Quality Commission.

(3) If the Department determines the facility cost, the percentage of the facility cost allocable to pollution control, or the applicable percentage under ORS 468.173 is less than the applicant claimed on the application then the Department shall:

(a) Notifying the applicant in writing; and

(b) Include a concise statement of the reasons for the proposed certification of a lesser amount or percentage; and

(c) Include a statement advising the applicant of their rights under section (4).

(4) Applicants that receive a notification under section (3) may elect to defer certification to the Environmental Quality Commission by notifying the Department within 30 days of the notification date.

(5) The Department shall defer certification to the Environmental Quality Commission according to sections (2) and (4).

(6) The Director or the Director's delegate shall certify facilities that otherwise qualify under this rule and have not been deferred according to sections (2) or (4).

Stat. Auth.: ORS 468.020 & 483.335(5)
Stats. Implemented: ORS 468.155-468.190
Hist.: DEQ 16-2002, f. 10-28-02 cert. ef. 11-1-02

340-016-0010

Definitions

The definitions in this rule give meaning to the term or phrase as used in OAR 340-016-0005 through OAR 340-016-0080.

(1) "Applicant" means any person who applies for a pollution control tax credit under these rules.

(2) "Circumstances Beyond the Control of the Applicant" means facts, conditions and circumstances which the applicant's due care and diligence would not have avoided.

(3) "Commission" means Environmental Quality Commission or the Commission's delegate.

(4) "Department" means Department of Environmental Quality.

(5) "Facility" as used in context means:

(a) A pollution control facility as set forth in ORS 468.150 and ORS 468.155; or

(b) The facility as claimed on the application.

(6) "Like-for-Like Replacement Cost" means the current price of providing a new facility of the same type, size and construction materials as the facility that is being replaced based upon the Consumer Price Index (CPI) - All Urban Consumers as published by the Bureau of Labor Statistics.

(7) "Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered materials shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end-product of real economic value. The material recovery process does not include processes:

(a) In which the major purpose is the production of fuel from solid waste, hazardous waste or used oil which can be utilized for heat content or other forms of energy; or

(b) That burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process which burns waste if such device is otherwise eligible for pollution control tax credit under these rules.

(8) "Nonpoint Source Pollution" means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment. The meaning includes:

(a) The definition provided in OAR 340-041-0006(17); or

(b) Any sources of air pollution that are:

(A) Mobile sources that can move on or off roads; or

(B) Area sources.

(9) "Pollution Control" means the elimination, prevention, control or reduction of air, water or noise pollution; or the utilization of solid waste, hazardous waste, or the recycling or properly disposing of used oil except where otherwise noted herein.

(10) "Reconstruction or Replacement" means the provision of a new facility with qualities and pollution control characteristics equivalent to the facility that is being replaced. This does not include repairs or work done to maintain the facility in good working order.

(11) "Spill or Unauthorized Release" means

(a) The discharge, deposit, injection, dumping, spilling, emitting, releasing, leakage or placing of oil, hazardous materials or other polluting substances into the air or into or on any land or waters of the state, as defined in ORS 468.700, except as authorized by a permit issued under ORS Chapter 454, 459, 468 or 469, ORS 466.005 to 466.385, 466.880(1) and (2), 466.890 and 466.995(1) and (2) or federal law while being stored or used for its intended purpose; and

(b) For purposes of determining eligibility for tax credits under these rules, polluting substances released into the environment in conjunction with operation of a previously approved facility or activity where such facility or activity was operated in compliance with requirements imposed by the Department or the Federal Environmental Protection Agency, and where the polluting substances which must now be cleaned up are determined by the Department to have been an unanticipated result of the approved facility or activity and are not deemed to be a "spill or unauthorized release".

(12) "Substantial Completion" means the completion of the erection, installation, modification, or construction of all elements of the claimed facility which are essential to perform its purpose.

(13) "Useful Life" means the number of years the claimed facility is capable of operating before replacement or disposal. The applicant shall provide a statement of how the useful life of the facility was determined. The minimum useful life shall not be less than three years or the Asset Guideline Period used to report the depreciation of the facility to the Internal Revenue Service.

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 12-1984, f. & ef. 7-13-84; DEQ 5-1985, f. & ef. 3-12-85; DEQ 20-1987, f. & ef. 12-16-

87; DEQ 6-1990, f. & cert. ef. 3-13-90; DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98; DEQ 1-2001, f. 1-30-01, cert. ef. 2-1-01

340-016-0055

Application Procedures

Any Oregon taxpayer may apply for the certification of a pollution control facility to take relief from their Oregon tax liability. The applicant and the facility shall be eligible under ORS 307.405, 315.304, and 468.150 to 468.190. The applicant shall submit the application to the Department on the application form provided by the Department.

(1) Application for Preliminary Certification. An applicant may apply for preliminary certification of a pollution control facility to determine if a future facility would meet the certification requirements as set forth in OAR 340-016-0060. The applicant may submit the optional preliminary application anytime before the construction of the pollution control facility is complete. If the Commission issues a preliminary certificate and if the applicant constructs the facility as represented on the preliminary application and the preliminary certificate then the facility shall meet the requirements as set forth in OAR 340-016-0060. The preliminary certification of a facility does not exempt the applicant from submitting a timely application for final certification as set forth in section (2) of this rule.

(2) Application for Final Certification. The applicant shall submit all information, exhibits and substantiating documents requested on the application for final certification. The Department shall reject the application for final certification if the applicant fails to submit the application:

(a) After the construction of the facility is substantially complete and the facility is placed in service;

(b) Within one year after construction of the facility is substantially completed; and

(c) On or before December 31, 2008.

(3) Complete Application. The applicant shall submit to the Department an application as set forth in section (1) or section (2) that is complete and ready to process. For an application to be complete and ready to process, the applicant shall:

(a) Complete all required application fields;

(b) Provide all appropriate exhibits;

(c) Explain how the facility is eligible for a pollution control tax credit as set forth in OAR 340-016-0060. The applicant shall include supporting documentation if the facility is eligible for certification based upon orders or permit limitations;

(d) Include the appropriate fees established in OAR 340-016-0065;

(e) Provide documentation that substantiates the facility cost as claimed on the application for final certification and as set forth in OAR 340-016-0070;

- (f) Contain a statement that the facility is in compliance with Department statutes, rules and standards, and any documentation regarding non-compliance;
- (g) Sign the application certifying that all claims made on the application are true and accurate;
- (h) Provide a copy of a written agreement between the lessor and lessee designating the party to receive the tax credit if the applicant is claiming a tax credit for a leased facility. The applicant shall provide a copy of the cover, first and signature pages of the complete and current lease agreement for the facility. The Department may request a copy of the complete agreement; and
- (i) Provide a copy of a written and signed agreement between the owners designating the party or parties to receive the tax credit certificate if the applicant is claiming the tax credit for a facility with more than one owner.

(4) Department Notification. The Department shall notify the applicant in writing when:

(a) Rejecting an application for the applicant's failure to file a timely application as set forth in sections (1) and (2) of this rule or rejecting an application for failure to provide a timely response as set forth in subsection (5)(a) of this rule.

(b) Requiring additional information from the applicant. The Department shall request additional information within 60 days from the date the Department received the application if the Department is unable to complete the review;

(c) Requiring additional information, for applications for final certification only, if the Department is unable to determine the actual cost of the facility or the portion of the actual cost of the facility properly allocable to pollution control;

(d) Notifying the applicant of the date, time and place of the Commission meeting where the Commission shall take action on the application; and

(e) Notifying the applicant of the action taken by the Commission. If the Commission rejects an application for certification; certifies a lesser actual cost of the facility; or certifies a lesser portion of the actual cost properly allocable to pollution control, material recovery or recycling than the applicant claimed in the application for certification, the Commission shall cause written notice of its action, and a concise statement of the findings and reasons therefore, to be sent by registered or certified mail to the applicant.

(5) Applicant Response to Notification. The applicant:

(a) Shall respond to the Department within 60 days of receipt of the Department's written notification when the Department requests additional information as set forth in section (4) of this rule. The applicant shall respond by providing the additional information requested or by submitting a written estimate of the time needed to provide the information necessary to complete the application.

(b) May appeal from the rejection or reduction as provided in ORS 468.170(3) and 468.110.

(6) Extension of Time. The Commission may grant an extension of time to submit an application for final certification. An extension of time:

(a) Shall only be considered for applications that may exceed the time limits set forth in section (2) of this rule;

(b) Shall not extend the period for filing an application beyond December 31, 2008; and

(c) Shall only be granted for circumstances beyond the control of the applicant that would make filing a timely application unreasonable.

[ED. NOTE: Applications referenced are available from the agency.]

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98; DEQ 4-2004(Temp), f. & cert. ef. 6-8-04 thru 12-5-04

340-016-0060

Eligibility

(1) Eligible Facilities. Facilities eligible for pollution control tax credit certification shall include any land, structure, building, installation, excavation, machinery, equipment or device, or alternative methods for field sanitation and straw utilization and disposal. An eligible facility shall be reasonably used, erected, constructed or installed as:

(a) A new facility;

(b) An addition or improvement to an existing facility; or

(c) The reconstruction or replacement of an existing facility.

(2) Purpose of Facility. The facility shall meet the principal purpose requirement to be eligible for a pollution control facility tax credit certification, or if the facility is unable to meet the principal purpose requirement, the facility shall meet the sole purpose requirement to be eligible for a pollution control tax credit:

(a) Principal Purpose Requirement. The principal purpose of the facility is the most important or primary purpose of the facility. Each facility shall have only one principal purpose. The facility shall be established to comply with environmental requirements imposed by the Department, the federal Environmental Protection Agency or a regional air pollution authority to control, reduce, or prevent air, water or noise pollution, or for the material recovery of solid waste, hazardous waste or used oil; or

(b) Sole Purpose Requirement. The sole purpose of the facility shall be the exclusive purpose of the facility. The only function or use of the facility shall be the control, reduction, or prevention of pollution; or for the material recovery of solid waste, hazardous waste or used oil.

(3) Facility Compliance. The facility shall achieve compliance with Department statutes and rules, or Commission orders or permit conditions before the Commission issues certification as a pollution control facility.

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate:

(a) Air contamination by use of air cleaning devices as defined in ORS 468A.005 or through equipment designed to prevent, reduce or eliminate air contaminants prior to discharge to the outdoor atmosphere;

(b) Alternatives to Open Field Burning. The facility shall reduce or eliminate:

(A) Open field burning and may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

(B) Air quality impacts from open field burning and may include propane burners or mobile field sanitizers; or

(C) Grass seed acreage that requires open field burning. The facility may include:

(i) Production of alternative crops that do not require open field burning;

(ii) Production of rotation crops that support grass seed production without open field burning; or

(iii) Drainage tile installations and new crop processing facilities.

(c) Hazardous Waste. The facility shall treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005 or utilize material as set forth in subsection (4)(e) of this rule;

(d) Industrial Waste. The facility shall dispose of, eliminate or be redesigned to eliminate industrial waste and the use of treatment works for industrial wastewater as defined in ORS 468B.005;

(e) Hazardous Waste, Solid Waste and Used Oil Material Recovery. The facility shall eliminate or obtain useful material from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 468.850. The facility shall produce an end product of utilization that is an item of real economic value and is competitive with an end product produced in another state. The facility shall produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation, or use of materials which:

(A) Have useful chemical or physical properties and which may be used for the same or other purposes; or

(B) May be used in the same kind of application as its prior use without change in identity.

(f) Noise Pollution. The facility shall substantially reduce, eliminate or be redesigned to eliminate noise pollution or noise emission sources set forth in OAR 340-035-0005 through OAR 340-035-0100;

(g) Spills or Unauthorized Releases. The facility shall be used to detect, defer or prevent spills or unauthorized releases. This does not include any facility installed, constructed or used for cleanup after a spill or unauthorized release has occurred; or

(h) Nonpoint Source Pollution. Pursuant to ORS 468.155(2)(b), the EQC has determined that the following facilities reduce, or control significant amounts of nonpoint source pollution:

(A) Any facility that implements a plan, project, or strategy to reduce or control nonpoint source pollution as documented:

(i) By one or more partners listed in the Oregon Nonpoint Source Control Program Plan; or

(ii) In a Federal Clean Air Act State Implementation Plan for Oregon; or

(B) Any facility effective in reducing nonpoint source pollution as documented in supporting research by:

(i) Oregon State University, Agricultural Experiment Station; or

(ii) The United States Department of Agriculture, Agriculture Research Service; or

(iii) The Oregon Department of Agriculture; or

(C) Wood chippers used to reduce openly burned woody debris; or

(D) The retrofit of diesel engines with a diesel emission control device, certified by the U.S. Environmental Protection Agency.

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98; DEQ 1-2001, f. 1-30-01, cert. ef. 2-1-01

340-016-0065

Fees

The application fee shall be made payable to the Department of Environmental Quality and shall not be refunded to the applicant except as set forth in section (3) of this rule. The application fee shall be based upon the facility cost after any reductions as set forth ORS 340-016-0070(1).

(1) Application Fee for Preliminary Certification. If the applicant chooses to submit the optional application for preliminary certification as set forth in OAR 340-016-0055(1), the applicant shall submit the appropriate preliminary application fee of:

(a) One-half of one percent of the estimated facility cost as claimed on the preliminary application. The minimum fee shall be \$50 and the maximum fee shall be \$7,500; or

(b) \$50 for preliminary applications claiming alternatives to open field burning.

(2) Application Fee for Final Certification. The applicant shall submit the appropriate final application fee:

(a) One percent of the estimated facility cost as claimed on the final application. The minimum fee shall be \$50 and the maximum fee shall be \$15,000. If the applicant received a preliminary certificate and the facility claimed on the final application:

(A) Was built substantially as represented on the preliminary certification, the applicant may subtract the amount of the preliminary application fee paid from the final application fee; or

(B) Was not built substantially as represented on the preliminary certification, the applicant shall not subtract the amount of the preliminary application fee paid from the final application fee.

(b) \$50 for final applications claiming alternatives to open field burning.

(3) Refunds. The Department shall refund 50% of the preliminary and final application fee paid only if the preliminary or the final application is rejected or denied. The preliminary and final application fee for alternatives to open field burning shall not be refunded any amount under this rule.

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98

340-016-0070

Determining the Facility Cost

(1) Facility Cost. The applicant shall provide documentation sufficient to substantiate the facility cost. The facility cost shall be reduced by the:

(a) Salvage value of a pre-existing facility if the applicant is replacing a facility. The salvage value shall never be less than zero and shall be the value of the pre-existing facility at the end of its useful life minus the cost to remove it from service;

(b) Amount of any government grants received to pay part of the facility cost;

(c) Present value of any other state tax credits for which the investment is eligible; and

(d) Ineligible facility costs as set forth in section (3) and as determined by comparing the actual facility costs with eligible costs as set forth in section (2).

(2) Eligible Costs. For costs to be eligible, they shall make a significant contribution to pollution control and shall directly relate to the acquisition and installation of the facility. Eligible costs may include:

(a) Machinery, equipment and devices;

(b) Structures and buildings;

- (c) Design or engineering;
- (d) Employee or contractor labor;
- (e) Indirect costs limited to employees of the applicant's business that directly performed the engineering, acquisition or installation work;
- (f) Government fees associated with the installation of the equipment;
- (g) Freight;
- (h) Excavation;
- (i) Materials and supplies needed for installation;
- (j) Travel directly related to purchased equipment;
- (k) For underground and aboveground storage tank systems holding petroleum, waste oil and hazardous substances:
 - (A) Modification and decommissioning of existing tank systems; and
 - (B) Ninety percent of any automatic tank gauging system.
- (l) Essential backup systems;
- (m) Replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued under ORS 468.170, limited to:
 - (A) An amount equal to the difference between the cost the new facility and the like-for-like replacement cost of the original facility if the facility is being replaced due to a new requirement imposed by the Department, the federal Environmental Protection Agency or a regional air pollution authority; or
 - (B) The remainder of the tax credit certified to the facility being replaced if a facility is replaced or reconstructed before the end of its useful life; and
- (n) Other costs directly related to the principal or sole purpose of the facility.
- (3) Ineligible Costs. The applicant and the Department shall reduce the facility cost by any ineligible costs. Ineligible costs are any distinct portion of a pollution control facility that makes an insignificant contribution to the principal or sole purpose of the facility; or provides benefits of economic value; or where the costs are not directly related to the operation of the industry or enterprise seeking the tax credit but were installed as a result of the facility. Ineligible costs include but are not limited to:
 - (a) Office buildings and furnishings;
 - (b) Parking lots and road improvements;

- (c) Automobiles;
 - (d) Landscaping;
 - (e) External lighting;
 - (f) Company or related signs;
 - (g) Air conditioners;
 - (h) Property installed, constructed or used for clean up of emergency spills or unauthorized releases, as defined by the Commission;
 - (i) Septic tanks or other facilities for human waste including property installed, constructed or used for moving sewage to the collecting facilities of a public or quasi-public sewerage system;
 - (j) Removal of equipment replaced by the facility except for tanks as set forth in paragraph (2)(k)(A) of this rule;
 - (k) Replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued under ORS 468.170, except as set forth in subsection (2)(m) of this rule;
 - (l) Application fees for a pollution control tax credit;
 - (m) Start-up costs;
 - (n) Asbestos abatement;
 - (o) Purchased equipment used to install the facility;
 - (p) Maintenance, operation, or repair of a facility, including spare parts;
 - (q) Owner's time;
 - (r) Interest, warranty charges, financing costs, capitalized costs (property taxes, capitalized interest, etc.), insurance premiums, legal fees, court costs, patent searches and feasibility studies; and
 - (s) Travel for research purposes.
- (4) Statement of Facility Cost. The applicant shall provide an auditor's statement that the facility cost claimed on the application for final certification is eligible and allocable as set forth in this rule and ORS 340-016-0070. The facility cost prior to any reductions, as set forth ORS 340-016-0070(1), shall determine the degree of independence of the auditor:
- (a) The applicant may prepare the auditor's statement when the facility cost:
 - (A) Does not exceed \$50,000; or

(B) Exceeds \$500,000. When the facility cost exceeds \$500,000, the applicant shall also allow the Department to perform an independent accounting review to be paid by the Department.

(b) The applicant shall have the auditor's statement prepared by an independent Certified Public Accountant when the facility cost exceeds \$50,000 but does not exceed \$500,000.

(5) Waiver of External CPA's Audit. The applicant may submit a written request and the Department may grant a waiver of the independent accounting review:

(a) If the facility cost can be thoroughly documented by less than twenty invoices or canceled checks;

(b) If the facility is not part of a larger construction project; and

(c) If the facility consists of a single pollution control component or a single pollution control process.

(6) More Than One Owner. If there is more than one owner applying for tax relief for the same facility, each owner may be required to obtain a separate certification of cost as set forth in this section. The facility cost claimed by each owner separately shall not exceed the total cost of the facility.

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98

340-016-0075

Determination of Portion of Facility Cost Allocable to Pollution Control

The applicant shall provide the information necessary for the Commission and the Department to determine the portion of the facility cost allocable to pollution control as set forth in ORS 468.190 and this rule. The portion of the facility cost properly allocable to pollution control shall be from zero to 100 percent in increments of one percent. If the portion is zero percent, the Commission shall issue an order denying the certification. The facility cost for this rule shall be the cost as set forth in OAR 340-016-0070(1) after the reduction of the salvage value.

(1) Facility Cost Does Not Exceed \$50,000. The Commission shall only consider the percentage of time the facility is used for pollution control as opposed to any other purpose when determining the percentage of the facility cost allocable to pollution control for facilities with costs that do not exceed \$50,000. The remaining sections in this rule shall not be applicable to these facilities.

(2) Facility Cost Exceeds \$50,000. The Commission shall consider the five factors in this section when establishing the portion of the facility costs properly allocable to pollution control for facilities qualifying for certification under ORS 468.170. These five factors shall be considered only when the facility cost exceeds \$50,000 under sections (3), (4) and (5) of this rule. In considering the five factors and their applicability to these rules, the Commission may determine in

its findings that one or more factors are more important than others and may assign different weights to the factors when determining the portion of costs properly allocable to pollution control:

- (a) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity;
- (b) The estimated annual percent return on the investment in the facility;
- (c) The alternative methods, equipment and costs for achieving the same pollution control objective;
- (d) Related savings or increases in costs which occur or may occur as a result of the installation of the facility; or
- (e) Other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution, solid or hazardous waste or to recycling or properly disposing of used oil.

(3) Non-Integral Facilities. The Department shall determine the percentage of the facility cost allocable to pollution control as set forth in this section if the facility is not "integral to the operation of the applicant's business" as set forth in subsection (4)(a) of this rule. The applicant shall:

(a) Determine the Average Annual Cash Flow from the facility. The average annual cash flow is calculated by summing the five annual cash flows in this subsection as calculated through paragraph (3)(a)(C) and dividing the sum by five. Where the useful life of the facility is less than five years, sum the annual cash flows for the useful life of the facility and divide the sum by the useful life. The applicant shall:

(A) Estimate gross annual revenue for each of the first five full years of operation. Revenue includes the estimated total annual income directly related to the operation of the facility. Revenue includes income derived from sale or reuse of recovered materials or energy or any other means including savings that may occur as a result of the facility. The Department may require additional information or documentation regarding gross annual revenue estimates for evaluation purposes;

(B) Estimate the annual operating expenses for each of the first five full years of operation. Operating expenses shall be the estimated annual cost of operating the facility. Operating expenses may include labor, utilities, property taxes, insurance, and other cash expenses, less any savings in expenses attributable to installation of the facility. Operating expenses shall not include depreciation, interest expenses, and state and federal taxes; and

(C) Subtract the estimated annual operating expenses set forth in paragraph (3)(a)(B) from the estimated gross annual revenues set forth in paragraph (3)(a)(A) for each of the first five full years of operation.

(b) Determine the Return on Investment Factor (ROI Factor) by dividing the facility cost by the average annual cash flow as set forth in subsection (3)(a) of this rule.

(c) Determine the Facility Return on Investment (Facility ROI) by using the Facility ROI -Table 1 provided with the application. At the top of Table 1, find the number equal to the number of years of the useful life of the facility. In the column under the useful life, find the number closest to the ROI Factor as set forth in subsection (3)(b) of this rule. Follow this row to the leftmost column to find the Facility ROI. Table 1 shall be developed utilizing the following equation: [Equation not included. See ED. NOTE.]

(d) Determine the National Return on Investment (National ROI) from the National ROI - Table 2 provided with the application. Select the National ROI that corresponds with the year construction was completed on the facility. The National ROI Table 2 shall be developed by averaging the prior five years' rates of return before taxes on total assets for all United States manufacturing corporations as found in the Quarterly Financial Report for Manufacturing, Mining and Trade Corporations, published by the U.S. Department of Commerce, Bureau of the Census.

(e) Determine the Portion of Actual Costs Properly Allocable to Pollution Control. If the Facility ROI as set forth in subsection (3)(c) is:

(A) Greater than or equal to the National ROI as set forth in subsection (3)(d) then the percentage of the facility cost properly allocable to pollution control shall be zero percent.

(B) Less than the National ROI as set forth in subsection (3)(d) then the percentage of the facility cost properly allocable to pollution control shall be determined by the equation: [Equation not included. See ED. NOTE.]

(4) Facilities Integral to the Operation of the Applicant's Business. This section applies only to facilities costing over \$50,000, to applications received by the Department on or after February 1, 1993, and to any facility that the Commission determines to be "integral to the operation of the applicant's business" as set forth in this section. The Department shall use the steps in this section to determine the portion of the facility cost that is allocable to pollution control for facilities determined to be "integral to the operation of the applicant's business."

(a) Determine if the Facility is Integral to the Operation of the Applicant's Business. A facility is integral to the operation of the applicant's business when the business is unable to operate or is only able to operate at reduced income levels, without the claimed pollution control facility as determined by the Commission. Such instances include, but are not limited to, commercial solid waste and hazardous waste landfills, solid and hazardous waste recycling businesses, and environmental service providers. A pollution control facility integral to the operation of the applicant's business does not include a facility that meets the principal purpose requirement as set forth in OAR 340-016-0060(3)(a) unless the pollution control facility meets one or more of the factors included in this definition. Factors that the Department may use to determine whether a pollution control facility is integral to the operation of the business include:

(A) The facility represent in excess of 25 percent of the total assets of the business; or

(B) The facility was erected, constructed, or installed in response to market demand for such pollution control facilities. This may occur as the result of requirements imposed by the

Department, the Federal Environmental Protection Agency or regional air pollution authority, on parties unaffiliated with the applicant; or

(C) Erection, construction, or installation of the facility and any previously certified pollution control facilities, allows the applicant to generate gross revenues at least 50 percent greater than would have been generated in the absence of the claimed facility and any previously certified pollution control facilities; or

(D) The applicant's operating expenses related to operation of the facility and any previously certified pollution control facilities are at least 50 percent of the operating expenses of the applicant's business.

(b) Determine the National Return on Investment (National ROI) from National ROI Table 2 provided with the application. Select the National ROI that corresponds with the year construction was completed on the facility. Table 2 shall be developed as set forth in subsection (3)(d) of this rule.

(c) Determine the Industry Average Profit (Industry AP) by summing the "industry median profit before taxes as a percent of total assets" for the five years prior to the year the facility was completed as found in Robert Morris Associates, Annual Statement Studies under the applicant's primary four digit Standard Industrial Classification (SIC) and dividing the sum obtained by five. Where five years are not available, sum the number of years that are available and divide by the number of years available. If the Annual Statement Studies do not list the "industry median profit before taxes as a percent of total assets" for the applicant's SIC, the applicant and the Department shall determine whether an alternate SIC is appropriate for the applicant's business. If no alternate SIC is appropriate for the applicant's business or if an applicant is dissatisfied with the percent allocable determination made using the procedures in this section, the percent allocable shall be determined using the procedures set forth in section (5) of this rule;

(d) Determine the Portion of Actual Costs Properly Allocable to Pollution Control. If the Industry AP as set forth in paragraph (4)(c) is:

(A) Greater than or equal to the National ROI as set forth in subsection (4)(b), the percentage of the facility cost allocable to pollution control shall be zero percent;

(B) Less than the National ROI as set forth in paragraph (4)(b), the percentage of the facility cost allocable to pollution control shall be determined by the equation: [Equation not included. See ED. NOTE.]

(5) Alternate for Facilities Integral to Applicant's Business. If the applicant and the Department determine that no alternate Standard Industrial Classification (SIC) is appropriate for the applicant's business as set forth in subsection (4)(c) of this rule, the percent allocable to pollution control shall be determined using the procedures set forth in this section.

(a) Definitions. The following definitions shall be used in this section:

(A) "Annual Incremental Cash Flow" means the estimated annual cash flow for each year of the useful life of the claimed pollution control facility that is integral to the operation of applicant's business calculated as follows:

(i) Calculate the applicant's annual cash flow including the claimed facility by subtracting the annual operating expenses for the applicant's business from the gross annual income for the applicant's business for each year of the useful life of the claimed facility; and

(ii) Calculate the applicant's annual cash flow assuming that the claimed facility was not erected, constructed, or installed by subtracting the annual operating expenses for the applicant's business using this assumption from the gross annual income for the applicant's business using this assumption for each year of the useful life of the claimed facility; and

(iii) Subtract the applicant's annual cash flow assuming that the claimed facility was not erected, constructed, or installed from the annual cash flow with the claimed facility for each year of the useful life of the claimed facility.

(B) "Annual Operating Expenses" means the estimated costs of operating the applicant's business including labor, utilities, property taxes, insurance, and other cash expenses, less any savings in expenses. Depreciation, interest expenses, and state and federal taxes are not included;

(C) "Gross Annual Income" means the estimated total annual income from the applicant's business including savings that may occur;

(D) "Internal Rate of Return" means the rate of return that will equate the present value of the annual incremental cash flows over the useful life of the claimed facility with the present value of the claimed facility cost.

(b) The applicant shall furnish the following information to the Department:

(A) An income statement, balance sheet, statement of cash flows, and federal and state tax returns (if applicable) for the applicant's business for the applicant's three fiscal years prior to the date of submission of the application. If three years of such statements are not available, the applicant shall submit information for the years that are available;

(B) Revenue and expense projections, and cash flow projections for the applicant's business beginning with the year the application is submitted and continuing for the entire useful life of the pollution control facility. The level of detail of these projections shall be substantially equivalent to the level of detail of information submitted in paragraph (A) of this subsection. The Department may elect to provide the applicant with a worksheet for this purpose;

(C) Revenue and expense projections, and cash flow projections for the applicant's business for the entire useful life of the claimed facility assuming that the claimed pollution control facility was not erected, constructed or installed;

(D) A projection of the applicant's future capital expenditures for the pollution control facility;

(E) A letter signed by the applicant authorizing the Department to contract with an independent certified public accountant to review the financial information provided by the applicant. The applicant shall agree to reimburse the Department for the cost of this review;

(F) Using the information submitted in paragraphs (A) through (D) of this subsection, the Department shall calculate an Internal Rate of Return for the claimed facility by considering the claimed facility cost and annual incremental cash flow. The Internal Rate of Return shall be compared to the National ROI from Table 2 as set forth in subsection (4)(b) of this rule;

(G) If the applicant's Internal Rate of Return is greater than the reference rate, the percent allocable shall be zero percent;

(H) If the applicant's Internal Rate of Return is less than the reference rate, the percent allocable shall be determined by the following formula:

[ED. NOTE: The Tables and equations referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98

340-016-0080

Certification

(1) The Preliminary Certificate. The Commission shall pre-certify the eligibility of a facility if the Commission determines the facility is eligible for a pollution control tax credit certificate as set forth in OAR 340-016-0060. The certificate shall be prima facie evidence that the facility is qualified for certification for tax relief under ORS 468.167. Preliminary certification shall not ensure that the facility constructed will receive certification under ORS 468.167 or tax relief under ORS 307.405 or 315.304.

(2) The Final Certificate. The Commission shall certify the actual cost of a pollution control facility as set forth in OAR 340-016-0070 and the portion of the cost properly allocable to pollution control as set forth in ORS 468.190 and OAR 340-016-0075 if the Department determines the facility is eligible for pollution control tax credit certification as set forth in OAR 340-016-0060. The certificate:

(a) Shall bear a separate serial number for each such facility;

(b) May certify two or more facilities which constitute an operational unit under one certificate;

(c) Is effective for purposes of tax relief according to the provisions of ORS 307.405 or ORS 315.304;

(d) Shall be granted:

(A) For 10 consecutive years beginning with tax year of the person taking the tax credit; or

(B) For 20 consecutive years for corporations organized under ORS Chapters 62 or 65 that utilize ad valorem tax-relief. The portion of the facility allocable to pollution control shall be exempt from ad valorem taxation.

(e) Shall be limited to that portion of the eligible and allocable facility costs, as set forth in OAR 340-016-0070 and OAR 340-016-0075 representing the taxpayer's investment in the pollution control facility.

(f) May certify portions of a facility qualifying under ORS 468.165(1)(c) separately under this section if portions of the facility are owned by more than one person. The actual cost certified for all portions of a facility separately certified under this subsection shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of ORS 307.405 or ORS 315.304, whichever is applicable, shall apply to any sale, exchange or other disposition of a certified portion of a facility.

(g) May certify a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to pollution control, material recovery or recycling than was claimed in the application for certification.

(3) Revocation. The Commission may order the revocation of the final tax credit certification as set forth in ORS 468.185. The Department shall notify the Department of Revenue and the county assessor of the county in which the facility is located as soon as the order of revocation or reinstatement under this section has become final.

(a) Cause for Revocation. Pursuant to the procedures for a contested case under ORS 183.310 to 183.550, the Commission may order revocation of a tax credit for:

(A) Fraud or Misrepresentation, if the certificate was obtained by fraud or misrepresentation. All prior tax relief provided to the certificate holder by virtue of such certificate shall be forfeited. The Department of Revenue or the proper county officers shall proceed to collect taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405 and 315.304; or

(B) Failure to Operate Facility, if the certificate holder has failed substantially to operate the facility for the purpose of, and to the extent necessary to meet the specifications of the certificate; or in compliance with the applicable Department or Commission statutes, rules, orders or permit conditions. The certificate holder shall be denied any further relief provided under ORS 307.405 or 315.304 in connection with such facility from and after the date that the order of revocation becomes final.

(b) Suspended Revocation. The Commission may suspend the revocation of a certificate when operation of a facility ceases if the certificate holder indicates in writing that the facility will be returned to operation within five years time. In the event that the facility is not returned to operation as indicated, the Commission shall revoke the certificate.

(c) Impact on Adjacent Facilities. The Commission may revoke tax credits held for any facility or piece of equipment which is for the purpose of preventing, controlling, reducing, or eliminating pollution to the same media and which is at a location adjacent to the non-complying facility.

(d) Reinstatement. The Commission may reinstate any revoked tax credit certification if the Commission finds the non-complying facility has been brought into compliance. The tax credit certification shall be reinstated for the remaining period of the tax credit, less the period beginning on the date the Commission revokes the certificate and ending on the date the Commission reinstates the certificate.

(4) Sale, Exchange or Disposition of Facility. The certificate holder shall provide the Department with written notice upon any sale, exchange or other disposition of the certified pollution control facility. Upon request, the taxpayer shall provide a copy of the contract or other evidence of disposition of the property to the Department of Environmental Quality. Upon sale or exchange of the facility, the certificate holder may request that the Commission transfer a tax credit from one holder to another, the Commission shall reissue the certificate to the new holder, and the Department shall report the transfer of the certificate to the Department of Revenue as set forth in ORS 307.405 and 315.304.

Stat. Auth.: ORS 468.150

Stats. Implemented: ORS 468.150 - ORS 468.190

Hist.: DEQ 5-1998, f. 4-24-98, cert. ef. 5-1-98

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Date: November 18, 2004
To: Environmental Quality Commission
From: Stephanie Hallock, Director
Subject: Agenda Item H, Action Item: Tax Credit Consideration
December 10, 2004 EQC Meeting

S. Hallock

Proposed Action The Department of Environmental Quality (DEQ, Department) presents its analyses and recommendations regarding Pollution Control Facilities Tax Credits in this agenda item. The Department requests the Environmental Quality Commission's decision on the actions summarized in Attachment A of this staff report.

EQC Action Alternatives Any application may be postponed to a future meeting if the Environmental Quality Commission (EQC, Commission):

- Requires the Department or the applicant to provide additional information; or
- Makes a determination different from the Department's recommendation, and that determination may have an adverse effect on the applicant.

Department Recommendation The Department recommends that the EQC:

- Approve final certification of **19** facilities as provided in Attachment B;
- Deny final certification of the **two** facilities presented in Attachment C; and
- Transfer **23** certificates, revoke **three** certificates and reissue **two** certificates as presented in Attachment D.

Attachments

- A. Summary of Recommendations
- B. Background and References for Final Certifications
- C. Background and References for Certification Denials
- D. Certificate Administration
- E. Tax Expenditure Report
- F. Certified Wood Chipper Report
- G. Amalgam Separator Fact Sheet

Available Upon Request ORS 468.150 to 468.190 & OAR 340-016-0005 to 340-016-0080

Approved:

Section:

Division:

Maggie Vandehey
M. Vandehey for Stephanie Hallock

Report Prepared By: Maggie Vandehey
Phone: 503-229-6878

Attachment A

Summary of Recommendations

App #	Media	Applicant	Claimed	Certified	Difference	% Allocable	Maximum Percent	GF Liability	EQC Action
Recommended for Approval - Attachment B									
6277	Air	Columbia Steel Casting Co., Inc.	41,221	40,846	(375)	100%	50%	20,423	
6601	Water	Merix Corporation	757,084	757,084		100%	35%	264,979	
6719	Mat. Rec.	East County Recycling Company	250,082	250,082		100%	35%	87,529	
6731	Mat. Rec.	Bank of the West, Equipment Leasing	560,000	560,000		100%	35%	196,000	
6766	Mat. Rec.	Newberg Garbage Service, Inc.	42,682	39,878	(2,804)	100%	35%	13,957	
6781	Water	Wagoner Properties, LLC	26,461	26,461		100%	35%	9,261	
6783	Air	Masterbrand Cabinets Inc	1,304,667	\$1,267,975	(36,692)	100%	35%	443,791	
6799	Mat. Rec.	Far West Fibers, Inc.	1,191,706	1,063,007	(128,699)	92%	35%	342,288	
6801	Water	Century Dental	1,165	1,165		100%	35%	408	
6803	Water	Permapost Products, Inc.	27,033	27,033		100%	35%	9,462	
6807	Mat. Rec.	Bend Garbage Company, Inc.	139,145	139,145		100%	35%	48,701	
6810	Mat. Rec.	Miller Associated Enterprises, Inc.	73,578	73,578		100%	35%	25,752	
6812	Water	Karole H. Wilson	469	469		100%	35%	164	
6819	Mat. Rec.	J-CAD Equipment Leasing, LLC	1,220	346	(874)	100%	35%	121	
6820	Mat. Rec.	J-CAD Equipment Leasing, LLC	32,200	32,200		100%	35%	11,270	
6829	NPS	John & Kerry Rietmann Farms	288,750	288,750		97%	35%	98,031	
6830	FB	T & P Farms, LLC	74,185	74,185		100%	35%	25,965	
6832	FB	Veldon D. Kropf	198,155	198,155		100%	35%	69,354	
6839	NPS	Newton Brothers	97,296	97,296		100%	35%	34,054	

19 approvals

Sum	5,107,099	4,937,655	-169,444	1,701,510
Average	268,795	259,877	-33,889	89,553
Minimum	469	346	-128,699	121
Maximum	1,304,667	1,267,975	-375	443,791

Attachment A

Summary of Recommendations

Recommended for Denial - Attachment C

Attachment C: Certification Denials

App #	Media	Applicant	Claimed						
6555		Weyerhaeuser Company	1,627,545	0					
6556		Weyerhaeuser Company	1,251,199	0					
Sum			2,878,744	0					

Liability = certified cost * % allocable * maximum allowable %.

Recommended Certificate Administration - Attachment D

- Transfer 23 Certificates
- Revoke 3 Certificates
- Reissue 2 Certificates

Attachment B

Background and References for Final Certifications

The Department recommends that the Environmental Quality Commission approve certification of the 19 pollution control and material recovery facilities presented in this attachment. The individual application records and the Pollution Control Facilities Tax Credit regulations support the Director's Recommendation as shown at the top of each Review Report. The Department organized the reports by ascending application number under the following categories.

1. Air
2. Alternatives to Field Burning (shown as *Alt FB* on the tab)
3. Material Recovery (shown as *Mat Rec* on the tab)
4. Nonpoint Source Pollution Control (shown as *NPS* on the tab)
5. Water

Definition of a "Pollution Control Facility"

The tax credit regulations provide the definition of a "pollution control facility." The regulations split the definition into several parts. The parts of the definition common to all pollution control facilities include a broad description of the asset, the environmental benefit, and the purpose of the facility:

Asset	Environmental Benefit	Pollution Control Purpose
<ul style="list-style-type: none"> • Land • Structure • Building • Installation • Excavation • Machinery • Equipment • Devices 	Prevents, Controls, or Reduces: <ul style="list-style-type: none"> • Air pollution • Water pollution • Solid waste • Hazardous waste • Used oil 	Required - Principal primary and most important purpose is to achieve the environmental benefit by complying with DEQ/EPA/LRAPA requirements Voluntary - Sole sole or exclusive purpose is to achieve the environmental benefit - the benefit must be substantial

Statutory Definition of "Pollution Control Facility"

ORS 468.155 Definitions for ORS 468.155 to 468.190 and 468.962

- (1)(a) As used in ORS 468.155 to 468.190 and 468.962, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if:
 - (A) The principal purpose of such use, erection, construction or installation is to comply with a requirement imposed by the Department of Environmental Quality, the federal Environmental Protection Agency or regional air pollution authority to prevent, control or reduce air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil; or
 - (B) The sole purpose of such use, erection, construction or installation is to prevent, control or reduce a substantial quantity of air, water or noise pollution or solid or hazardous waste; or to recycle or provide for the appropriate disposal of used oil.

...

- (2)(a) As used in ORS 468.155 to 468.190 and 468.962, "pollution control facility" or "facility" includes a nonpoint source pollution control facility.

Eligibility and Purpose

OAR 340-016-0060 Eligibility

- (1) Eligible Facilities. Facilities eligible for pollution control tax credit certification shall include any land, structure, building, installation, excavation, machinery, equipment or device, or alternative methods for field sanitation and straw utilization and disposal. An eligible facility shall be reasonably used, erected, constructed or installed as:
 - (a) A new facility;
 - (b) An addition or improvement to an existing facility; or
 - (c) The reconstruction or replacement of an existing facility.
- (2) Purpose of Facility. The facility shall meet the principal purpose requirement to be eligible for a pollution control facility tax credit certification, or if the facility is unable to meet the principal purpose requirement, the facility shall meet the sole purpose requirement to be eligible for a pollution control tax credit:
 - (a) Principal Purpose Requirement. The principal purpose of the facility is the most important or primary purpose of the facility. Each facility shall have only one principal purpose. The facility shall be established to comply with environmental requirements imposed by the Department, the federal Environmental Protection Agency or a regional air pollution authority to control, reduce, or prevent air, water or noise pollution, or for the material recovery of solid waste, hazardous waste or used oil; or

- (b) Sole Purpose Requirement. The sole purpose of the facility shall be the exclusive purpose of the facility. The only function or use of the facility shall be the control, reduction, or prevention of air, water or noise pollution; or for the material recovery of solid waste, hazardous waste or used oil.

BACKGROUND

APPROVALS: Air Pollution Control Facilities

The Department recommends that the Environmental Quality Commission approve two air pollution control facilities. Each of these facilities disposes of or eliminates air pollution with the use of air cleaning devices.

Summary of Air Pollution Control Facilities

App #	Applicant	Certified	% Allocable	Maximum Percent	GF Liability
6277	Columbia Steel Casting Co., Inc.	\$40,846	100%	50%	\$20,423
6783	Masterbrand Cabinets Inc	\$1,267,975	100%	35%	\$443,791
2 Apps		Sum	1,308,821		464,214
		Average	654,411		232,107
		Minimum	40,846		20,423
		Maximum	1,267,975		443,791

Statutory Definition of an "Air Pollution Control Facility"

ORS 468.155 Definitions for ORS 468.155 to 468.190 and 468.962

- ...
- (b) Such prevention, control or reduction required by this subsection shall be accomplished by:
- ...
- (B) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468A.005;
- ...

ORS 468A.005 provides the following pertinent definitions.

"Air contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof.

"Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby.

"Air contamination source" means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes.

An "Air-cleaning device" means any method, process or equipment that removes, reduces or renders less noxious air contaminants prior to their discharge in the atmosphere.

Eligibility

OAR 340-016-0060 Eligibility

...

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate:

- (a) Air contamination by use of air cleaning devices as defined in ORS 468A.005 or through equipment designed to prevent, reduce or eliminate air contaminants prior to discharge to the outdoor atmosphere;

...



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Air Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 83095
Portland, OR 97283

Organized as: **S Corp**
Taxpayer ID: **93-0336095**

Technical Information

Columbia Steel Casting Company, Inc. manufactures alloy steel castings. The pattern shop makes wood, metal, and plastic patterns for the foundry. Pattern making involves several machining processes such as sawing, milling, drilling, turning, and sanding. The applicant claims a RotoClone dust collection system to remove approximately ten tons per year of particulate emissions generated in the pattern shop. The system is a used 15,000 cubic feet per minute (cfm) dust collector with a centrifugal separator. It has a 99% collection efficiency. The claimed facility replaced a smaller, 3,900 cfm dust collector that was incapable of handling all the particulate from all of the machines.

Director's Recommendation

Approve Application No. **6277 @ Reduced Cost**

Applicant: **Columbia Steel Casting Company, Inc.**

Certification of:

Facility Cost		\$40,846
Percentage Allocable	X	100%
Maximum Percentage	X	50%
Tax Credit		<u>\$20,423</u>

Certificate Period: **7 years**

Facility Identification

10425 N Bloss Ave
Portland, OR 97203

The certificate will identify the facility as:

**RotoClone dust collector, Model 24D, Serial #
D840037**

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Columbia Steel Casting Company, Inc. **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility

Timely Filing Criteria

1999 Edition ORS
468.173(1) OAR
340-016-0007

The applicant must submit the final application after completing construction of the facility and placing it into service. If the applicant completed constructing the facility before January 1, 2002, the applicant must submit the application within two years after the construction completion date.

Applied to this Application

The applicant **timely filed** the application. The applicant completed construction or installation of the claimed facility on **12/18/2000** and filed the application on **9/16/2002**. The applicant filed the application within the two-year filing requirement. The applicant also submitted the application after completing construction and placing the facility into service on 12/18/2000.

Purpose: Required Criteria

ORS 468.155
(1)(a)(A)
OAR 340-016-
0060(2)(a)

The principal purpose of the claimed facility must be to comply with a requirement imposed by DEQ, EPA, or LRAPA to prevent, reduce, or control air pollution. That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Air Pollution" is the presence in the **outdoor atmosphere** of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005

Applied to this Application

The applicant claims the facility has a sole purpose; however, the dust collector complies with Air Contaminant Discharge Permit #26-1869 imposed by

Department of Environmental Quality; therefore, it has a **principal** purpose.

The dumpster modifications are not eligible for certification because it makes an insignificant contribution to the principal purpose of the facility. Modifications to the dumpster facilitate material handling. The Department subtracted the associated cost from the claimed facility cost under the *Facility Cost* section below.

Method Criteria
ORS 468.155 (1)(b)(B) The prevention, control, or reduction must be accomplished by the disposal or elimination of air contaminants, air pollution, or air contamination sources; and the use of an air cleaning device as defined in ORS 468A.005.

Applied to this Application

Airborne particulate meets the definition of an air contaminate as defined by ORS 468A.005:

Dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof.

The dust collector **meets the definition of** an air-cleaning device in ORS 468A.005:

Any method, process or equipment that removes, reduces or renders less noxious air-contaminants prior to their discharge in the atmosphere.

Exclusions Criteria
ORS 468.155(3) OAR 340-016-0070(3) The regulations exclude over 40 items from the definition of a Pollution Control Facility. These items are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement Criteria
ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. However, there are two exceptions. The applicant replaced the facility:

1. because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. before the end of its useful life.

Applied to this Application

The State of Oregon issued 17 certificates to the applicant at this location. The certificates are all for controlling air pollution; however, the claimed facility is **not a replacement** to any of these previously certified facilities.

Maximum Credit Criteria

ORS 468.173(1) The maximum tax credit is 50% of the certified facility cost if the applicant began construction or installation of the facility before January 1, 2001, and completed before January 1, 2004.

Applied to this Application

The **maximum tax credit is 50%** because the applicant began construction on 5/30/2000, completed construction on **12/18/2000**, and submitted the application on **9/16/2002**.

Facility Cost**Subtractions** Criteria

OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

\$ Certification Criteria

ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed \$41,221
	Dumpster modifications (Invoice 12940-19922)	-375.00
		Certified \$40,846

Facility Cost Allocable to Pollution Control

ORS 468.190 (3) Criteria

If the cost of the facility (or facilities certified under one certificate) 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 pollution bears to the entire time the facility is used for any purpose.

Applied to this Application

The certified facility cost is **\$40,846** and the applicant uses the facility **100%** of the time for pollution control.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The DEQ staff member assigned to the source is Greg Grunow in the Northwest Region. Mr. Grunow affirmed the applicant's statement that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ issued the following permits to the applicant at this site: NPDES No. 1200-COLS issued December 22, 1999; and Air Contaminant Discharge Permit No. 26-1869, issued September 24, 2002.

Reviewer: PBS Engineering and Environmental
Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Air Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

One Masterbrand Cabinet Drive
Jasper, IN 47546

Organized as: **C Corp**
Taxpayer ID: **13-3346717**

Technical Information

Masterbrand Cabinets Inc. is a manufacturer of kitchen and bath cabinetry. The applicant claims a baghouse system for dust collection. It consists of six baghouses, three fans with 250 horsepower drives; four 30-cubic yard waste bins with hoods and leveling screws, and a Motor Control Center with 6-zone spark detection and suppression system.

Director's Recommendation

Approve Application No.6783 @ Reduced Cost

Applicant: **Masterbrand Cabinets Inc**

Certification of:

Facility Cost		\$1,267,975
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$443,791</u>

Certificate Period: **10 years**

Facility Identification

550 SE Mill Street
Grants Pass, OR 97526

The certificate will identify the facility as:

One Baghouse Dust Collection System consisting of:

**Three New York Acoustafoil Fans with
250 Hp drives;**

**Six Donaldson 484FW10 Baghouses,
SN #1G740895;**

**Four 30 cubic yard waste bins with hoods
and leveling screws;**

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Masterbrand Cabinets Inc **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility

Timely Filing

2001 Edition ORS
468.165(6)

Criteria

The applicant must submit the final application after completing construction of the facility and placing it into service. If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date.

Applied to this Application

The applicant **timely filed** the application within the one year requirement. The applicant completed construction of the claimed facility on **7/1/2003** and filed the application on **6/17/2004**. The applicant also submitted the application after completing construction and placing the facility into service on 11/4/2003.

Purpose: Required

ORS 468.155

(1)(a)(A)

OAR 340-016-

0060(2)(a)

Criteria

The principal purpose of the claimed facility must be to comply with a requirement imposed by DEQ, EPA, or LRAPA to prevent, reduce, or control air pollution. That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Air Pollution" is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005

Applied to this Application

The baghouse system complies with Air Contaminant Discharge Permit No. 17-0046 imposed by DEQ. The primary or most important purpose of the claimed facility is to prevent air pollution. The baghouse system collects **420 tons** of particulate per month.

The primary and most important purpose of the fire detection and suppression system is to respond to the fire marshal's requirements, not to meet the applicant's permit requirements. The Department deducted the associated costs from the claimed facility cost under the *Facility Cost* section below.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(B)	The prevention, control, or reduction must be accomplished by the disposal or elimination of air contaminants, air pollution, or air contamination sources; and the use of an air cleaning device as defined in ORS 468A.005.

Applied to this Application

The baghouse system **meets the definition of** an air-cleaning device in ORS 468A.005:

Any method, process or equipment that removes, reduces or renders less noxious air-contaminants prior to their discharge in the atmosphere.

Exclusions	<u>Criteria</u>
ORS 468.155(3) OAR 340-016- 0070(3)	The regulations exclude over 40 items from the definition of a Pollution Control Facility. These items are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement	<u>Criteria</u>
ORS 468.155(3)(e)	The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. However, there are two exceptions. The applicant replaced the facility:

1. because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. before the end of its useful life.

Applied to this Application

The State of Oregon has issued **no** Pollution Control Facilities Tax Credit Certificates to the applicant at this location.

Maximum Credit	<u>Criteria</u>
ORS 468.173(3)(h)	The maximum tax credit is 35% if the claimed facility is located in an area that has been designated a distressed area, as defined in ORS 285A.010, by the Economic and Community Development Department.

Applied to this Application

The **maximum tax credit is 35%** because the claimed facility is located in Josephine County which is a designated distressed area.

Facility Cost**Subtractions**Criteria

OAR 340-016-0070(1)

The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no other subtractions**.

\$ CertificationCriteria

ORS 468.170(1)

The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost documentation indicates that the cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
Ineligible costs	Fire detection/suppression system	\$1,304,667
		Certified
		-\$36,692
		\$1,267,975

Facility Cost Allocable to Pollution Control**% Certification**Criteria

ORS 468.170(1)

The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

- Percentage** Criteria
ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.
- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
 - b. The estimated annual percent return on the investment in the facility;
 - c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
 - d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
 - e. Any other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above, and a ten-year useful life. The claimed facility does not produce a salable or useable commodity, and it does not have revenue or cost savings associated with it. The expenditures exceed the revenue, therefore the resulting facility ROI is less than the National ROI for 2003, the facility's construction completion year. The applicant did not investigate an alternative technology and there are no other relevant factors.

Compliance

- ORS 468.180(1) Criteria
The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey

BACKGROUND

APPROVALS: Alternatives to Open Field Burning Facilities

The Department recommends the Commission approve two alternatives to open field-burning facilities for certification as pollution control facilities.

The Department and the Commission have traditionally treated alternatives to open field burning as *principal purpose* facilities. This means that the applicant installed the facility to meet a DEQ or EPA requirement. DEQ required that the state reduce the maximum number of acres that are open-burned in compliance with acreage limitations and allocations under OAR 340-266-0060.

Summary of Alternatives to Open Field Burning

App #	Applicant	Certified	% Allocable	Maximum Percent	GF Liability
6830	T & P Farms, LLC	\$74,185	100%	35%	\$25,965
6832	Veldon D. Kropf	\$198,155	100%	35%	\$69,354
2 Apps	Sum	272,340			95,319
	Average	136,170			47,660
	Minimum	74,185			25,965
	Maximum	198,155			69,354

Statutory Definition of "Alternatives to Field Burning"

ORS 468.150 Field sanitation and straw utilization and disposal methods as "pollution control facilities."

After alternative methods for field sanitation and straw utilization and disposal are approved by the Department of Environmental Quality, "pollution control facility," as defined in ORS 468.155, shall include such approved alternative methods and persons purchasing and utilizing such methods shall be eligible for the benefits allowed by ORS 468.155 to 468.190 and 468.962.

[1975 c.559 §15; 1999 c.59 §136]

Note: 468.150 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

Eligibility

OAR 340-016-0060 Eligibility

...

(4) Eligible Activities. ...

...

(b) Alternatives to Open Field Burning. The facility shall reduce or eliminate:

- (A) Open field burning and may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;
- (B) Air quality impacts from open field burning and may include propane burners or mobile field sanitizers; or

- (C) Grass seed acreage that requires open field burning. The facility may include:
- (i) Production of alternative crops that do not require open field burning;
 - (ii) Production of rotation crops that support grass seed production without open field burning; or
 - (iii) Drainage tile installations and new crop processing facilities.



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Director's Recommendation

Approve Application No. 6830

Applicant: T & P Farms, LLC

Certification of:

Facility Cost		\$74,185
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$25,965</u>

Certificate Period: 10 years

Pollution Control Facility: Alternative to Field Burning

Final Certification

ORS 468.150 -- 468.190

OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 9068
Brooks, OR 97305

Organized as: LLC

Taxpayer ID: 93-6084519

Facility Identification

9410 Portland Road NE
Brooks, OR 97305

The certificate will identify the facility as:

One 50'x150'x22' steel clearspan straw storage building

Technical Information

T & P Farms, LLC is a grass seed grower in Marion County. The applicant claims a 50 'x 150' x 22' steel clearspan building with gravel floor to provide dry storage of baled straw. The storage capacity of the building is 500 tons of straw. The applicant grows 245 acres of tall fescue grass seed on the 275 acre farm. The resulting grass straw averages three tons per acre. One hundred seventy acres have been removed from open field burning by the use of the storage building.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

DEQ will report the following information to the Department of Revenue: T & P Farms, LLC **owns** the business that uses the grass seed acreage that requires the alternative to open field burning.

Eligibility**Timely Filing**

2001 Edition ORS
468.165(6)

Criteria

The applicant must submit the final application after completing construction of the facility and placing it into service. If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date.

Applied to this Application

The applicant **timely filed** the application within the one-year filing requirement. The applicant submitted the application after completing construction and placing the facility into service on 7/1/2004. The applicant completed construction or installation of the claimed facility on **3/1/2004** and submitted the application on **9/17/2004**.

Purpose: Required

ORS 468.155
(1)(a)(A)
OAR 340-016-
0060(2)(a)

Criteria

The sole purpose of the new facility is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Air Pollution" is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005

Applied to this Application

The primary and most important purpose of the building is to comply with OAR 340-266-0060 by reducing the maximum acreage that will be open-burned and to reduce air pollution.

Method

ORS 468.150
OAR 340-016-0060
(4)(b)

Criteria

Alternatives to Open Field Burning. The facility must reduce or eliminate:

- (a) Open field burning and may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;
- (b) Air quality impacts from open field burning and may include propane burners or mobile field sanitizers; or

(c) Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Applied to this Application

The straw storage building is an approved alternative method for field sanitation and straw utilization and disposal. The effects of field burning meet the definition of an air contaminant as defined by ORS 468A.005:

Dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof.

Exclusions Criteria

ORS 468.155(3) The regulations exclude over 40 items from the definition of a Pollution Control Facility. Any items that do not meet the definition are ineligible for certification.
OAR 340-016-0070(3)

Applied to this Application

There are **no exclusions**.

Replacement Criteria

ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions. The applicant replaced the facility:

1. because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. before the end of its useful life.

Applied to this Application

The State of Oregon has issued **One** Pollution Control Facilities Tax Credit Certificate to the applicant at this location. The claimed facility is **not a replacement** of this previously certified facility.

Maximum Credit Criteria

ORS 468.173(3)(f) The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the **certified cost does not exceed \$200,000**.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 9/17/2004, and the certified facility cost is \$74,185.

Facility Cost

- | | |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subtractions | <u>Criteria</u> |
| OAR 340-016-0070(1) | The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include: <ul style="list-style-type: none"> a) the salvage value of a pre-existing facility if the applicant is replacing a facility; b) the amount of any government grants received to pay part of the facility cost; c) the present value of any other state tax credits for which the investment is eligible; and d) ineligible costs as set forth in OAR 340-016-0070(3). |

Applied to this Application

There are **no subtractions**.

- | | |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| \$ Certification | <u>Criteria</u> |
| ORS 468.170(1) | The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility. |

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$74,185
	No deductions	0
	Certified	\$74,185

Facility Cost Allocable to Pollution Control

- | | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| % Certification | <u>Criteria</u> |
| ORS 468.170(1) | The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution. |

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

- | | |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Percentage | <u>Criteria</u> |
| ORS 468.190(1) | The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000. <ul style="list-style-type: none"> a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity; b. The estimated annual percent return on the investment in the facility; |

- c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
- d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
- e. Any other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above, and a twenty-year useful life. The claimed facility stores straw, a salable and useable commodity. The applicant's straw, however, does not have revenue or cost savings associated with it. The expenditures exceed the revenue, therefore the resulting facility ROI is less than the National ROI for 2004, the facility's completion year. The applicant did not investigate an alternative technology.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Director's Recommendation

Approve Application No.6832

Applicant: **Veldon D. Kropf**

Certification of:

Facility Cost		\$198,155
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$69,354</u>

Certificate Period: **10 years**

Pollution Control Facility: Alternative to Field Burning

Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

25070 Peoria Road
Harrisburg, OR 97446

Organized as: **Sole Proprietor**

Facility Identification

Same as the applicant's address.

The certificate will identify the facility as:

**One 128' x 200' steel storage building with
concrete base**

Technical Information

Veldon D. Kropf is a grass seed grower in Linn County, Oregon. He is claiming a 128' x 200' steel storage building with a concrete base. This building is used for storing grass seed straw until it can be shipped to Korea and Japan for sale as cattle feed. The facility can store up to 3,000 tons (1,000 acres) of straw.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

DEQ will report the following information to the Department of Revenue:
Veldon D. Kropf **owns** the business that uses the grass seed acreage that requires the alternative to open field burning.

Eligibility**Timely Filing**

2001 Edition ORS
468.165(6)

Criteria

The applicant must submit the final application after completing construction of the facility and placing it into service. If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within **one year** after the construction completion date.

Applied to this Application

The applicant **timely filed** the application within the one-year filing requirement. The applicant submitted the application after completing construction and placing the facility into service on 7/12/2004. The applicant completed construction or installation of the claimed facility on **6/23/2004** and submitted the application on **9/27/2004**.

Purpose: Required

ORS 468.155
(1)(a)(A)
OAR 340-016-
0060(2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Air Pollution" is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005

Applied to this Application

The primary and most important purpose of the building is to comply with OAR 340-266-0060 by reducing the maximum acreage that will be open-burned and to reduce air pollution.

Method

ORS 468.150
OAR 340-016-0060
(4)(b)

Criteria

Alternatives to Open Field Burning. The facility must reduce or eliminate:

- (a) Open field burning and may include equipment, facilities, and land for gathering, densifying, handling, **storing**, transporting and incorporating grass straw or straw based products;
- (b) Air quality impacts from open field burning and may include propane burners or mobile field sanitizers; or
- (c) Grass seed acreage that requires open field burning. The facility may

include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Applied to this Application

The straw storage building is an **approved alternative method** for field sanitation and straw utilization and disposal. The effects of field burning **meet the definition of** an air contaminant as defined by ORS 468A.005:

Dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof.

Exclusions Criteria

ORS 468.155(3) The regulations exclude over 40 items from the definition of a Pollution Control
OAR 340-016- Facility. Any items that do not meet the definition are ineligible for certification.
0070(3)

Applied to this Application

There are **no exclusions**.

Replacement Criteria

ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions. The applicant replaced the facility:

1. because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. before the end of its useful life.

Applied to this Application

The claimed facility is **not a replacement** facility.

Maximum Credit Criteria

ORS 468.173(3)(f) The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively, and the certified cost **does not exceed \$200,000**.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 9/27/2004, and the certified facility cost is **\$198,155**.

Facility Cost

- Subtractions** Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:
- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
 - b) the amount of any government grants received to pay part of the facility cost;
 - c) the present value of any other state tax credits for which the investment is eligible; and
 - d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

- \$ Certification** Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents **the taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
	No deductions	\$198,155
		0
		Certified
		\$198,155

Facility Cost Allocable to Pollution Control

- % Certification** Criteria
 ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

- Percentage** Criteria
 ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.
- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
 - b. The estimated annual percent return on the investment in the facility;

- c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
- d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
- e. Any other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above, and a 10-year useful life. The claimed facility stores straw, a salable and useable commodity. The applicant receives revenue from the sale of the straw to Korea and Japan. The expenditures do not exceed the revenue, however, the resulting facility ROI is less than the National ROI for 2004, the facility's construction completion year. The applicant did not investigate an alternative technology.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey

BACKGROUND

APPROVALS: Material Recovery Facilities

The Department recommends that the EQC certify 8 material recovery facility summarized below and represented in the attached Review Report.

Summary of Material Recovery Facilities

App #	Applicant	Certified	% Allocable	Maximum Percent	GF Liability
6719	East County Recycling Company	\$250,082	100%	35%	\$87,529
6731	Bank of the West, Equipment Leasing	\$560,000	100%	35%	\$196,000
6766	Newberg Garbage Service, Inc.	\$39,878	100%	35%	\$13,957
6799	Far West Fibers, Inc.	\$1,063,007	92%	35%	\$342,288
6807	Bend Garbage Company, Inc.	\$139,145	100%	35%	\$48,701
6810	Miller Associated Enterprises, Inc.	\$73,578	100%	35%	\$25,752
6819	J-CAD Equipment Leasing, LLC	\$346	100%	35%	\$121
6820	J-CAD Equipment Leasing, LLC	\$32,200	100%	35%	\$11,270
8 Apps		Sum	2,158,236		725,618
		Average	269,780		90,702
		Minimum	346		121
		Maximum	1,063,007		342,288

Statutory Definition of "Material Recovery"

ORS 468.155 Definitions for ORS 468.155 to 468.190 and 468.962

...

(b) Such prevention, control or reduction required by this subsection shall be accomplished by:

...

(D) The use of a material recovery process which obtains useful material from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 459A.555; or ...

Eligibility

OAR 340-016-0060 Eligibility

...

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate:

...

(d) Hazardous Waste, Solid Waste and Used Oil Material Recovery. The facility shall eliminate or obtain useful material from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 468.850. The facility shall produce an end product of utilization that is an item of real economic value and is competitive with an end product produced in another state. The facility shall produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation, or use of materials which:

- (A) Have useful chemical or physical properties which may be used for the same or other purposes; or
- (B) May be used in the same kind of application as its prior use without change in identity.



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 20096
Portland, OR 97294

Organized as: **C Corp**
Taxpayer ID: **93-0915760**

Technical Information

East County Recycling Company owns Nature's Needs, an organic waste recycling and soil amendment manufacturing facility, located in North Plains, Oregon. The company accepts pre-consumer vegetative waste from grocery stores and food processors, and wood debris from landscapers. From this waste material, the applicant produces Oregon Materials Review Institute (OMRI) approved organic humus. The claimed facility is an Ag-Bag Encapsulator that feeds the organic waste through its hopper into long plastic tubes called EcoPODs. The encapsulator seals the EcoPODs (not claimed) to contain odors and juices during the first twelve weeks of active decomposition. The applicant also claims thirty-three fans and timers and two perforated pipes to distribute air through the organic waste for the length of each of the thirty-three EcoPods.

Director's Recommendation

Approve Application No. 6719

Applicant: East County Recycling Company

Certification of:

Facility Cost		\$250,082
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$87,529</u>

Certificate Period: **7 years**

Facility Identification

12409 NE San Rafael
Portland, OR 97230

The certificate will identify the facility as:

**Ag-Bag Environmental EcoPOD System
Model CT10, Serial #638-02**

Taxpayer Allowed CreditORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or
- c. Person who, as an owner, including a contract purchaser, or lessee, owns or leases a pollution control facility that is used for recycling, material recovery or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: East County Recycling Company **owns** the claimed facility that they use for recycling or material recovery.

Eligibility**Timely Filing** Criteria2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into operation.

Applied to this Application

The applicant **timely filed** the application. The applicant completed construction or installation of the claimed facility on **9/9/2003** and submitted the application on **3/26/2004**. The applicant also submitted the application after completing construction and placing the facility into operation on **9/9/2003**.

Purpose: Voluntary CriteriaORS 468.155 (1)(a)(B)
OAR 340-016-0010(7)(a)(b)

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

The claimed facility processes an average of **295 tons** of organic waste per week. The encapsulator is part of a material recovery process that converts this waste into organic humus for soil amendment.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(D)	The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value.

OAR 340-016-0010(7)	<u>Criteria</u>
OAR 340-016-0060(4)(e)	The facility must produce an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation , or use of materials which:

- a. Have useful chemical or physical properties and which may be used for the same or other purposes: or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

The encapsulator is part of a process that reduces organic waste and produces humus. The applicant sells the humus at a competitive price to nurseries, landscapers, farmers, organic growers, and homeowners who use it as a soil amendment.

Exclusions	<u>Criteria</u>
ORS 468.155(3) OAR 340-016-0070(3)	The regulations exclude over 40 items from the definition of a Pollution Control Facility. Any items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement	<u>Criteria</u>
ORS 468.155(3)(e)	The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions:

1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The State of Oregon has issued **one** Pollution Control Facilities Tax Credit Certificate to the applicant at this location. The claimed facility is **not a replacement** of this previously certified facility.

Maximum Credit	<u>Criteria</u>
ORS 468.170(3)(d) ORS 468.155(1)(b)(D)	The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively, and the facility is used for material recovery or recycling , as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 3/26/04 and completed construction of the material recovery facility on 9/9/03.

Facility Cost

Subtractions	<u>Criteria</u>
OAR 340-016-0070(1)	The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include: <ol style="list-style-type: none"> a) the salvage value of a pre-existing facility if the applicant is replacing a facility; b) the amount of any government grants received to pay part of the facility cost; c) the present value of any other state tax credits for which the investment is eligible; and d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

§ Certification Criteria

ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
	No deductions	\$250,082
		0
		Certified
		\$250,082

Facility Cost Allocable to Pollution Control**% Certification** Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Integral Facility* and *Percentage* subsections below.

Integral Facility Criteria

OAR 340-016-0075 (4)(a) Facilities that are integral to the applicant's business must use an alternate method for calculating the percentage of the facility cost that is allocable to pollution control if the facility cost exceeds \$50,000. Examples of integral facilities include commercial solid waste and hazardous waste landfills, solid waste and hazardous waste recycling businesses, and environmental service providers.

The Commission may determine that a business is integral to the operation of the applicant's business if the business is unable to operate or is only able to operate at reduced income levels.

The rule requires the Commission to use the following factors to determine whether a pollution control facility is integral to the operation of the applicant's business.

- a. The facility represents 25 percent or more of the total assets of the applicant's business; or
- b. The facility was constructed or installed in response to market demand for such pollution control facilities such as requirements imposed by DEQ, EPA or LRAPA or parties unaffiliated with the applicant; or
- c. Where the facility allows the applicant to generate gross revenues at least 50%

greater than could be or were without the facility; or

- d. The applicant's operating expenses for the facility are at least 50% of the operating expenses for the applicant's entire business.

Applied to this Application

The facility is **not integral** to the applicant's business.

Percentage
ORS 468.190(1)

Criteria

The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.

- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
- b. The estimated annual percent return on the investment in the facility;
- c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
- d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
- e. Any other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above. The applicant uses the claimed facility to convert green waste into humus. The expenditures exceed the estimated revenue associated with the Ag-Bag Environmental EcoPOD; therefore, the facility does not have a positive ROI. This means the Facility ROI is less than the National ROI for 2003 (the year the applicant constructed the facility). The applicant investigated placing the materials in windrows but the local community objected. The facility is 100% allocable to material recovery or recycling.

Compliance

ORS 468.180(1)

Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer:

Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

300 S. Grand Avenue
Mail Code: SC-CAL-06-A
Los Angeles, CA 90071

Organized as: **C Corp**
Taxpayer ID: **94-0475440**

Technical Information

Bank of the West is a commercial banking and lending institution. The bank claims a solid waste reducer and a powerscreen which it leases to East County Recycling (ECR). ECR is a Metro licensed material recovery facility that processes dry waste from commercial and residential generators throughout the Portland metropolitan area. The Primary Waste Reducer (PWR) can process up to 150 tons of material an hour. It rips and shears the solid waste to reduce it to about 20% of its previous volume. The Trommel separates reduced material, sending the larger materials back through the PWR for additional sorting on the smaller materials.

Director's Recommendation

Approve Application No. 6731

Applicant: Bank of the West

Certification of:

Facility Cost		\$560,000
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$196,000</u>

Certificate Period: **10 years**

Facility Identification

East County Recycling Company
12409 NE San Rafael
Portland, OR 972794

The certificate will identify the facility as:

- One Shredding Systems Primary Waste Reducer, Model PR-4000M, Serial #PR-4000N-102**
- One Powerscreen Trommel, Model 725LL, Serial #9501098**

Taxpayer Allowed CreditORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or
- c. Person who, as an owner, including a contract purchaser, or lessee, owns or leases a pollution control facility that is **used for recycling, material recovery** or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Bank of the West **owns** the claimed facility which it leases to East County Recycling where it is used for recycling and material recovery.

Eligibility**Timely Filing** Criteria

2001 Edition ORS 468.165(6) If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into service.

Applied to this Application

The applicant **timely filed** the application. The applicant purchased the claimed facility on **7/13/2003**, and submitted the application on **4/15/2004**. The applicant also submitted the application after purchasing the facility and placing it into service on **7/18/2003**.

Purpose: Voluntary Criteria

ORS 468.155 (1)(a)(B) The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.
OAR 340-016-0010(7)(a)(b)

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

ECR previously sent about 30,000 tons of incoming dry material to Wasco County Landfill each year. This material was either too large to market or it was captured in other materials that made it too labor intensive to separate. An example of this is separating fibers, wood, and metal contained in a box-spring mattress. The reducer and trommel will recover approximately **21,000 tons (70%)** of material that previously went to the landfill each year. The applicant sends recovered materials such as wood, plastic, fibers, glass, and metals to the appropriate processor for use as feedstock.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(D)	The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value.

OAR 340-016- 0010(7)	<u>Criteria</u>
OAR 340-016- 0060(4)(e)	The facility produces an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation , or use of materials which:

- a. Have useful chemical or physical properties and which may be used for the same or other purposes; or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

The reducer and trommel recover materials through a process of reduction that allows the applicant to segregate materials into their recyclable parts. The applicant recovers materials such as metal, fibers, wood, plastic, and glass for use as feedstock to produce new products.

Exclusions	<u>Criteria</u>
ORS 468.155(3) OAR 340-016- 0070(3)	The regulations exclude over 40 items from the definition of a Pollution Control Facility. Any items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement Criteria
 ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions:

1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The claimed facility is **not a replacement** facility. The State of Oregon has issued **no** Pollution Control Facilities Tax Credit Certificates to Bank of the West, the applicant, at this location. The EQC has issued **two** certificates to ECR at this location.

Maximum Credit Criteria
 ORS 468.170(3)(d) The maximum tax credit is 35% if the applicant submitted the application between
 ORS January 1, 2002, and December 31, 2008, inclusively, and the facility is used **for**
 468.155(1)(b)(D) **material recovery or recycling**, as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 4/15/2004, and the facility is used in a material recovery process.

Facility Cost

Subtractions Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

§ Certification Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the taxpayer's own cash investment.

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
	No deductions	\$560,000
		0
		Certified
		\$560,000

Facility Cost Allocable to Pollution Control**% Certification** Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

Integral Facility Criteria

OAR 340-016-0075

(4)(a)

Facilities that are integral to the applicant's business must use an alternate method for calculating the percentage of the facility cost that is allocable to pollution control if the facility cost exceeds \$50,000. Examples of integral facilities include commercial solid waste and hazardous waste landfills, solid waste and hazardous waste recycling businesses, and environmental service providers.

The Commission may determine that a business is integral to the operation of the applicant's business if the business is unable to operate or is only able to operate at reduced income levels.

The rule requires the Commission to use the following factors to determine whether a pollution control facility is integral to the operation of the applicant's business.

- a. The facility represents 25 percent or more of the total assets of the applicant's business; or
- b. The facility was constructed or installed in response to market demand for such pollution control facilities such as requirements imposed by DEQ, EPA or regional air pollution authority on parties unaffiliated with the applicant; or
- c. Where the facility allows the applicant to generate gross revenues at least 50% greater than could be or were without the facility; or
- d. The applicant's operating expenses for the facility are at least 50% of the operating expenses for the applicant's entire business.

Applied to this Application

The facility is **not integral** to Bank of the West's business.

Percentage	Criteria
ORS 468.190(1)	<p>The following factors establish the portion of costs properly allocable to material recovery or recycling if the facility cost exceeds \$50,000.</p> <ol style="list-style-type: none"> a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity; b. The estimated annual percent return on the investment in the facility; c. Any alternative methods, equipment, and costs for achieving the same pollution control objective; d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and e. Any other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above and a ten-year useful life. The claimed facility allows ECR to recycle a substantial quantity of solid waste into recyclable material. Bank of the West included the lease income and the expenditures associated with servicing the loan to determine its return on investment (ROI). The resulting facility ROI is less than the National ROI for 2003, the facility's construction completion year. ECR did not investigate an alternative technology.

Compliance

ORS 468.180(1)	<p><u>Criteria</u></p> <p>The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.</p>
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Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190

OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 1000
Newberg, OR 97132

Organized as: **S Corp**

Taxpayer ID: **93-0625804**

Technical Information

Newberg Garbage Service, Inc. is a residential and commercial solid waste collector and recycler in Yamhill County. The applicant claims 284 95-gallon roll carts, 61 2-yard rear load containers, and 32 used 2-yard recycling containers made of steel. The company is placing the containers at its commercial customers' sites in Newberg and Dundee. The containers allow the applicant to collect commingled recycling materials on a weekly basis.

Director's Recommendation

Approve Application No. **6766 @ Reduced Cost**

Applicant: **Newberg Garbage Service, Inc.**

Certification of:

Facility Cost		\$39,878
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		\$13,957

Certificate Period: **5 years**

Facility Identification

2904 S Wynooki
Newberg, OR 97132

The certificate will identify the facility as:

- 284 95-gallon roll carts, Serial #s 9009328-9009527 and 9009628-9009711;**
- 61 2-yard rearload red containers, Serial #s 181350-181355, 182074-182079, 182369-182378, 182702-182726, and 183868-183881;**
- 32 Used 2-yard recycling containers**

Taxpayer Allowed CreditORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or

Person who, as an owner, including a contract purchaser, or lessee, owns or leases a pollution control facility that is **used for recycling, material recovery** or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Newberg Garbage Service, Inc. **owns** the claimed facility that they use for recycling or material recovery.

Eligibility**Timely Filing** Criteria

2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into service.

Applied to this Application

The applicant **timely filed** the application. The applicant purchased the claimed facility on **11/1/2003** and submitted the application on **5/25/2004**. The applicant also submitted the application after purchasing the facility and placing it into service on 11/1/2003.

Purpose: Voluntary Criteria

ORS 468.155
(1)(a)(B)
OAR 340-016-
0010(7)(a)(b)

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

The claimed facility reduces a substantial quantity of solid waste by increasing the amount of recyclable material collected from commercial customers to an estimated **210 tons per year**. The commingled containers increased participation in the program.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(D)	The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value.

OAR 340-016- 0010(7)	<u>Criteria</u> The facility produces an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation , or use of materials which:
OAR 340-016- 0060(4)(e)	

- a. Have useful chemical or physical properties and which may be used for the same or other purposes: or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

Applicant collects recyclable material consisting of cardboard, glass, tin cans, newspaper, office paper, magazines, milk jugs and scrap paper for sorting and selling to the appropriate recycling mills.

Exclusions	<u>Criteria</u>
ORS 468.155(3)	The regulations exclude over 40 items from the definition of a Pollution Control Facility. Any items that do not meet the definition are ineligible for certification
OAR 340-016- 0070(3)	

Applied to this Application

There are **no exclusions**.

Replacement	<u>Criteria</u>
ORS 468.155(3)(e)	The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions:

1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The State of Oregon has issued **eighteen** Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of these previously certified facilities.

Maximum Credit

ORS 468.170(3)(d)

ORS

468.155(1)(b)(D)

Criteria

The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively, and the facility is **used for material recovery or recycling**, as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 5/25/2004, and the facility is used in a material recovery process.

Facility Cost

Subtractions

OAR 340-016-

0070(1)

Criteria

The applicant must provide documents that substantiate the claimed facility cost.

The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

\$ Certification

ORS 468.170(1)

Criteria

The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

The applicant claims costs associated with constructing containers but was unable to provide proof in May of 2003 because there was no invoice or proof of payment. Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$42,682
	No invoices provided	-2,804
	Certified	\$39,878

Facility Cost Allocable to Pollution Control

% Certification Criteria

ORS 468.190(3) If the cost of the facility (or facilities certified under one certificate) 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 solid waste bears to the entire time the facility is used for any purpose.

Applied to this Application

The certified facility cost is **\$39,878**. The applicant uses the facility **100%** of the time for collecting recyclable solid waste products.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190

OAR 340-016-0005 -- 340-016-0080

Applicant Identification

6440 SE Alexander
Hillsboro, OR 97123

Organized as: **C Corp**

Taxpayer ID: **93-0788493**

Technical Information

Far West Fibers, Inc. owns a material recovery facility. The applicant modified its sorting operations. The applicant claims two screens, an old newsprint (ONP) separator, and three conveyors. The claimed facility increases the quantity and improves the quality of materials obtained from commingled residential and commercial waste. The system mechanically separates cardboard from other recyclables. The applicant ships baled and loose cardboard to recyclable material brokers and packing plants which separate commingled residential and commercial recyclables into market-ready bales of paper.

Director's Recommendation

Approve Application No. 6799

Applicant: **Far West Fibers, Inc.**

Certification of:

Facility Cost		\$1,063,007
Percentage Allocable	X	92%
Maximum Percentage	X	35%
Tax Credit		<u>\$342,288</u>

Certificate Period: **5 years**

Facility Identification

Same as the applicant's address.

The certificate will identify the facility as:

- One Lubo Starscreen, Type 1240-2000/330, 6'7" x 4'1", with a screen size of 2";**
- One Lubo Starscreen Type 660-1640x9000, 29'6" x 5'5";**
- One Lubo ONP Separator;**
- One Conveyor C11 Krause 48" Trough Style Slider 30' long;**
- One Conveyor C12 Krause 60" Trough Style slider 82' long;**
- One Conveyor C13 Krause 60" Trough Style slider 35' long**

Taxpayer Allowed CreditORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or
- c. Person who, as an owner, including a contract purchaser, or lessee, **owns** or leases a pollution control **facility** that is used **for recycling, material recovery** or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Far West Fibers, Inc. **owns** the claimed facility that they use for recycling or material recovery.

Eligibility**Timely Filing** Criteria

2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into service.

The commission may grant an extension of time to file an application for circumstances beyond the control of the applicant that would make timely filing unreasonable.

Applied to this Application

The Environmental Quality Commission approved Far West Fiber's request for an extension of time to file its application. (July 16, 2004 EQC Meeting, Agenda Item G. – see Exhibit A for the report) The applicant **timely filed** the application on **July 20, 2004**. The applicant completed construction or installation of the claimed facility on 10/1/2002 and placed the facility into service on the same day.

Purpose: Voluntary Criteria

ORS 468.155
(1)(a)(B)
OAR 340-016-
0010(7)(a)(b)

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and **non-putrescible materials**, including but not limited to garbage, **rubbish**, refuse, ashes, **paper and cardboard**, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

The claimed facility recycles an average of **9,500 tons per month** of solid waste. This new facility has increased the operating efficiency rate from 8 to 10 tons per hour to **twenty-two tons per hour**. The facility receives and processes commingled materials and mechanically separates cardboard from the other recyclables and old newsprint from metals and plastics.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(D)	The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value.

<u>Criteria</u>	
OAR 340-016-0010(7) OAR 340-016-0060(4)(e)	The facility produces an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation, or use of materials which:

- a. Have useful chemical or physical properties and which may be used for the same or other purposes: or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

The claimed facility is a system of sorting and grading lines to meet market specifications. The applicant separates commodities for pulp mills (paper, cardboard, newspaper, metal, plastic and fines), steel mills, and export markets.

Exclusions Criteria
 ORS 468.155(3) The regulations exclude over 40 items from the definition of a Pollution Control
 OAR 340-016- Facility. Any items that do not meet the definition are ineligible for certification.
 0070(3)

Applied to this Application

There are **no exclusions**.

Replacement Criteria
 ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions:

1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The claimed facility is **not a replacement** facility.

Maximum Credit Criteria
 ORS 468.170(3)(d) The maximum tax credit is 35% if the applicant submitted the application between
 ORS January 1, 2002, and December 31, 2008, inclusively, and the facility is **used for**
 468.155(1)(b)(D) **material recovery or recycling**, as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 7/20/2004, and the facility is used in a material recovery process.

Facility Cost

Subtractions Criteria
 OAR 340-016- The applicant must provide documents that substantiate the claimed facility cost.
 0070(1) The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

\$ Certification Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
		\$1,191,706
	Deducted missing documentation at applicant's request	-128,699
		Certified
		\$1,063,007

Facility Cost Allocable to Pollution Control**% Certification** Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste.

Applied to this Application

The Department determined that **92%** of the facility cost is allocable to pollution control as discussed in the *Integral Facility and Percentage* subsections below.

Integral Facility Criteria

OAR 340-016-0075 (4)(a) Facilities that are integral to the applicant's business must use an alternate method for calculating the percentage of the facility cost that is allocable to pollution control if the facility cost exceeds \$50,000. Examples of integral facilities include commercial solid waste and hazardous waste landfills, solid waste and hazardous waste recycling businesses, and environmental service providers.

The Commission may determine that a business is integral to the operation of the applicant's business if the business is unable to operate or is only able to operate at reduced income levels.

The rule requires the Commission to use the following factors to determine whether a pollution control facility is integral to the operation of the applicant's business.

- a. The facility represents 25 percent or more of the total assets of the applicant's business; or
- b. The facility was constructed or installed in response to market demand for such pollution control facilities such as requirements imposed by DEQ, EPA or regional air pollution authority on parties unaffiliated with the applicant; or
- c. Where the facility allows the applicant to generate gross revenues at least 50% greater than could be or were without the facility; or
- d. The applicant's operating expenses for the facility are at least 50% of the operating expenses for the applicant's entire business.

Applied to this Application

The facility is **integral** to the applicant's business because the applicant's gross revenues are at least 50% greater than could be or were without the facility.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the integral method in OAR 340-016-0075(4)(a). The Industry ROI for 2002, the facility's construction completion year, is greater National ROI. The comparison of the two returns on investments in the calculation results in 92% of the facility cost **allocable** to pollution control. The facility has a five-year useful life. The claimed facility allows the applicant to convert a substantial quantity of solid waste into different grades of paper (useable commodity). The applicant did not investigate an alternative technology.

ComplianceORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey, DEQ

Date: June 24, 2004
To: Environmental Quality Commission
From: Stephanie Hallock, Director *S. Hallock*
Subject: Agenda Item G, Action Item: Tax Credit Consideration
July 16, 2004 EQC Meeting

Proposed Action Approve or deny Far West Fibers, Inc.'s request for an extension of time to file a Pollution Control Facilities Tax Credit application.

Key Issues Far West Fibers, Inc. requested that the Environmental Quality Commission (EQC, Commission.) grant an extension of time to file an application in its letter dated March 29, 2004 (Attachment A - Exhibit A.)

Prior to the rule changes made by the Commission at the May 21, 2004 EQC meeting, the Department of Environmental Quality's (DEQ, Department) rule was inconsistent with state law with regard to timelines for filing deadlines. Having relied solely on the Department's rule without reference to the statute, the application, or other program resources, Far West Fibers Inc. mistakenly thought they had two years after completing construction of their material recovery facility to file a Pollution Control Facilities Tax Credit application rather than the one-year provided by state law.

EQC Action Alternatives ORS 469.165 provides, "The commission may grant an extension of time to file an application for circumstances beyond the control of the applicant¹ that would make a timely filing unreasonable."

The EQC may either

- Approve the request, in which case the Department would review the application and submit its report to the Commission at a future, regularly scheduled EQC meeting for action, or
- Deny the request, in which case the applicant may seek judicial review of the Commission's findings according to ORS 468.110 and ORS 183.484.

Department Recommendation The Department recommends the Commission approve the request for an extension of time to file an application.

Exhibit A

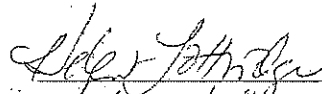
¹ "Circumstances Beyond the Control of the Applicant" means facts, conditions and circumstances which the applicant's due care and diligence would not have avoided. [OAR 340-016-0010(2)]

Attachments A. Request for Extension
 Exhibit A – Letter Requesting Extension
 Exhibit B – Application Excerpt
 Exhibit C – Application Instructions Excerpt

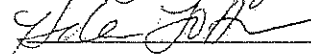
Available Upon Request ORS 468.150 to 468.190; OAR 340-016-0005 to 340-016-0080; ORS 468.110; and ORS 183.484

Approved:

Section:



Division:



Report Prepared By: Maggie Vandehey
Phone: 503-229-6878



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

61480 Parrell Road
Bend, OR 97702

Organized as: **S Corp**
Taxpayer ID: **93-0890916**

Technical Information

Bend Garbage Company, Inc. is a garbage and recycling hauler which provides weekly curbside pickup to residential customers in Bend, Oregon. The claimed facility is an International Truck with a sideloader. The sideloader has a 60/40 split body configuration which separates the glass from the other commingled recyclables. The unit has a pre-crusher panel for crushing large bulky items prior to being swept into the sideloader body.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or
- c. Person who, as an owner, including a contract purchaser, or lessee, owns or leases a pollution control facility that is used for **recycling, material**

Director's Recommendation

Approve Application No. **6807**

Applicant: **Bend Garbage Company, Inc.**

Certification of:

Facility Cost		\$139,145
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$48,701</u>

Certificate Period: **5 years**

Facility Identification

Same as the applicant's address.

The certificate will identify the facility as:

**One 2003 International Truck, Model 7400,
Serial #1HTWCAAN63J071433, with a
Labrie Expert 2000 22-yard Sideloader,
Serial #CL03104NVS**

recovery or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Bend Garbage Company, Inc. **owns** the claimed facility that they use for recycling or material recovery.

Eligibility

Timely Filing

2001 Edition ORS
468.165(6)

Criteria

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into service.

Applied to this Application

The applicant **timely filed** the application. The applicant purchased the claimed facility on **9/5/2003** and submitted the application on **8/9/2004**. The applicant also submitted the application after purchasing the facility and placing it into service on 9/5/2003.

Purpose: Voluntary

ORS 468.155
(1)(a)(B)
OAR 340-016-
0010(7)(a)(b)

Criteria

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

The claimed facility reduces, prevents, or controls a substantial quantity of solid waste. The amount of glass collected annually increased from 459 tons in 2002 to **552 tons (20%) in 2003** and the amount of commingled materials collected annually increased from 1,665 tons in 2002 to **2,154 tons (30%) in 2003**.

Method

ORS 468.155
(1)(b)(D)

Criteria

The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a

specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value.

OAR 340-016- Criteria

0010(7)

The facility produces an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation, or use of materials which:

OAR 340-016-

0060(4)(e)

- a. Have useful chemical or physical properties and which may be used for the same or other purposes: or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

The truck is used to collect paper, glass, plastic and metal. The applicant then sorts the material at the recycling center and ships it to manufacturers or mills for use in products that have a competitive end-use.

Exclusions Criteria

ORS 468.155(3)

OAR 340-016-

0070(3)

The regulations exclude over 40 items from the definition of a Pollution Control Facility. Any items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement Criteria

ORS 468.155(3)(e)

The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions:

1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The claimed facility is **not a replacement** facility.

Maximum Credit Criteria

ORS 468.170(3)(d)

ORS

468.155(1)(b)(D)

The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively, and the facility is used for **material recovery or recycling**, as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 8/9/2004, and the facility is used in a material recovery process.

Facility Cost

- | Subtractions | <u>Criteria</u> |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OAR 340-016-0070(1) | <p>The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:</p> <ul style="list-style-type: none"> a) the salvage value of a pre-existing facility if the applicant is replacing a facility; b) the amount of any government grants received to pay part of the facility cost; c) the present value of any other state tax credits for which the investment is eligible; and d) ineligible costs as set forth in OAR 340-016-0070(3). |

Applied to this Application

There are **no subtractions**.

- | \$ Certification | <u>Criteria</u> |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORS 468.170(1) | The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility. |

Applied to this Application

Invoices substantiated the eligible facility cost. The cost documentation indicates that the cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$139,145
	No deductions	0
	Certified	\$139,145

Facility Cost Allocable to Pollution Control

- | % Certification | <u>Criteria</u> |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORS 468.170(1) | The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste. |

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

- | Integral Facility | <u>Criteria</u> |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OAR 340-016-0075
(4)(a) | Facilities that are integral to the applicant's business must use an alternate method for calculating the percentage of the facility cost that is allocable to pollution control if the facility cost exceeds \$50,000 . Examples of integral facilities include commercial solid waste and hazardous waste landfills, solid waste and hazardous waste recycling businesses, and environmental service providers. |

The Commission may determine that a business is integral to the operation of the applicant's business if the business is unable to operate or is only able to operate at reduced income levels.

The rule requires the Commission to use the following factors to determine whether a pollution control facility is integral to the operation of the applicant's business.

- a. The facility represents 25 percent or more of the total assets of the applicant's business; or
- b. The facility was constructed or installed in response to market demand for such pollution control facilities such as requirements imposed by DEQ, EPA or regional air pollution authority on parties unaffiliated with the applicant; or
- c. Where the facility allows the applicant to generate gross revenues at least 50% greater than could be or were without the facility; or
- d. The applicant's operating expenses for the facility are at least 50% of the operating expenses for the applicant's entire business.

Applied to this Application

The facility is **not integral** to the applicant's business.

Percentage	<u>Criteria</u>
ORS 468.190(1)	<p>The following factors establish the portion of costs properly allocable to material recovery or recycling if the facility cost exceeds \$50,000.</p> <ol style="list-style-type: none"> a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity; b. The estimated annual percent return on the investment in the facility; c. Any alternative methods, equipment, and costs for achieving the same pollution control objective; d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and e. Any other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above and a five-year useful life. The claimed facility allows the applicant to collect and presort solid waste for use as a salable commodity. The applicant used its estimated revenue from recycling rates charged to customers and the operating expenses of the facility to determine the facility's return on investment (ROI). The resulting facility ROI is less than the National ROI for 2003, the facility's purchase year. The applicant did not investigate an alternative technology.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 40097
Eugene, OR 97404

Organized as: **S Corp**
Taxpayer ID: **93-0941217**

Technical Information

Miller Associated Enterprises, Inc., doing business as Lane Garbage-Apex Disposal, is a garbage and recycling business in Lane County, Oregon. The claimed facility is 65-gallon grey yard debris roll carts with lids; 65-gallon green recycle roll carts with lids and 95-gallon green recycle roll carts with lids. The applicant distributes the roll carts to customers in the Eugene area for curbside collection.

Director's Recommendation

Approve Application No. 6810

Applicant: Miller Associated Enterprises, Inc.

Certification of:

Facility Cost		\$73,578
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$25,752</u>

Certificate Period: 7 years

Facility Identification

2399 Highway 99 North
Eugene, OR 97402

The certificate will identify the facility as:

**450 65-gallon yard debris roll carts,
Serial # Y003551-Y004000
1150 65-gallon recycle roll carts,
Serial # LAR000701-LAR001850
50 95-gallon recycle roll cart,
Serial # LAR 000001-LAR 000050**

Taxpayer Allowed CreditORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or
- c. Person who, as an owner, including a contract purchaser, or lessee, owns or leases a pollution control facility that is used for recycling, material recovery or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Miller Associated Enterprises, Inc. **owns** the claimed facility that they use for recycling or material recovery.

Eligibility**Timely Filing** Criteria

2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into service.

Applied to this Application

The applicant **timely filed** the application on **8/23/2004**. The applicant made the first purchase on **1/16/2004** and the last purchase on **7/9/2004**. The applicant also submitted the application after placing the facility into service on the dates of purchase.

Purpose: Voluntary Criteria

ORS 468.155
(1)(a)(B)
OAR 340-016-
0010(7)(a)(b)

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

The claimed facility reduces, prevents, or controls a substantial quantity of solid waste. The new yard-debris roll carts increased the collection of yard debris by **270.83 tons (25.5%)** over the last six months. The new recycling roll carts increased the amount of recyclable materials collected by **222.69 tons (17.8%)** over the last six months.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(D)	The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value. The material recovery process does not include processes:

- a. In which the major purpose is the production of fuel from solid waste, hazardous waste or used oil which can be utilized for heat content or other forms of energy; or
- b. That burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process that burns waste if such device is otherwise eligible for pollution control tax credit under these rules.

OAR 340-016-0010(7)	<u>Criteria</u>
OAR 340-016-0060(4)(e)	The facility produces an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation , or use of materials which:

- a. Have useful chemical or physical properties and which may be used for the same or other purposes: or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

The roll carts increase the amount of yard waste and commingled recyclable materials that the applicant collects and recycles for sorting and selling to the appropriate recycling mills.

Exclusions Criteria
 ORS 468.155(3) The regulations exclude over 40 items from the definition of a Pollution Control
 OAR 340-016- Facility. Any items that do not meet the definition are ineligible for certification.
 0070(3)

Applied to this Application

There are **no exclusions**.

Replacement Criteria
 ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution
 control facility is not eligible for the tax credit. There are two exceptions:

1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The State of Oregon has issued **three** Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of these previously certified facilities.

Maximum Credit Criteria
 ORS 468.170(3)(d) The maximum tax credit is 35% if the applicant submitted the application between
 ORS January 1, 2002 and December 31, 2008, inclusively, and the facility is used for
 468.155(1)(b)(D) **material recovery or recycling**, as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 8/23/2004, and the facility is used in a material recovery process.

Facility Cost

Subtractions Criteria
 OAR 340-016- The applicant must provide documents that substantiate the claimed facility cost.
 0070(1) The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

\$ Certification Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash

investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment.**

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
	No deductions	\$73,578
		0
		Certified
		\$73,578

Facility Cost Allocable to Pollution Control

% Certification Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

Integral Facility Criteria

OAR 340-016-0075 (4)(a) Facilities that are integral to the applicant's business must use an alternate method for calculating the percentage of the facility cost that is allocable to pollution control if the **facility cost exceeds \$50,000**. Examples of integral facilities include commercial solid waste and hazardous waste landfills, solid waste and hazardous waste recycling businesses, and environmental service providers.

The Commission may determine that a business is integral to the operation of the applicant's business if the business is unable to operate or is only able to operate at reduced income levels.

The rule requires the Commission to use the following factors to determine whether a pollution control facility is integral to the operation of the applicant's business.

- a. The facility represents 25 percent or more of the total assets of the applicant's business; or
- b. The facility was constructed or installed in response to market demand for such pollution control facilities such as requirements imposed by DEQ, EPA or regional air pollution authority on parties unaffiliated with the applicant; or
- c. Where the facility allows the applicant to generate gross revenues at least 50% greater than could be or were without the facility; or
- d. The applicant's operating expenses for the facility are at least 50% of the operating expenses for the applicant's entire business.

Applied to this Application

The facility is **not integral** to the applicant's business.

Percentage	Criteria
ORS 468.190(1)	<p>The following factors establish the portion of costs properly allocable to material recovery or recycling if the facility cost exceeds \$50,000.</p> <ol style="list-style-type: none">The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;The estimated annual percent return on the investment in the facility;Any alternative methods, equipment, and costs for achieving the same pollution control objective;Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; andAny other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above and a seven-year useful life. The applicant used their estimated revenue from the roll carts and the expenditures associated with these carts to determine the facility's return on investment (ROI). The resulting facility ROI is less than the National ROI for 2004, the facility's purchase year. The applicant did not investigate an alternative technology.

Compliance

ORS 468.180(1)	<p><u>Criteria</u></p> <p>The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.</p>
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Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190

OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 4397
Salem, OR 97302

Organized as: **LLC**
Taxpayer ID: **93-1298183**

Technical Information

J-CAD Equipment Leasing, LLC, an equipment rental and leasing company in Salem, Oregon, leases Eriez vibratory screens of different mesh sizes to West Coast Cryogrind, where they are used in conjunction with a Syncro-Sieve Screener. The different mesh sizes enable more precise sorting of the specific size particles of the recycled rubber that are reintroduced into new rubber compounds. The end-product is called Arenaground and is used as a surface material in horse arenas.

Director's Recommendation

Approve Application No. **6819 @ Reduced Cost**

Applicant: **J-CAD Equipment Leasing, LLC**

Certification of:

Facility Cost		\$346
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$ 121</u>

Certificate Period: **7 years**

Facility Identification

2025 Hyacinth Street NE
Salem, OR 97303

The certificate will identify the facility as:

**One Eriez vibratory screen for Syncro-Sieve
Screener:**

50 Mesh TBC SSZ 4" CNTR

Taxpayer Allowed CreditORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or
- c. Person who, as an owner, including a contract purchaser, or lessee, owns or leases a pollution control facility that is used for **recycling, material recovery** or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: J-CAD Equipment Leasing, LLC **owns** the claimed facility which they lease to West Coast Cryogrind where it is used in a recycling or material recovery process.

Eligibility**Timely Filing** Criteria

2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into service.

Applied to this Application

The applicant **timely filed** the application for one of the screens ((50M TBC-SSZ). The applicant purchased the screen on **1/20/2004** and submitted the application on **9/7/2004**. The applicant also submitted the application after placing the facility into service on 1/20/2004. However, the applicant purchased the other two screens (60M TBC-SSZ and 80M TBC-SSZ) in July 2003, beyond the one year filing period. The Department deducted the cost of the two screens from the *Facility Cost* section below.

Purpose: Voluntary Criteria

ORS 468.155
(1)(a)(B)
OAR 340-016-
0010(7)(a)(b)

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or

animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

The vibratory screen separates recycled rubber granules for reintroduction into new rubber compounds. The screen processes **325 pounds** of scrap rubber per hour.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(D)	The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value.

OAR 340-016-0010(7)	<u>Criteria</u>
OAR 340-016-0060(4)(e)	The facility produces an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation, or use of materials which:

- a. Have useful chemical or physical properties and which may be used for the same or other purposes: or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

The waste material is in the form of rubber and steel coils. The steel is separated out, chopped up and sent to a recycling mill. The processor places the rubber scraps on the screens where it is vibrated to separate the rubber granules into different sizes based on the screen's mesh size. Applicant leases the screens to West Coast Cryogrind who produces Arenaground, the **end product** which is used as ground cover in horse arenas.

Exclusions	<u>Criteria</u>
ORS 468.155(3) OAR 340-016-0070(3)	The regulations exclude over 40 items from the definition of a Pollution Control Facility. Any items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

- Replacement** Criteria
 ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions:
1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
 2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The State of Oregon has issued **two** Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of the previously certified facilities.

- Maximum Credit** Criteria
 ORS 468.170(3)(d) The maximum tax credit is 35% if the applicant submitted the application between
 ORS January 1, 2002 and December 31, 2008, inclusively, and the facility is **used for**
 468.155(1)(b)(D) **material recovery or recycling**, as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 9/7/2004, and the facility is used in a material recovery process.

Facility Cost

- Subtractions** Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:
- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
 - b) the amount of any government grants received to pay part of the facility cost;
 - c) the present value of any other state tax credits for which the investment is eligible; and
 - d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

- § Certification** Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
Untimely Filing	2 Vibratory Screens	Claimed
		\$1,220
		-874
	Certified	\$346

Facility Cost Allocable to Pollution Control

ORS 468.190 (3)

Criteria

If the cost of the facility (or facilities certified under one certificate) 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 solid waste bears to the entire time the facility is used for any purpose.

Applied to this Application

The certified facility cost is **\$346**. The applicant uses the facility **100%** of the time for screening and separating recycled rubber into different granule sizes for Arenaground.

Compliance

ORS 468.180(1)

Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer:

Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Material Recovery

Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 4397
Salem, OR 97302

Organized as: **LLC**
Taxpayer ID: **93-1298183**

Technical Information

J-CAD Equipment Leasing, LLC, an equipment rental and leasing company in Salem, Oregon, claims a used flatbed truck and a used dump truck which they lease to West Coast Cryogrind. The processor uses the flatbed truck to pick up waste material and deliver it to the recycling center. The processor uses the dump truck to deliver Arenaground (ground and graded rubber) to customers for use as a surface material in horse arenas.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or
- c. Person who, as an owner, including a contract purchaser, or lessee, owns or

Director's Recommendation

Approve Application No. **6820**

Applicant: **J-CAD Equipment Leasing, LLC**

Certification of:

Facility Cost		\$32,200
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$11,270</u>

Certificate Period: **7 years**

Facility Identification

2025 Hyacinth Street NE
Salem, OR 97303

The certificate will identify the facility as:

One 1985 Freightliner Model 8664T Flatbed truck, VIN #1EVDYCY91EP263293;
One 1998 Ford F80 Dump truck, VIN #1FDWF80CXWVA31877

leases a pollution control facility that is used for recycling, material recovery or energy recovery as defined in ORS 459.005.

Applied to this Application

DEQ will report the following information to the Department of Revenue: J-CAD Equipment Leasing, LLC **owns** the claimed facility which they lease to West Coast Cryogrind where the trucks are used for recycling or material recovery.

Eligibility

Timely Filing

2001 Edition ORS
468.165(6)

Criteria

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The applicant must submit the final application after completing construction of the facility and placing it into service.

Applied to this Application

The applicant **timely filed** the application. The applicant purchased the claimed facility on **12/23/2003** and submitted the application on **9/7/2004**. The applicant also submitted the application after purchasing and placing the facility into service on 12/23/2003.

Purpose: Voluntary

ORS 468.155
(1)(a)(B)
OAR 340-016-
0010(7)(a)(b)

Criteria

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of solid waste.

“Solid waste” as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386.

Applied to this Application

The claimed facility reduces a substantial quantity of solid waste. The processor uses the flatbed truck to collect recyclable rubber and steel coils which are loaded onto pallets and then transported to the recycling center. The flatbed truck carries **72 coils per load** of waste material. At the recycling center, the waste material is separated, and the rubber is ground up and mixed with raw rubber to produce the end product of Arenaground which the dump truck then delivers to the customers. The dump trunk transports **six tons per load** of Arenaground.

Method

ORS 468.155
(1)(b)(D)

Criteria

The claimed facility must prevent, control, or reduce the waste material by the use of a material recovery process. The process must obtain useful material from material that would otherwise be solid waste, hazardous waste or used oil.

"Material Recovery" means any process, such as pre-segregation, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive end product of real economic value.

OAR 340-016-0010(7) Criteria
 OAR 340-016-0060(4)(e) The facility produces an end product of utilization. It must be an item of real economic value and it must be competitive with an end product produced in another state. The facility must produce the end product by mechanical processing, chemical processing; or through the production, processing, **pre-segregation**, or use of materials which:

- a. Have useful chemical or physical properties and which may be used for the same or other purposes: or
- b. May be used in the same kind of application as its prior use without change in identity.

Applied to this Application

The end product produced at the recycling center is a surface material for horse arenas called Arenaground. It is composed of recycled rubber scraps which have been ground up and mixed with solid rubber. The scrap steel which is recycled is sent to a recycling mill. The flatbed truck transports waste materials to a recycling center and the dump truck transports the Arenaground to customers.

Exclusions Criteria
 ORS 468.155(3) The regulations exclude over 40 items from the definition of a Pollution Control Facility. Any items that do not meet the definition are ineligible for certification.
 OAR 340-016-0070(3)

Applied to this Application

There are **no exclusions**.

Replacement Criteria
 ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions:

1. The applicant replaced the facility because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. The applicant replaced the facility before the end of its useful life.

Applied to this Application

The State of Oregon has issued **two** Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of the previously certified facilities.

Maximum Credit Criteria
 ORS 468.170(3)(d) The maximum tax credit is 35% if the applicant submitted the application between
 ORS January 1, 2002, and December 31, 2008, inclusively, and the facility is **used for**
 468.155(1)(b)(D) **material recovery or recycling**, as those terms are defined in ORS 459.005.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 9/7/2004, and the facility is used in a material recovery process.

Facility Cost

Subtractions Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost.
 The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

§ Certification Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment'**

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
	No deductions	\$32,200
		0
		Certified
		\$32,200

Facility Cost Allocable to Pollution Control

ORS 468.190 (3) Criteria
 If the cost of the facility (or facilities certified under one certificate) 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 solid waste bears to the entire time the facility is used for any purpose.

Applied to this Application

The certified facility cost is **\$32,200**. Prior to submitting the application, the applicant subtracted \$6,800 for the percentage of time they use the trucks for other activities (10% for the flatbed truck and 20% for the dump truck).

ComplianceORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey, DEQ

BACKGROUND

APPROVALS: Nonpoint Source Pollution Control Facilities

The Department recommends that the Commission approve the certification of two facilities presented behind this tab.

Summary of NPS Pollution Control Facilities

App #	Applicant	Certified	% Allocable	Maximum Percent	GF Liability
6829	John & Kerry Rietmann Farms	\$288,750	97%	35%	\$98,031
6839	Newtonson Brothers	\$97,296	100%	35%	\$34,054
2 Apps	Sum	386,046			132,084
	Average	193,023			66,042
	Minimum	97,296			34,054
	Maximum	288,750			98,031

The law defines nonpoint source pollution control facilities as "...a facility that the Environmental Quality Commission has identified by rule as reducing or controlling significant amounts of nonpoint source pollution."¹ The Commission adopted rules that define "nonpoint source pollution"² and identify eligible "nonpoint source pollution control facilities"³ as shown below.

Statutory Definition of a "Nonpoint Source Pollution Control"

ORS 468.155 provides the definitions for ORS 468.155 to 468.190 and 468.962 provided in part below.

...

(b) Such prevention, control or reduction required by this subsection shall be accomplished by:

...

(2)(a) As used in ORS 468.155 to 468.190 and 468.962, "pollution control facility" or "facility" includes a nonpoint source pollution control facility.

(b) As used in this subsection, "nonpoint source pollution control facility" means a facility that the Environmental Quality Commission has identified by rule as reducing or controlling significant amounts of nonpoint source pollution.

...

OAR 340-016-0010 provides the following pertinent definitions.

"Nonpoint Source Pollution" means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment. The meaning includes:

(a) The definition provided in OAR 340-041-0006(17): "Nonpoint Sources" refers to diffuse or unconfined sources of pollution where wastes can either enter into or be conveyed by the movement of water to public waters; or

¹ ORS 468.155(2)(b)

² OAR 340-016-0010(8)

³ OAR 340-016-0060(4)(h)

- (b) Any sources of air pollution that are:
 - (A) Mobile sources that can move on or off roads; or
 - (B) Area sources.

Eligibility

340-016-0060 Eligibility

...

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate:

...

(h) Nonpoint Source Pollution. Pursuant to ORS 468.155(2)(b), the EQC has determined that the following facilities reduce, or control significant amounts of nonpoint source pollution:

- (A) Any facility that implements a plan, project, or strategy to reduce or control nonpoint source pollution as documented:
 - ...
- (B) Any facility effective in reducing nonpoint source pollution as documented in supporting research by:
 - ...
- (C) Wood chippers used to reduce openly burned woody debris; or
- (D) The retrofit of diesel engines with a diesel emission control device, certified by the U.S. Environmental Protection Agency.

...



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: NPS

Final Certification

ORS 468.150 -- 468.190

OAR 340-016-0005 -- 340-016-0080

Applicant Identification

PO Box 313

Ione, OR 97843

Organized as: **Partnership**

Taxpayer ID: **93-0891189**

Technical Information

John & Kerry Rietmann Farms is a dryland wheat farm located in Morrow County. Prior to installing the new facility, the applicant used summer fallow rotation as the wheat farming method. This technique requires plowing, disking, cultivating and rod-weeding for a year prior to planting the wheat, in an effort to store moisture and control weeds. This method increases the potential for wind and water erosion. The applicant claims a precision-guided dry land reduced tillage farming system that includes a tractor, a boom sprayer with a controller, an 800-gallon anhydrous tank, and a forty-foot drill. The system maintains surface residue, increases the efficiency of fertilizers and herbicides and increases the aggregate stability of the soil. The air cart with the 800-gallon anhydrous (ammonia) tank is used together with the forty-foot drill to place a dry starter fertilizer along with the seed in the soil, while simultaneously placing a deep band of NH₃ (anhydrous ammonia) fertilizer deep below and to the side of the seed row. The tractor pulls the boom sprayer which dispenses herbicide in a controlled manner over varying terrain for uniform application. In between the tractor and the boom sprayer, the air cart and

Director's Recommendation

Approve Application No.6829

Applicant: **John & Kerry Rietmann Farms**

Certification of:

Facility Cost		\$288,750
Percentage Allocable	X	97%
Maximum Percentage	X	35%
Tax Credit		<u>\$98,031</u>

Certificate Period: **10 years**

Facility Identification

66904 Olden Lane

Ione, OR 97843

The certificate will identify the facility as:

One Model MT835 Challenger Rubber-Tracked Tractor, Serial #BAM40451;

One Flexi-coil S67 Suspended Boom Sprayer, Serial #S67-107509, with Automatic Spray controller;

One Case IH ADX 2230 Air Cart, Serial #CBJ00004272, with 800 gallon Anhydrous Tank;

One Case IH 4012 Forty Foot Drill

drill are also being pulled.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

DEQ will report the following information to the Department of Revenue: John & Kerry Rietmann Farms **own** the business that uses the Oregon property requiring the pollution control.

Eligibility

Timely Filing Criteria

2001 Edition ORS
468.165(6)

The applicant must submit the final application after purchasing the facility. If the applicant purchased the facility on or after January 1, 2002, the applicant must submit the application within one year after the purchase date.

Applied to this Application

The applicant **timely filed** the application within the one-year filing requirement. The applicant purchased the claimed facility on **12/9/2003** and filed the application on **9/20/2004**. The applicant also submitted the application after purchasing the facility and placing it into service on 3/1/2004.

Purpose: Voluntary Criteria

ORS 468.155
(1)(a)(B)
OAR 340-016-
0060(2)(a)

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of Nonpoint Source Pollution (NPS).

"Nonpoint Source Pollution" means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment. The meaning includes:

- a. The definition provided in OAR 340-041-0006(17); or
- b. Any sources of air pollution that are:
 - Mobile sources that can move on or off roads; or
 - Area sources.

"Air Pollution" is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005

OAR 340-041-0006(17) "Nonpoint Sources" refers to diffuse or unconfined sources of pollution where wastes can either enter into or be conveyed by the movement of water to public waters.

"Water Pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005

Applied to this Application

The Precision-Guided Dry Land Reduced Tillage Farming System retains plant residue on the soil surface reducing soil loss through water and wind erosion. The tractor is dedicated to providing the power to run this system. Weed control through herbicide application is maintained by using boom sprayers which are independently controlled to allow for uniform height and coverage over varying terrain and are equipped with windscreens to minimize spray drift and air quality degradation. Fertilizer and seed placement are made in one pass through the soil by using the air cart with an anhydrous tank and forty-foot drill concurrently. This reduces sediment buildup in the rivers and dust in Morrow county. Less disturbance of the soil reduces the amount of green house gasses (CO₂) released into the atmosphere and results in more carbon storage in the soil.

Method	Criteria
ORS 468.155(2)(b) OAR 340-016-0060(4)(h)(B)(i)	Nonpoint source pollution must be reduced or eliminated through one of the methods the EQC determined to reduce, or control significant amounts of nonpoint source pollution (ORS 468.155(2)(b)).

This includes:

- a. Any facility that implements a plan, project, or strategy to reduce or control nonpoint source pollution as documented by one or more partners listed in the Oregon Nonpoint Source Control Program Plan.
- b. Any facility effective in reducing nonpoint source pollution as documented in supporting research by:
 - Oregon State University, Agricultural Experiment Station; or

- The United States Department of Agriculture, Agriculture Research Service; or
- The Oregon Department of Agriculture.

Nonpoint Source Pollution means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment.

Applied to this Application

The tractor, boom sprayer, air cart and drill **meet the definition of** a nonpoint source pollution control device in OAR 340-016-0010:

Any method, process or equipment that removes, reduces or renders less noxious nonpoint source contaminants prior to their discharge in the atmosphere.

When the soil has a high percentage of plant material on the surface, it is less prone to soil and wind erosion. The minimized soil disturbance promotes carbon storage in the soil, which means better soil tilth and less green house gasses (CO₂) in the air.

Exclusions Criteria

ORS 468.155(3)
OAR 340-016-0070(3)
The regulations exclude over 40 items from the definition of a Pollution Control Facility. These items are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement Criteria

ORS 468.155(3)(e)
The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions. The applicant replaced the facility:

1. because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. before the end of its useful life.

Applied to this Application

The claimed facility is **not a replacement** facility.

Maximum Credit Criteria

ORS 468.173(3)(c)
ORS 468.155(2)
The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility controls **nonpoint source pollution**.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the

application on 9/20/2004, and the facility is defined as a nonpoint source pollution control facility.

Facility Cost

- Subtractions** Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost.
 The claimed cost may not include:
- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
 - b) the amount of any government grants received to pay part of the facility cost;
 - c) the present value of any other state tax credits for which the investment is eligible; and
 - d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

- \$ Certification** Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$288,750
	No deductions	0
	Certified	\$288,750

Facility Cost Allocable to Pollution Control

- % Certification** Criteria
 ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste, hazardous waste, or to recycling or appropriately disposing of used oil.

Applied to this Application

The Department determined that **97%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

- Percentage** Criteria
 ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.

- Percentage** Criteria
ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.
- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
 - b. The estimated annual percent return on the investment in the facility;
 - c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
 - d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
 - e. Any other relevant factors.

Applied to this

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above, and a 10-year useful life. The applicant claims the tractor is dedicated solely to the no-till drill system. The claimed facility is part of a process that produces income. There are cost savings in labor, fuel, and equipment maintenance associated with fewer passes over the field. The annual revenue exceeds the expenditures but the Facility ROI is still less than the National ROI for 2003, the facility's construction completion year. The applicant did not investigate an alternative technology and there are no other relevant factors.

Compliance

- ORS 468.180(1) Criteria
The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: NPS

Final Certification

ORS 468.150 -- 468.190

OAR 340-016-0005 -- 340-016-0080

Applicant Identification

82696 Stockman Road
Helix, OR 97835

Organized as: **Partnership**
Taxpayer ID: **93-0535531**

Technical Information

Newtson Brothers, a wheat farming partnership in Umatilla County, is claiming a no-till drill planting system which consists of a Great Plains Folding Drill, Model 4010NT, with fertilizer arms, a rear hitch and a fertilizer tank. This no-till drill allows the applicant to reduce and control the movement of water and soil off farmland by keeping a high level of crop residue on the soil surface. The higher level of residue and reduced tillage decrease air pollution caused by dust.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Director's Recommendation

Approve Application No.6839

Applicant: Newtson Brothers

Certification of:

Facility Cost		\$97,296
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$34,054</u>

Certificate Period: **7 years**

Facility Identification

82106 S. Juniper Canyon Road
Helix, OR 97835

The certificate will identify the facility as:

**One Great Plains Folding Drill, Model 4010NT,
Serial #GP-1001TT**

Applied to this Application

DEQ will report the following information to the Department of Revenue: Newton Brothers **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility**Timely Filing**

2001 Edition ORS
468.165(6)

Criteria

The applicant must submit the final application after purchasing the facility and placing it into service. If the applicant purchased the facility on or after January 1, 2002, the applicant must submit the application within one year after the purchase date.

Applied to this Application

The applicant **timely filed** the application within the one-year filing requirement. The applicant purchased the claimed facility on **3/19/2004** and filed the application on **10/4/2004**. The applicant also submitted the application after purchasing the facility into service on 3/19/2004.

Purpose: Voluntary

ORS 468.155
(1)(a)(B)
OAR 340-016-
0060(2)(a)

Criteria

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of Nonpoint Source Pollution (NPS).

"Nonpoint Source Pollution" means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment. The meaning includes:

- a. The definition provided in OAR 340-041-0006(17); or
- b. Any sources of air pollution that are:
 - Mobile sources that can move on or off roads; or
 - Area sources.

"Air Pollution" is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005

OAR 340-041-
0006(17)

"Nonpoint Sources" refers to diffuse or unconfined sources of pollution where wastes can either enter into or be conveyed by the movement of water to public waters.

"Water Pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of

the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005

Applied to this Application

The applicant claims the facility has a **sole purpose**. The no-till drill reduces a substantial quantity of nonpoint source pollution. A no-till drill planting system retains plant residue on the soil surface, reducing soil loss through water and wind erosion. This reduces sediment buildup in the rivers and dust in Umatilla County. Less disturbance of the soil reduces the amount of green house gasses (CO₂) released into the atmosphere and results in more carbon storage in the soil.

Method Criteria

ORS 468.155(2)(b) Nonpoint source pollution must be reduced or eliminated through one of the
OAR 340-016- methods the EQC determined to reduce, or control significant amounts of
0060(4)(h)(B)(i) nonpoint source pollution (ORS 468.155(2)(b)).

This includes:

- a. Any facility that implements a plan, project, or strategy to reduce or control nonpoint source pollution as documented by one or more partners listed in the Oregon Nonpoint Source Control Program Plan.
- b. Any facility effective in reducing nonpoint source pollution as documented in supporting research by:
 - Oregon State University, Agricultural Experiment Station; or
 - The United States Department of Agriculture, Agriculture Research Service; or
 - The Oregon Department of Agriculture.

Nonpoint Source Pollution means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment.

Applied to this Application

The no-till drill **meets the definition** of a nonpoint source pollution control. In research done by the Oregon State University Agricultural Experiment Station, a no-till cropping system reduces non-point source pollution by allowing the surface residue to act as a physical barrier to resist surface erosion. It also allows the soil to increase nutrient and moisture infiltration. Mary K. Corp, an agronomist with the Oregon State University's Umatilla County Extension Office, provided supporting research on the applicant's behalf. The Department attached the letter to this report.

When the soil has a high percentage of plant material on the surface, it is less prone to soil and wind erosion. The minimized soil disturbances promotes carbon storage in the soil, which means better soil tilth and less green house gasses (CO₂) in the air.

Exclusions Criteria

ORS 468.155(3) The regulations exclude over 40 items from the definition of a Pollution Control
OAR 340-016- Facility. These items are ineligible for certification.
0070(3)

Applied to this Application

There are **no exclusions**.

Replacement Criteria

ORS 468.155(3)(e) The replacement or reconstruction of all or part of a previously certified pollution control facility is not eligible for the tax credit. There are two exceptions. The applicant replaced the facility:

1. because DEQ or EPA imposed a different requirement than the requirement to construct the original facility; or
2. before the end of its useful life.

Applied to this Application

The claimed facility is **not a replacement** facility.

Maximum Credit Criteria

ORS 468.173(3)(e) The maximum tax credit is 35% if the applicant submitted the application
ORS 468.155(2) between January 1, 2002, and December 31, 2008, inclusively, and the facility controls nonpoint source pollution.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 10/4/2004, and the facility is defined as a nonpoint source pollution control facility.

Facility Cost

Subtractions Criteria

OAR 340-016- The applicant must provide documents that substantiate the claimed facility cost.
0070(1) The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

§ Certification Criteria

ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$97,296
	No deductions	0
	Certified	\$97,296

Facility Cost Allocable to Pollution Control**% Certification** Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste, hazardous waste, or to recycling or appropriately disposing of used oil.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsection below.

Percentage Criteria

ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.

- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
- b. The estimated annual percent return on the investment in the facility;
- c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
- d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
- e. Any other relevant factors.

Applied to this Application

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above, and a seven-year useful life. The average annual income prorated to this step is \$26,850. The claimed facility is only the first step in a process that produces a salable or useable

commodity. There is no direct revenue associated with it. The applicant has reduced the number of passes over the acreage, thereby, reducing labor and fuel costs. The average annual expenditures are \$22,502. Although the revenues exceed the expenditures, the resulting facility ROI is still less than the National ROI for 2004, the facility's construction completion year. The applicant did not investigate an alternative technology and there are no other relevant factors.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey

BACKGROUND

APPROVALS: Water Pollution Control Facilities

The Department recommends that the Environmental Quality Commission approve **five** water pollution control facilities installed to dispose of or eliminate industrial waste as defined in ORS 468B.005.

Two reports behind this tab are for dental practices that installed amalgam separators. Amalgam separators have always been eligible under the water pollution control portion of the pollution control facility tax credit but no practices have applied for the credit. The Department has developed a streamlined water pollution control facility application and a Fact Sheet (Attachment G) directed toward dental practices.

Summary of Water Pollution Control Facilities

App #	Applicant	Certified	% Allocable	Maximum Percent	GF Liability
6601	Merix Corporation	\$757,084	100%	35%	\$264,979
6781	Wagoner Properties, LLC	\$26,461	100%	35%	\$9,261
6801	Century Dental	\$1,165	100%	35%	\$408
6803	Permapost Products, Inc.	\$27,033	100%	35%	\$9,462
6812	Karole H. Wilson	\$469	100%	35%	\$164
5 Apps	Sum	812,212			284,274
	Average	162,442			56,855
	Minimum	469			164
	Maximum	757,084			264,979

Statutory Definition of a "Water Pollution Control Facility"

ORS 468.155 provides the definition of a pollution control facility. Part of that definition describes how the applicant must accomplish the pollution control. For water pollution control facilities, the prevention, control, or reduction must be accomplished by "The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468B.005."

ORS 468.155 Definitions for ORS 468.155 to 468.190 and 468.962

...

(b) Such prevention, control or reduction required by this subsection shall be accomplished by:

...

(A) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468A.005;

...

ORS 468B.005 provides the following pertinent definitions.

"Industrial waste" means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

"Treatment works" means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

"Wastes" means sewage, industrial wastes, and all other liquid, gaseous, solid, radioactive or other substances which will or may cause pollution or tend to cause pollution of any waters of the state.

"Water pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.

Eligibility

OAR 340-016-0060 Eligibility

...

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate:

...

(d) Industrial Waste. The facility shall dispose of, eliminate or be redesigned to eliminate industrial waste and the use of treatment works for industrial wastewater as defined in ORS 468B.005; ...



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Water Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

1521 Poplar Lane
Forest Grove, OR 97116

Organized as: **C Corp.**
Taxpayer ID: **93-1135197**

Technical Information

Merix Corporation is a manufacturer of advanced multi-layer rigid circuit boards. Electroless copper plating is one of the steps in the manufacturing process. The pH of the wastewater from this process fluctuates from highly acidic to highly alkaline. The wastewater also contains levels of copper that exceed the allowable discharge limits of the applicant's wastewater permit. The applicant installed a wastewater treatment system that reduces the copper concentration from 40 milligrams per liter (mg/l) to 1 mg/l. The pH of the water discharged from the claimed facility meets the applicant's wastewater permit.

The claimed facility is designed to treat 136,000 gallons of wastewater per day. The primary components include two 2,000-gallon fiberglass collection tanks, four 11,750-gallon fiberglass storage tanks, one 2,000-gallon sludge thickening unit, one 15-cubic-foot filter press, two 1,285-gallon fiberglass mix tanks, and numerous pumps and controls.

Director's Recommendation

Approve Application No. **6601**

Applicant: **Merix Corporation**

Certification of:

Facility Cost		\$835,421
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$292,397</u>

Certificate Period: **10 years**

Facility Identification

23665 NE Halsey
Wood Village, OR 97060

The certificate will identify the facility as:

Industrial Wastewater Treatment System

Taxpayer***Allowed Credit***

ORS 315.304(4)

Criteria

The taxpayer who is allowed the credit must be:

- a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

DEQ will report the following information to the Department of Revenue:

Merix Corporation **owns** the business that uses the Oregon property requiring the pollution control.***Eligibility******Timely Filing***

2001 Edition ORS

468.165(6)

Criteria

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application **within one year** after the construction completion date. The final application, however, is not valid if the applicant submits the application before they complete construction or before they place the facility into operation.

Applied to this Application

The applicant **timely filed** the application. The applicant completed the installation of the claimed facility on **10/1/2002** and submitted the application on **9/30/2003**. The applicant did not submit the application before they completed construction or placed the facility into operation on 10/1/2002.

Purpose: Required

ORS 468.155

(1)(a)(A)

OAR 340-016-

0060(2)(a)

Criteria

The principal purpose of the claimed facility must be to comply with a requirement imposed by DEQ or EPA to prevent, reduce, or control water pollution. That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Water Pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005

Applied to this Application

The claimed facility complies with the requirements that prohibit the discharge of wastewater with a pH of <5.0 or >10.0 and copper levels >3.38 mg/l. The City of Gresham issued the applicant the industrial wastewater discharge permit that imposes these requirements. The primary or most important purpose of the claimed facility is to reduce water pollution.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(A)	The prevention, control, or reduction must be accomplished by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

"Industrial waste" means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

"Treatment works" means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Applied to this Application

A pH measurement of <5.0 or >10.0 and copper levels >3.38 mg/l **meets the definition** of industrial waste and water pollution as defined under the *Purpose: Require* section. The waste water treatment system **meets the definition** of a treatment works in ORS 468B.005 because it controls pH and reduces copper levels.

Exclusions	<u>Criteria</u>
ORS 468.155 (3) OAR 340-016-070(3)	The regulations provide a list of more than 40 items excluded from the definition of a Pollution Control Facility. Items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**

Replacement	<u>Criteria</u>
ORS 468.155 (3)(e)	The replacement or reconstruction of all or part of a facility that has previously been certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions:

1) the facility was replaced due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or

2) the facility was replaced before the end of its useful life.

Applied to this Application

The State of Oregon has **not issued** a certificate to the applicant at this location.

Maximum Credit Criteria

ORS 468.170(3)(a) The maximum tax credit is 35% if the applicant began construction or installation of the facility between January 1, 2001, and December 31, 2008, inclusively and the applicant is certified under International Organization for Standardization, ISO 14001.

Applied to this Application

The **maximum tax credit is 35%**. The applicant began constructing the facility on 5/1/2001 and the applicant is ISO 14001 certified.

Facility Cost**Subtractions** Criteria

OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

§ Certification Criteria

ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost and that the cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
		Claimed
	No deductions	\$835,421
		0
		Certified
		\$835,421

Facility Cost Allocable to Pollution Control

% Certification Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to water pollution control as discussed in the *Percentage* subsection below.

Percentage Criteria

ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.

- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
- b. The estimated annual percent return on the investment in the facility;
- c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
- d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
- e. Any other relevant factors.

Applied to this Application

The applicant and the Department considered the factors a. through e. above and a 15-year useful life. The claimed facility does not produce a salable or usable commodity. The average annual cash flow for the wastewater treatment system is negative because there is an increase in expenditures but no income or cost savings associated with its operation. The Facility ROI, therefore, is less than the National ROI for 2002 (the year of construction completion). This results in 100% of the facility cost being allocable to pollution control. The applicant did not investigate an alternative technology and there are no other relevant factors.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The City of Gresham's Department of Environmental Services staff member assigned to the source is Alan Johnston. Mr. Johnson affirmed the applicant's statement that the facility and site comply with the applicant's Industrial Wastewater Discharge Permit conditions. DEQ issued the following permit to the site: Air Contaminant Discharge Permit No. 26-0108 issued 3/7/01.

Reviewers: PBS Engineering and Environmental
Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Water Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

1709 NW Eleven Mile Avenue
Gresham, OR 97080

Organized as: **LLC**
Taxpayer ID: **47-0871455**

Technical Information

Wagoner Properties, LLC is a parking lot sweeping company operating in Multnomah County. The applicant brings all parking lot debris and wastewater back to its site for processing through the claimed system. The claimed facility consists of a 36' x 36' concrete pad, a pole building and an oil/water separator. The pad is 8.5" of concrete over 1.5' of drain rock. The pad drains to an oil/water separator. The applicant roofed the building with wood trusses sheathed in metal to prevent rainwater from entering the system.

The applicant discharges the sweepings from the trucks into a trundle screen that separates debris from wastewater. The applicant removes trash from recyclable materials such as dirt, rock, and woody debris. The trash is processed at a transfer station and the other materials are processed through a material recovery facility. Annually, approximately 55,000 gallons of wastewater that had the potential of contaminating the Clackamas River is now pre-treated prior to discharge to the City of Gresham sanitary system sewer.

Director's Recommendation

Approve Application No.6781

Applicant: **Wagoner Properties, LLC**

Certification of:

Facility Cost		\$26,461
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<hr/> \$9,261

Certificate Period: **10 years**

Facility Identification

Same as the applicant's address.

The certificate will identify the facility as:

Pretreatment System with a 36' x 36' covered concrete pad and a Utility Vault Model 660-CPS oil/water separator

Taxpayer Allowed Credit**ORS 315.304(4) Criteria**

The taxpayer who is allowed the credit must be:

- a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

DEQ will report the following information to the Department of Revenue: Wagoner Properties, LLC **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility**Timely Filing Criteria**

2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The final application, however, is not valid if the applicant submits the application before they complete construction or before they place the facility into service.

Applied to this Application

The applicant filed the application within the one-year filing requirement. They completed construction on **5/23/2004** and submitted the application on **6/10/2004**. The applicant submitted the application after they completed construction and placed the facility into service on 5/28/2004.

Purpose: Required Criteria

ORS 468.155
(1)(a)(A)
OAR 340-016-
0060(2)(a)

The principal purpose of the claimed facility must be to comply with a requirement imposed by DEQ or EPA to prevent, reduce, or control water pollution. That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Water Pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005

Applied to this Application

The claimed facility complies with DEQ administered ORS 468B.050. The primary or most important purpose of the claimed facility is to prevent water pollution.

Method Criteria

ORS 468.155 (1)(b)(A) The prevention, control, or reduction must be accomplished by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

"Industrial waste" means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

"Treatment works" means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Applied to this Application

The wastewater from parking lot sweeping meets the definition of **water pollution** as defined under the *Purpose: Required* section above.

The covered concrete pad and oil/water separator meets the definition of **treatment works** in ORS 468B.005.

Exclusions Criteria

ORS 468.155 (3) The regulations provide a list of over 40 items excluded from the definition of a
OAR 340-016-070(3) Pollution Control Facility. Items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement Criteria

ORS 468.155 (3)(e) The replacement or reconstruction of all or part of a facility that the State of Oregon previously certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions. The applicant replaced the facility:

- 1) due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or
- 2) before the end of its useful life.

Applied to this Application

The State of Oregon issued **no** certificates to the applicant at this site.

Maximum Credit Criteria

ORS 468.173(3)(f) The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified

cost does not exceed \$200,000.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 6/10/2004, and the certified facility cost is **\$26,461**.

Facility Cost

Subtractions
OAR 340-016-0070(1)

Criteria

The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

\$ Certification
ORS 468.170(1)

Criteria

The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The claimed cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$26,461
	No deductions	0
	Certified	\$26,461

Facility Cost Allocable to Pollution Control

% Certification
ORS 468.190 (3)

Criteria

If the cost of the facility (or facilities certified under one certificate) 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 water pollution bears to the entire time the facility is used for any purpose.

Applied to this Application

The certified facility cost is **\$26,461** and the applicant uses the facility **100%** of the time for pollution control.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey



State of Oregon
 Department of
 Environmental
 Quality

Tax Credit Review Report

Pollution Control Facility: Water Final Certification

ORS 468.150 -- 468.190
 OAR 340-016-0005 -- 340-016-0080

Applicant Identification

2831 SW Cornelius Pass Road
 Hillsboro, OR 97123

Organized as: **LLC**
 Taxpayer ID: **93-1296681**

Technical Information

Century Dental claims a CE24 Amalgam Collector for use in their dental offices. Amalgam is a pollutant that contains mercury and an alloy of silver, tin and copper. Amalgam collectors are traps in the water and vacuum lines designed to remove amalgam waste particles from dental wastewater. Removal of dental amalgam generates amalgam waste particles that can be suctioned into the dental unit vacuum line and discharged into the public sewer system. The applicant plumbed the collector into the suction line.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The taxpayer who is allowed the credit must be:

- a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Director's Recommendation

Approve Application No. **6801**

Applicant: **Century Dental**

Certification of:

Facility Cost		\$1,165
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		\$ 408

Certificate Period: **3 years**

Facility Identification

Same as the applicant's address.

The certificate will identify the facility as:

One CE24 Amalgam Collector

Applied to this Application

DEQ will report the following information to the Department of Revenue: Century Dental **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility**Timely Filing** Criteria

2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The final application, however, is not valid if the applicant submits the application before they complete construction or before they place the facility into service.

Applied to this Application

The applicant filed the application within the one-year filing requirement. They completed construction or installation on 5/28/2004 and submitted the application on 7/16/2004. The applicant submitted the application after they completed construction or installation and placed the facility into service on 5/28/2004.

Purpose: Voluntary Criteria

ORS 468.155
(1)(a)(B)
OAR 340-016-
0060(2)(a)

The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of water pollution.

“Pollution” or “water pollution” means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.

Applied to this Application

The applicant claims the facility has a **sole purpose**. The amalgam collector: reduces a substantial quantity of water pollution. Amalgam is a pollutant that contains mercury and an alloy of silver, tin and copper. If not removed, the pollutants could contaminate rivers and streams and be absorbed by fish. The primary environment route of human exposure to mercury is from eating contaminated fish.

Method Criteria

ORS 468.155
(1)(b)(A)

The prevention, control, or reduction must be accomplished by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

"**Industrial waste**" means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

"**Treatment works**" means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Applied to this Application

Mercury meets the definition of **industrial wastewater** as defined by ORS 468B.005.

The Amalgam Collector: meets the definition of **treatment works** in ORS 468B.005.

Exclusions	<u>Criteria</u>
ORS 468.155 (3) OAR 340-016- 070(3)	The regulations provide a list of over 40 items excluded from the definition of a Pollution Control Facility. Items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement	<u>Criteria</u>
ORS 468.155 (3)(e)	The replacement or reconstruction of all or part of a facility that the State of Oregon previously certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions. The applicant replaced the facility:

- 1) due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or
- 2) before the end of its useful life.

Applied to this Application

The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location.

Maximum Credit	<u>Criteria</u>
ORS 468.173(3)(f)	The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified cost does not exceed \$200,000.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 7/16/2004, and the certified facility cost is **\$1,165**.

Facility Cost

- Subtractions** Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:
- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
 - b) the amount of any government grants received to pay part of the facility cost;
 - c) the present value of any other state tax credits for which the investment is eligible; and
 - d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

- \$ Certification** Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost and show that the cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$1,165
	No deductions	0
	Certified	\$1,165

Facility Cost Allocable to Pollution Control

- ORS 468.190 (3) Criteria

If the cost of the facility (or facilities certified under one certificate) 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.

Applied to this Application

The certified facility cost is **\$1,165** and the applicant uses the facility **100%** of the time for pollution control.

Applied to this Application

The Department determined that **100%** of the facility cost is allocable to pollution control as discussed in the *Percentage* subsections below.

ComplianceORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Water

Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

Permapost Products, Inc.
PO Box 100
Hillsboro, OR 97123

Organized as: **C Corporation**
Taxpayer ID: **93-0495305**

Technical Information

The applicant treats wood products with oil-based, mineral spirit-based, and water-based preservatives and fire retardants. The preservatives contain, among other things, copper, pentachlorophenol and zinc. When the treated wood products are exposed to rain, these chemicals transfer to the storm water runoff which eventually enters Rock Creek. These chemicals are classified as water pollutants by the federal Environmental Protection Agency (EPA) and the Department of Environmental Quality (DEQ). The applicant installed a carbon adsorption and filtration system to reduce these pollutants to within DEQ allowed levels. The claimed facility consists of a carbon filter manufactured by US Filter, three pumps manufactured by Grundfos, system piping, and a 144 square foot building housing the treatment system. The system is designed to treat 30 gallons of storm water a minute.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The taxpayer who is allowed the credit must be:

- a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Director's Recommendation

Approve Application No. **6803**

Applicant: **Permapost Products, Inc.**

Certification of:

Facility Cost		\$27,033
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		<u>\$9,462</u>

Certificate Period: **10 years**

Facility Identification

Permapost Products, Inc.
4066 SE Tualatin Valley Highway
Hillsboro, OR 97123

The certificate will identify the facility as:

Storm water treatment system, US Filter Serial #PV 10176

Applied to this Application

DEQ will report the following information to the Department of Revenue: Permapost Products, Inc **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility**Timely Filing** Criteria

2001 Edition ORS
468.165(6)

If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The final application, however, is not valid if the applicant submits the application before they complete construction or before they place the facility into operation.

Applied to this Application

The applicant filed the application within the one-year filing requirement by completing construction on **10/30/2003** and submitting the application on **08/02/2004**. The applicant submitted the application after they completed construction and placed the facility into operation on 11/01/2003.

Purpose: Required Criteria

ORS 468.155
(1)(a)(A)
OAR 340-016-
0060(2)(a)

The principal purpose of the claimed facility must be to comply with a requirement imposed by DEQ or EPA to prevent, reduce, or control water pollution. That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Water Pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005

Applied to this Application

The claimed facility has a **principal purpose**. The primary or most important purpose of the claimed facility is to control water pollution to meet the applicant's permit conditions. DEQ issued National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit Number 101489 to the applicant. The permit prohibits discharging storm water containing copper at levels greater than 0.045 milligrams per liter (mg/l), pentachlorophenol greater than 0.050 mg/l and zinc greater than 0.30 mg/l.

Prior to installing the claimed facility, discharges containing copper levels reaching 0.05 mg/l, pentachlorophenol levels reaching 0.260 mg/l and zinc levels reaching 1.37 mg/l occurred on several occasions. DEQ issued Mutual Agreement and Order (MAO, WQ/I-NWR-03-076) to the applicant on April 1, 2003, for violating conditions of their NPDES permit. The MAO required the applicant to take immediate corrective actions to reduce these concentrations.

The applicant installed the claimed facility to ensure NPDES permit compliance. No violations have occurred since the treatment system began operating and it consistently reduces copper, pentachlorophenol, and zinc levels to well within permitted levels (0.020 mg/l, 0.025 mg/l, and 0.055 mg/l, respectively.)

Method	Criteria
ORS 468.155 (1)(b)(A)	The prevention, control, or reduction must be accomplished by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

"Industrial waste" means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

"Treatment works" means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Applied to this Application

The carbon adsorption and filtration system reduces copper, pentachlorophenol, and zinc concentrations in storm water prior to discharge. The claimed facility meets the definition of **treatment works**. High concentrations of copper, pentachlorophenol, and zinc found in storm water meets the definition of **industrial waste** and water pollution as defined under the *Purpose: Required* section above.

Exclusions	Criteria
ORS 468.155 (3) OAR 340-016- 070(3)	The regulations provide a list of over 40 items excluded from the definition of a Pollution Control Facility. Items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement	Criteria
ORS 468.155 (3)(e)	The replacement or reconstruction of all or part of a facility that the State of Oregon previously certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions. The applicant replaced the facility:

- 1) due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or
- 2) before the end of its useful life.

Applied to this Application

The State of Oregon issued **four** certificates to the applicant at this site. Two of the certificates were for water quality and two were for air quality. The claimed facility is **not a replacement** to any of these previously certified facilities.

Maximum Credit Criteria

ORS 468.173(3)(f) The maximum tax credit available to the applicant is 35% if the application was filed between January 1, 2002, and December 31, 2008, inclusively; and the certified facility cost does not exceed \$200,000.

Applied to this Application

The **maximum tax credit is 35%** because the application was filed on 08/02/04 and the certified facility cost is \$27,033.

Facility Cost**Subtractions** Criteria

OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

\$ Certification Criteria

ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost and show that the cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$27,033
	No deductions	\$0
	Certified	\$27,033

Facility Cost Allocable to Pollution ControlORS 468.190 (3) Criteria

If the cost of the facility (or facilities certified under one certificate) 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 water pollution bears to the entire time the facility is used for any purpose.

Applied to this Application

The certified facility cost is **\$27,033** and the applicant uses the facility **100%** of the time for water pollution control.

ComplianceORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

DEQ Northwest Region staff assigned to the source is Ranei Nomura who affirmed the applicant's statement that the facility and site are in compliance with the applicant's NPDES Permit requirements. DEQ issued Air Contaminant Discharge Permit number 342580 to the site on December 1, 1987.

Reviewers: PBS Engineering and Environmental
Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Water Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

Pediatric Dentistry
9370 SW Greenburg Road, Ste T
Portland, OR 97223

Organized as: S Corp
Taxpayer ID: 93-1314589

Technical Information

Karole H. Wilson, a dentist practicing in Portland, Oregon, is claiming a Silament Vivadent S5 Amalgam Separator. Amalgam contains mercury and an alloy of silver, tin and copper. Amalgam separators are traps in the water and vacuum lines designed to remove amalgam waste particles from wastewater. Dental amalgam restorations generate amalgam waste particles that can be suctioned into the dental unit's vacuum line and discharged into the public sewer system.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The taxpayer who is allowed the credit must be:

- a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Director's Recommendation

Approve Application No.6812

Applicant: **Karole H. Wilson**

Certification of:

Facility Cost		\$ 469
Percentage Allocable	X	100%
Maximum Percentage	X	35%
Tax Credit		\$ 164

Certificate Period: 1 year

Facility Identification

Same as the applicant's address.

The certificate will identify the facility as:

One Silament Vivadent S5 Amalgamator, Serial #1515775

Applied to this Application

DEQ will report the following information to the Department of Revenue:
Karole H. Wilson **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility**Timely Filing** Criteria

2001 Edition ORS 468.165(6) If the applicant completed constructing the facility on or after January 1, 2002, the applicant must submit the application within one year after the construction completion date. The final application, however, is not valid if the applicant submits the application before they complete construction or before they place the facility into service.

Applied to this Application

The applicant filed the application within the one-year filing requirement. They completed construction or installation on 11/19/2003 and submitted the application on 8/27/2004. The applicant submitted the application after they completed construction or installation and placed the facility into service on 11/19/2003.

Purpose: Voluntary Criteria

ORS 468.155 (1)(a)(B) The sole purpose, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of water pollution.

OAR 340-016-0060(2)(a)

“Pollution” or “water pollution” means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.

Applied to this Application

The applicant claims the facility has a **sole purpose**. The Amalgam Separator reduces a substantial quantity of hazardous waste pollution. The waste pollutant is amalgam, which contains mercury and an alloy of silver, tin and copper. If not removed, the mercury contained in the dental wastewater escapes into rivers and streams and can be absorbed by fish. The primary environmental route of human exposure to mercury is from eating fish.

Method Criteria

ORS 468.155 (1)(b)(A) The prevention, control, or reduction must be accomplished by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

"**Industrial waste**" means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

"**Treatment works**" means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Applied to this Application

Mercury meets the definition of **industrial wastewater** as defined by ORS 468B.005.

The Amalgam Collector meets the definition of **treatment works** in ORS 468B.005.

Exclusions	<u>Criteria</u>
ORS 468.155 (3) OAR 340-016-070(3)	The regulations provide a list of over 40 items excluded from the definition of a Pollution Control Facility. Items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions**.

Replacement	<u>Criteria</u>
ORS 468.155 (3)(e)	The replacement or reconstruction of all or part of a facility that the State of Oregon previously certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions. The applicant replaced the facility: <ol style="list-style-type: none"> 1) due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or 2) before the end of its useful life.

Applied to this Application

The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location.

Maximum Credit	<u>Criteria</u>
ORS 468.173(3)(f)	The maximum tax credit is 35% if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified cost does not exceed \$200,000.

Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on 8/27/2004, and the certified facility cost is **\$469**.

Facility Cost

- Subtractions** Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:
- the salvage value of a pre-existing facility if the applicant is replacing a facility;
 - the amount of any government grants received to pay part of the facility cost;
 - the present value of any other state tax credits for which the investment is eligible; and
 - ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions**.

- \$ Certification** Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost and show that the cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Claimed
	Claimed	\$469
	No deductions	0
	Certified	\$469

Facility Cost Allocable to Pollution Control

- ORS 468.190 (3) Criteria
 If the cost of the facility (or facilities certified under one certificate) 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.

Applied to this Application

The certified facility cost is **\$ 469** and the applicant uses the facility **100%** of the time for pollution control.

Compliance

- ORS 468.180(1) Criteria
 The Environmental Quality Commission may not issue a certificate unless the

applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the site.

Reviewer: Maggie Vandehey

Attachment C

Background and References for Certification Denials

The Department recommends that the Commission deny the **two** applications presented in this attachment. The applicant filed the two applications beyond the two-year filing period as described in the *Timely Filing* section of each Review Report presented in this attachment.

Summary of Facilities Recommended for Denial

App #	Applicant	Claimed Cost	% Allocable	Maximum Tax Credit	Media
6555	Weyerhaeuser Company	\$ 1,627,545	0%	50%	Air
6556	Weyerhaeuser Company	1,251,199	0%	50%	Water.

Apps	Sum	2,878,744
2	Average	1,439,372
	Minimum	1,251,199
	Maximum	\$ 1,627,545

Statutory Provision for Denying Certification - Filing Period

ORS 468.165 As applied to ORS 468.155 to 468.190

...

- (6) The application shall be submitted after construction of the facility is substantially completed and the facility is placed in service and within one year after construction of the facility is substantially completed. **Failure to file a timely application shall make the facility ineligible for tax credit certification.** An application may not be considered filed until it is complete and ready for processing. The commission may grant an extension of time to file an application for circumstances beyond the control of the applicant that would make a timely filing unreasonable. However, the period for filing an application may not be extended to a date beyond December 31, 2008.

By rule, the Department has authority to reject applications that the applicant failed to file within the required period. In practice, the Department has not rejected these applications but presented them to the Commission for action.

OAR 340-016-0055 Application Procedures

...

- (2) Application for Final Certification. The applicant shall submit all information, exhibits and substantiating documents requested on the application for final certification. The Department shall **reject** the application for final certification if the applicant fails to submit the application:
- (a) After the construction of the facility is substantially complete and the facility is placed in service;
 - (b) Within one year after construction of the facility is substantially completed; and
 - (c) On or before December 31, 2008.

One-year, Two-year Filing Period

The 2001 Legislative Assembly passed Senate Bill 764-B (Oregon Laws, 2001, Chapter 928), which made a number of changes to the Pollution Control Facilities Tax Credit law. One of the changes was a reduction in the filing period from two years to one year.

Section 6(1) of the 2001 Act was ambiguous with respect to facilities certified under the 1999 edition of ORS 468.155 to 468.190 when considered in conjunction with the effective date and other language in the Act. The EQC determined that a restrictive and unintended interpretation of the 2001 Act would withhold the tax credit from some applicants that constructed or installed facilities under the provisions of the 1999 edition. The EQC adopted the following rule in order to clarify the effective date of Senate Bill 764-B.

OAR 340-016-0007 Facilities certified under the 1999 Edition

For the purposes of Oregon Revised Statute 468.173(1), a facility may be certified under the 1999 edition of ORS 468.155 to 468.190 if the facility was substantially completed on or before December 31, 2001, and an application was filed with the Department within two years after the date of substantial completion. Adopted 10-4-02; effective 11-01-02

Statutory Provision for Denying Certification - General

ORS 468.170 Action on application; rejection; appeal; issuance of certificate; certification.

...

- (2) If the commission **rejects** an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil than was claimed in the application for certification, the commission shall cause written notice of its action, and a concise statement of the findings and reasons therefore, to be sent by registered or certified mail to the applicant before the 120th day after the filing of the application.

ORS 468.190 Allocation of costs to pollution control.

...

- (2) The portion of actual costs properly allocable shall be from zero to 100 percent in increments of one percent. If zero percent, the commission shall issue an order **denying** certification.



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Air Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

Tax Department, CH1c28
PO Box 9777
Federal Way, WA 98063

Organized as: **C Corp**
Taxpayer ID: **91-0470860**

Technical Information

Weyerhaeuser Company produces kraft bag paper and linerboard at its Albany mill. The applicant recovers the chemicals used in the pulping process by using lime and then recovers the lime in the lime kiln, which produces fine particulate (PM). The applicant installed an electrostatic precipitator (ESP) to reduce PM emissions by 99.9%. The claimed facility removes approximately 100 pounds of lime dust per minute. The applicant collects and reuses the lime. The claimed facility includes the ESP, exterior ducts, dust collection conveyor, and a material handling bucket elevator.

Taxpayer Allowed Credit

ORS 315.304(4) Criteria

The Department of Revenue determines if the taxpayer is allowed the credit if one of the following conditions apply. The taxpayer is the:

- a. Owner, including a contract purchaser, of the trade or business that uses the Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. Person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Director's Recommendation

**Deny Application No.6555 – Untimely Filing & Zero
Percent Allocable**

Applicant: **Weyerhaeuser Company**

Applicant Claimed:

Facility Cost		\$1,627,545
Percentage Allocable	X	100%
Maximum Percentage	X	50%
Tax Credit		<u>\$813,773</u>

Facility Identification

3251 Old Salem Road
Albany, OR 97321

The claimed facility is identified as:

A Lime Kiln Precipitator

Applied to this Application

Weyerhaeuser Company **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility**Timely Filing**

1999 Edition ORS
468.173(1) OAR
340-016-0007

Criteria

The applicant must submit the final application after completing construction of the facility and placing it into operation. If the applicant completed constructing the facility before January 1, 2002, the applicant must submit the application within **two years** after the construction completion date.

Applied to this Application

The applicant **did not submit the application within the two-year filing requirement**. The applicant completed construction on 5/4/2001 and submitted the application on 7/30/2003.

The 7/30/03 filing date means that the applicant would have had to complete construction of the claimed facility on or after 7/30/2001 to have timely filed the application. The Department, however, determined that the applicant completed the claimed facility on or before 5/4/01 when the applicant submitted a letter to Mr. Gary Andes at DEQ's Western Region Air Quality Division. The letter stated that the lime kiln was processing spent lime on 5/4/01 and the ESP system was operational. Bighorn Environmental conducted source testing of the ESP on 5/28/01.

The applicant originally claimed they placed the claimed facility into operation on 07/31/01. The Department requested documentation to verify this date on 08/07/03 but the applicant did not provide the requested documentation.

Purpose: Required

ORS 468.155
(1)(a)(A)
OAR 340-016-
0060(2)(a)

Criteria

The principal purpose of the claimed facility must be to comply with a requirement imposed by DEQ, EPA, or LRAPA to prevent, reduce, or control air pollution. That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Air Pollution" is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005

Applied to this Application

The ESP, exterior ducts, and dust collection conveyor **comply with** the applicant's Title V air **permit** issued by DEQ.

The primary and most important **purpose of the bucket elevator is material handling** to return reclaimed lime back to the process, rather than to meet the

requirements of the applicant's Title V air permit. The Department subtracted the associated costs from the claimed facility cost under the *Facility Cost* section below.

Method Criteria
 ORS 468.155 (1)(b)(B) The prevention, control, or reduction must be accomplished by the disposal or elimination of air contaminants, air pollution, or air contamination sources; and the use of an air cleaning device as defined in ORS 468A.005.

Applied to this Application

The ESP system meets the definition of **an air-cleaning device** and PM meets the definition of **an air contaminant** as defined by ORS 468A.005.

Exclusions Criteria
 ORS 468.155(3) The regulations exclude over 40 items from the definition of a Pollution Control Facility. Exclusions include items that make an insignificant contribution to the pollution control purpose of the claimed facility. Any items that do not meet the definition are ineligible for certification.
 OAR 340-016-0070(3)

Applied to this Application

There are **no exclusions** other than the items discussed under the *Purpose: Required* section above.

Replacement Criteria
 ORS 468.155(3)(e) The replacement or reconstruction of all or part of a facility that the State of Oregon previously certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions. The applicant replaced the facility:

- 1) due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or
- 2) before the end of its useful life.

Applied to this Application

The State of Oregon issued **18** certificates to Willamette Industries, the previous owner of this site. Five of the certificates were for treatment works for air quality. The claimed facility is **not a replacement** facility.

Maximum Credit Criteria
 ORS 468.173(1) The maximum tax credit is 50% of the certified facility cost if the applicant completed construction before January 1, 2002.
 OAR 340-016-0007

Applied to this Application

The **maximum tax credit would have been 50%** because the applicant completed construction of the facility prior to January 1, 2002.

Facility Cost

- Subtractions** Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:
- the salvage value of a pre-existing facility if the applicant is replacing a facility;
 - the amount of any government grants received to pay part of the facility cost;
 - the present value of any other state tax credits for which the investment is eligible; and
 - ineligible costs as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions** other than the items discussed under the *Purpose: Required* section above.

- \$ Certification** Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the material recovery portion of the facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost. The cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Cost
	Claimed	\$1,627,545
Purpose: Required	Bucket Elevator	- \$34,820
	Untimely filing	<u>-\$1,592,725</u>

Facility Cost Allocable to Pollution Control

- % Certification** Criteria
 ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste, hazardous waste, or to recycling or appropriately disposing of used oil.

Applied to this Application

The applicant claims the facility is 100% allocable, however the Department determined that **0%** of the facility cost is **allocable** to pollution control as discussed in the *Percentage* subsection below.

Percentage Criteria

- ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.
- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
 - b. The estimated annual percent return on the investment in the facility;
 - c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
 - d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
 - e. Any other relevant factors.

Applied to this Application

The Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above and a seven-year useful life. The claimed facility reclaims approximately 72 tons of lime per day, thereby reducing the quantity of lime purchased. Bulk lime sells for approximately \$55 per ton and the annual savings would be \$1,386,000 per year. This exceeds the applicant's estimated annual operating expenditures of \$1,000,000. The Facility ROI exceeds the National ROI for 2001, the facility's construction completion year resulting in a percentage of the **cost allocable** to pollution control of **0%**. The applicant did not investigate an alternative technology and there are no other relevant factors.

Compliance

ORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has issued the following permits to the site:

- NPDES Storm Water Permit 1200Z, issued 07/22/97;
- NPDES Wastewater Permit Number 101345, issued 11/30/95; and
- Title V Air Permit Number 22-0471, issued 01/03/00.

Reviewers: PBS Engineering & Environmental
Maggie Vandehey, DEQ



State of Oregon
Department of
Environmental
Quality

Tax Credit Review Report

Pollution Control Facility: Water Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Applicant Identification

Tax Department CH1C28
PO Box 9777
Federal Way, WA 98063

Organized as: **C Corp**
Taxpayer ID: **91-0470860**

Technical Information

Weyerhaeuser Company produces kraft bag paper and linerboard at its Albany mill. The manufacturing process requires the storage of various liquid chemicals. The claimed facility provides secondary containment for a 1,100,000-gallon storage tank for green liquor (sodium carbonate and sodium sulfide) and a 550,000-gallon white liquor (sodium hydroxide and sodium sulfide) tank. The containment area has a concrete base and curbs designed to hold 110% of the volume of the largest tank. The claimed facility includes a collection sump that transfers spilled material to a collection tank or allows the discharge of clean stormwater through a new 1,300-foot 30" storm sewer line connecting to an existing stormwater system.

Director's Recommendation

Deny Application No.6556 – Untimely Filing

Applicant: **Weyerhaeuser Company**

Applicant Claimed:

Facility Cost	\$1,251,199
Percentage Allocable	100%
Maximum Percentage	50%
Tax Credit	<hr/> \$625,600

Facility Identification

3251 Old Salem Road
Albany, OR 97321

The claimed facility is identified as:

**Lime Kiln Area Spill Containment and Sewer
Upgrades.**

Taxpayer Allowed CreditORS 315.304(4) Criteria

The taxpayer who is allowed the credit must be:

- a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or
- b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Applied to this Application

Weyerhaeuser Company **owns** the business that uses the Oregon property requiring the pollution control.

Eligibility**Timely Filing** Criteria

1999 Edition ORS
468.173(1) OAR
340-016-0007

If the applicant completed constructing the facility before January 1, 2002, the applicant must submit the application within two years after the construction completion date. The final application, however, is not valid if the applicant submits the application before they complete construction or before they place the facility into operation.

Applied to this Application

The applicant **did not submit the application within the two-year filing requirement**. The applicant completed construction on 1/11/2001 and submitted the application on 7/30/2003.

The Department reviewed the project invoices. The last invoice was from Knight's Fabrication and Welding for the addition of a sump vapor trap which indicates that construction completion was prior to the 01/11/01 invoice date. On 08/07/03, the Department requested documentation to verify the construction completion date and the date the applicant placed the claimed facility into operation. The applicant did not provide the requested information.

Purpose: Required Criteria

ORS 468.155
(1)(a)(A)
OAR 340-016-
0060(2)(a)

The principal purpose of the claimed facility must be to comply with a **requirement imposed by DEQ** or EPA to prevent, reduce, or control water pollution. That principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

"Water Pollution" means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic,

commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.
ORS 468B.005

Applied to this Application

The primary or most important purpose of the claimed facility is to prevent water pollution. The secondary containment around the two chemical storage tanks and the containment sump comply with the applicant's stormwater discharge permit. The DEQ issued a **permit which requires secondary containment**.

The primary and most important purpose of the 1,300-foot 30" **storm sewer line** is to transfer clean stormwater to the Willamette River. It is **not eligible** for certification because it does not reduce, prevent, or control water pollution. The Department subtracted the cost of the line from the claimed facility cost under the *Facility Cost* section below.

Method	<u>Criteria</u>
ORS 468.155 (1)(b)(A)	The prevention, control, or reduction must be accomplished by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

"Industrial waste" means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

"Treatment works" means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Applied to this Application

Contaminated stormwater meets the definition of **water pollutant** as defined under the *Purpose: Required* section. The secondary containment area meets the definition of a **treatment works** because it contains any spillage from the two chemical storage tanks.

As subtracted under the *Purpose: Required* section above, the storm sewer line transfers uncontaminated stormwater. Uncontaminated stormwater does not meet the definition of "industrial waste."

Exclusions	<u>Criteria</u>
ORS 468.155 (3) OAR 340-016-070(3)	The regulations provide a list of over 40 items excluded from the definition of a Pollution Control Facility. Items that do not meet the definition are ineligible for certification.

Applied to this Application

There are **no exclusions** except the storm sewer line subtracted under the *Purpose: Required* section above.

Replacement Criteria
 ORS 468.155 (3)(e) The replacement or reconstruction of all or part of a facility that the State of Oregon previously certified as a pollution control facility under ORS 468.170 is not eligible for the tax credit with two exceptions. The applicant replaced the facility:

- 1) due to a requirement imposed by DEQ or EPA that is different than the requirement to construct the original facility; or
- 2) before the end of its useful life.

Applied to this Application

The State of Oregon issued **18** certificates to Willamette Industries, the previous owner of this site. Thirteen of the certificates were for treatment works for water quality. The claimed facility is **not a replacement** facility.

Maximum Credit Criteria
 1999 Edition The maximum tax credit is 50% of the certified facility cost if the applicant
 ORS 468.173(1) completed construction before January 1, 2002.
 OAR 340-016-0007

Applied to this Application

The **maximum tax credit would have been 50%** because the applicant completed construction of the facility on or before 7/31/2001.

Facility Cost

Subtractions Criteria
 OAR 340-016-0070(1) The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

- a) the salvage value of a pre-existing facility if the applicant is replacing a facility;
- b) the amount of any government grants received to pay part of the facility cost;
- c) the present value of any other state tax credits for which the investment is eligible; and
- d) **ineligible costs** as set forth in OAR 340-016-0070(3).

Applied to this Application

There are **no subtractions** other than the cost of the storm sewer line discussed under the *Purpose: Required* section above.

S Certification Criteria
 ORS 468.170(1) The certified cost is limited to the actual cost of the claimed facility. The certified cost may not exceed the taxpayer's own cash investment in the facility or portion of the facility.

Applied to this Application

Invoices substantiated the eligible facility cost and show that the cost represents the **taxpayer's own cash investment**.

Referenced Section	Description of Ineligible Portion	Cost
	Claimed	\$1,251,199
<i>Purpose: Required</i>	1,300-foot 30" storm sewer line	- \$532,184
	Adjusted Cost	\$719,015

Facility Cost Allocable to Pollution Control**% Certification** Criteria

ORS 468.170(1) The certified "percentage allocable" is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

Applied to this Application

The Department **did not verify** the applicant's claim that 100% of the facility cost is allocable to pollution control.

Percentage Criteria

ORS 468.190(1) The following factors establish the portion of costs properly allocable to material recovery or recycling for facilities that cost more than \$50,000.

- a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;
- b. The estimated annual percent return on the investment in the facility;
- c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;
- d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and
- e. Any other relevant factors.

Applied to this Application

The Department **did not verify** the applicant's method for determining the percentage of the facility cost that is allocable to pollution control.

ComplianceORS 468.180(1) Criteria

The Environmental Quality Commission may not issue a certificate unless the applicant constructed or installed the claimed facility in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 465, 466 and 467 and ORS chapters 468, 468A and 468B. This includes the rules and standards adopted to implement these provisions.

Applied to this Application

Due to untimely submittal of the application, the reviewers did not contact the DEQ staff assigned to the source regarding the facility's or the site's compliance with Department rules and statutes and with EQC orders. DEQ has issued the following permits to the site:

- NPDES Stormwater Permit 1200Z, issued 07/22/97;
- NPDES Wastewater Permit Number 101345, issued 11/30/95; and
- Title V Air Permit Number 22-0471, issued 01/03/00.

Reviewers: PBS Engineering and Environmental
Maggie Vandehey, DEQ

Attachment D

Certificate Administration

The taxpayers presented in this attachment notified the Department of the change in the status of their Pollution Control Facilities Tax Credit Certificates. Based on these notifications, the Department recommends that the Commission take the following actions.

Action	Certificate #	
Transfer	3432	From: Ore-Ida Foods, Inc. To: H.J. Heinz Company, L.P.
	3960, 3996, 4102	From: Portland General Electric Co. (100%) To: Portland General Electric Co. (66.67%) & Confederated Tribes of the Warm Springs (33.33%)
	4263	From: Delbert Folk 324 SW Birdie Ct. Warrenton OR 97146 To: Marci Utti and Mark Utti 1423 S Franklin Seaside, OR 97138
	4796, 4797, 4798, 10381, and 10545	From: Garbarino Diposal & Recycling To: Global Leasing, Inc.
	4459, 4461, 4603, 4604, 4605, 4639, 4640, 4641, 4682, 4683, 4790, 10193, 10194	From: Washington Mutual Bank To: Umpqa Bank
Revoke	The following applicants notified the Department that they ceased operating the certified facilities.	
	3706	Intel Corporation
	10401	Novellus Systems, Inc.
	10637	Ken Schumm

Reissue	4008	<p>Intel Corporation</p> <p><u>Certified Facility Cost</u></p> <p>From: \$1,046,475</p> <p>To: \$926,480</p> <p><u>Facility Description</u></p> <p>From: A noise abatement wall and two air systems: 1) Three Corrosive Exhaust Scrubbers, and 2) One VOC Abatement unit;</p> <p>To: A noise abatement wall and three corrosive exhaust scrubbers.</p>
	4079	<p>Richard D. and Russell Baker notified the Department that they converted a portion of the straw storage building to seed storage.</p> <p><u>Certified Percentage Allocable</u></p> <p>From: 92%</p> <p>To: 49%</p>

Statutory Provision for Revoking Certification

ORS 468.185 (1) Pursuant to the procedures for a contested case under ORS 183.310 to 183.550, the Environmental Quality Commission may order the revocation of the certification issued under ORS 468.170 of any pollution control or solid waste, hazardous wastes or used oil facility, if it finds that:

- (a) The certification was obtained by fraud or misrepresentation; or
- (b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil as specified in such certificate.

(2) As soon as the order of revocation under this section has become final, the commission shall notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.

(3) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to subsection (1)(a) of this section, all prior tax relief provided to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405 and 315.304.

...

Tax Expenditure Liability Report

Attachment E

When the Environmental Quality Commission issues a Pollution Control Facilities Tax Credit Certificate, the State of Oregon incurs a tax expenditure liability. The table in this attachment shows the maximum potential fiscal impact associated with the Commission's decision to certify the facilities presented in this staff report and for the current biennium.

This report shows the maximum amount of credit that each applicant may use to reduce their Oregon taxes in any one year if the Commission certifies their facility. The annual limitation is equal to the tax credit divided by the "remaining useful life" of the facility but no more than ten years. The remaining useful life is the useful life of the facility less the expired period between the date the applicant placed the facility into operation and the date the Commission approved certification.

Attachment E

Tax Expenditure Liability Report

03-05 Biennium

App #	Tax Credit	Placed in Operation	UL	Remaining UL	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
6277	20,423	2000	7	3		6,808	6,808	6,807	0	0	0	0	0	0	0
6601	264,979	2003	10	9		29,442	29,442	29,442	29,442	29,442	29,442	29,442	29,442	29,443	0
6719	87,529	2003	7	6		14,588	14,588	14,588	14,588	14,588	14,589	0	0	0	0
6731	196,000	2003	10	9		21,778	21,778	21,778	21,778	21,778	21,778	21,778	21,778	21,776	0
6766	13,957	2003	5	4		3,489	3,489	3,489	3,490	0	0	0	0	0	0
6781	9,261	2004	39	10		926	926	926	926	926	926	926	926	926	927
6783	443,791	2003	10	9		49,310	49,310	49,310	49,310	49,310	49,310	49,310	49,310	49,311	0
6799	342,288	2002	5	3		114,096	114,096	114,096	0	0	0	0	0	0	0
6801	408	2004	3	3		136	136	136	0	0	0	0	0	0	0
6803	9,462	2003	10	9		1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,054	0
6807	48,701	2003	5	4		12,175	12,175	12,175	12,176	0	0	0	0	0	0
6810	25,752	2004	7	7		3,679	3,679	3,679	3,679	3,679	3,679	3,678	0	0	0
6812	164	2003	1	1		164	0	0	0	0	0	0	0	0	0
6819	121	2004	7	7		18	18	17	17	17	17	17	0	0	0
6820	11,270	2003	7	6		1,879	1,879	1,878	1,878	1,878	1,878	0	0	0	0
6829	98,031	2004	10	10		9,803	9,803	9,803	9,803	9,803	9,803	9,803	9,803	9,803	9,804
6830	25,965	2004	20	10		2,596	2,596	2,596	2,596	2,596	2,596	2,596	2,596	2,596	2,601
6832	69,354	2004	10	10		6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,939
6839	34,054	2004	7	7		4,865	4,865	4,865	4,865	4,865	4,865	4,864	0	0	0
Dec'04	1,764,928					283,738	283,574	283,571	160,639	144,973	144,974	130,383	121,841	121,844	20,271
Sept '04	2,467,375					379,236	379,231	379,227	379,226	247,602	243,703	129,361	124,493	124,494	80,800
May '04	2,318,208					310,167	310,167	310,167	310,167	271,873	271,873	254,719	208,503	70,570	0
Dec '03	4,815,472				598,243	598,243	598,243	589,384	583,236	556,927	522,324	522,077	224,379	22,420	0
Oct '03	8,982,220				1,822,303	1,559,805	1,355,567	1,332,976	947,174	759,224	720,219	358,126	96,070	30,757	0
WC LTD	13,797,692				2,158,048	1,953,810	1,922,360	1,530,410	1,316,151	1,242,543	880,203	320,449	53,177	0	0
Total	34,145,895				4,578,594	5,084,999	4,849,141	4,425,734	3,696,592	3,223,141	2,783,296	1,715,115	828,463	370,086	101,071

WC LTD = Wood Chippers Biennium-to-Date (7/1/2003 - 11/10/04)

Attachment F

Certified Wood Chipper Report 8/1/04 – 11/1/04

On October 4, 2002, the Commission adopted OAR 340-016-0009. The rule delegates the Commission's authority to certify wood chippers for tax credit purposes to the Department. The Commission requested that the Department periodically provide a listing of the wood chipper certifications.

The Department presented the last Certified Wood Chipper Report to the EQC on September 9, 2004. The Department certified the 26 wood chippers presented in this attachment on August 18, 2004 and September 27, 2004.

OAR 340-016-0009 Certification of wood chippers

For the purpose of subdelegating authority to approve and issue final certification of pollution control facilities under OAR 340-016-0080(2):

- 1) The Environmental Quality Commission authorizes the Director of the Department of Environmental Quality or the Director's delegate to certify wood chippers as provided in OAR 340-016-0060(4)(h)(C) if:
 - a) The Department determines the facility is otherwise eligible under OAR 340-016-0060; and
 - b) The claimed facility cost does not exceed \$50,000 as set forth in OAR 340-016-0075(1).
- 2) The Department may elect to defer certification of any facility to the Environmental Quality Commission.
- 3) If the Department determines the facility cost, the percentage of the facility cost allocable to pollution control, or the applicable percentage under ORS 468.173 is less than the applicant claimed on the application then the Department shall:
 - a) Notify the applicant in writing; and
 - b) Include a concise statement of the reasons for the proposed certification of a lesser amount or percentage; and
 - c) Include a statement advising the applicant of their rights under section (4).
- 4) Applicants that receive a notification under section (3) may elect to defer certification to the Environmental Quality Commission by notifying the Department within 30 days of the notification date.
- 5) The Department shall defer certification to the Environmental Quality Commission according to sections (2) and (4).
- 6) The Director or the Director's delegate shall certify facilities that otherwise qualify under this rule and have not been deferred according to sections (2) or (4).

Adopted 10-4-02; effective 11-01-02

Attachment F

Certified Wood Chippers

8/1/04 - 11/10/04

Action Date	App #	Applicant	Claimed	Certified	Difference	% Allocable	Maximum Percent	GF Liability
27-Sep-04	6777	James S. Wakefield	\$1,349	\$1,349	\$0	100%	35%	\$472
18-Aug-04	6791	Hooper's Farm Service, LLC	\$14,000	\$14,000	\$0	100%	35%	\$4,900
18-Aug-04	6792	Larry Cartney	\$2,028	\$2,028	\$0	100%	35%	\$710
18-Aug-04	6793	Paul Palfey	\$3,599	\$3,599	\$0	100%	35%	\$1,260
18-Aug-04	6794	Michael C. Kopp	\$1,595	\$1,595	\$0	100%	35%	\$558
18-Aug-04	6795	Joseph Schattler, President	\$23,175	\$23,175	\$0	100%	35%	\$8,111
27-Sep-04	6796	Lewis Wardrip	\$616	\$616	\$0	100%	35%	\$216
18-Aug-04	6797	John Fenk	\$1,439	\$1,439	\$0	100%	35%	\$504
18-Aug-04	6798	Gary Thomas Engdahl	\$3,399	\$3,399	\$0	100%	35%	\$1,190
18-Aug-04	6800	Nixon Farms, Inc.	\$6,502	\$6,502	\$0	100%	35%	\$2,276
18-Aug-04	6802	Hans Von Spaeth	\$1,659	\$1,659	\$0	100%	35%	\$581
18-Aug-04	6804	Lynette Boniface	\$14,500	\$14,500	\$0	100%	35%	\$5,075
18-Aug-04	6805	Andrew M. Rubin	\$4,800	\$4,800	\$0	100%	35%	\$1,680
18-Aug-04	6806	Fish Lake Resort	\$2,695	\$2,695	\$0	100%	35%	\$943
27-Sep-04	6809	Daniel Levin	\$1,640	\$1,640	\$0	100%	35%	\$574
27-Sep-04	6811	Lea Construction, Inc.	\$34,828	\$34,828	\$0	80%	35%	\$9,752
27-Sep-04	6813	Kenneth L. Settlemier	\$5,705	\$5,705	\$0	100%	35%	\$1,997
27-Sep-04	6814	Andrea L. Gassman	\$1,189	\$1,189	\$0	100%	35%	\$416
27-Sep-04	6815	Tom Graves	\$640	\$640	\$0	100%	35%	\$224
27-Sep-04	6816	George R. Last	\$2,800	\$2,800	\$0	100%	35%	\$980
27-Sep-04	6817	Steven Strain	\$1,600	\$1,600	\$0	100%	35%	\$560
27-Sep-04	6818	Dennis R. Turk	\$2,450	\$2,450	\$0	100%	35%	\$858
27-Sep-04	6821	Stutzman Environmental Products	\$1,645	\$1,645	\$0	100%	35%	\$576
27-Sep-04	6822	Bruce E. Anderson	\$895	\$895	\$0	100%	35%	\$313
27-Sep-04	6823	Derek Davis	\$2,798	\$2,798	\$0	100%	35%	\$979
27-Sep-04	6824	David J. McCormick	\$1,600	\$1,600	\$0	100%	35%	\$560

26 certificates issued

Sum	\$139,146	\$139,146	\$46,263
Average	\$5,352	\$5,352	\$1,779
Minimum	\$616	\$616	\$216
Maximum	\$34,828	\$34,828	\$9,752

Attachment G

Amalgam Separator Fact Sheet

The Department developed the Fact Sheet in this attachment to support its outreach to dental practices. Two dental practices claim amalgam separators as water pollution control facilities as shown in Attachment B of this staff report.

Amalgam Separator Installation Tax Credit



State of Oregon
Department of
Environmental
Quality

811 SW 6th Avenue
Portland, OR 97204
Phone: (800) 452-4011 Fax:
(503) 229-5850

www.deq.state.or.us

**Management
Services Division
Tax Credit Program**
Contact: Maggie Vandehey
Phone: (503) 229-6878

Background

Any dental practice in Oregon that makes an investment in an amalgam separator may qualify for an Oregon tax credit under the Oregon Department of Environmental Quality (DEQ) Tax Credit Program.

Amalgam separators are devices that remove mercury and mercury-containing items from dental wastewater. These devices can reduce up to 95 percent of discharged mercury when installed in dental offices in conjunction with chair-side traps and vacuum pump filters.

Dental practices are a significant source of mercury entering publicly operated wastewater treatment plants. Removing mercury from dental wastewater is an important step in removing mercury that can accumulate in fish tissue at concentrations that are harmful to human health.

About this tax credit

Any dental practice in Oregon may apply to DEQ for this tax credit within one-year after they install an amalgam separator. The tax credit is 35% of the cost of the separator and installation costs. Maintenance and service contracts, however, are not eligible for the credit. The tax credit is a dollar-for-dollar reduction of a dental practice's Oregon tax liability.

The tax credit program does not limit the:

- amount of credit that is available to any practice; or
- number of separators that a practice may claim; or
- number of applications that the practice may file. This means that the practice may install and apply for the tax credit one chair at a time.

The taxpayer may use the credit in equal portions over the life of the equipment. Consult with the dental practice's tax preparer to determine the life of the equipment.

Applying for this tax credit

The application is a two-page form. The form requests copies of all the invoices for the installation, a photograph of the installation, and

specifications for the separator. (Generally, a copy of a product brochure that provides these specifications is sufficient.)

The application fee is \$50 if the cost of the separator and the installation does not exceed \$5,000. Above that amount, the application fees are 1% of the cost.

About the certification process

DEQ reviews the information presented in the application. We may ask for additional information before making the recommendation to the Oregon Environmental Quality Commission (EQC) to approve or deny certification. The EQC is the board authorized to approve or deny Pollution Control Facilities Tax Credits. According to tax credit regulations, the EQC certifies all qualifying installations before the taxpayer may use the credit. The EQC typically approves most applications.

Upon approval, the EQC will issue a Pollution Control Facilities Tax Credit certificate. The certificate is proof to the Oregon Department of Revenue that the taxpayer may use the credit to reduce its Oregon taxes.

For more information

Contact Maggie Vandehey of DEQ's Pollution Control Tax Credit Program at (503) 229-6878, or 800-452-4011, x6878 toll-free in Oregon to obtain an application or to have specific tax credit questions answered.

Contact Rick Volpel of DEQ's Hazardous Waste Program, Portland, at (503) 229-6753 or toll-free in Oregon at 800-452-4011, x6753 for information on amalgam separators and the effects of mercury on the environment.

For information about the Pollution Control Facilities Tax Credit Program, visit "Tax Credits" listed under "Programs" on the DEQ Web site at www.deq.state.or.us.

Alternative formats

Alternative formats (such as large type or Braille) of this document can be made available. Contact DEQ's Office of Communications & Outreach, Portland, at (503) 229-5317, or toll-free in Oregon at 1-800-452-4011, ext. 5317, for more information.


04-OD-01
Last updated: 2/25/04
By M. Vandehey

State of Oregon
Department of Environmental Quality

Memorandum

Date: November 18, 2004

To: Environmental Quality Commission

From: Stephanie Hallock, Director 

Subject: Agenda Item I, Rule Adoption: Medford-Ashland PM₁₀ Attainment and Maintenance Plan as a revision to the State of Oregon Clean Air Act Implementation Plan (SIP), including supporting rule revisions in Divisions 200, 204, 224, 225, and 240. December 9-10, 2004 EQC Meeting

Department Recommendation The Department of Environmental Quality (DEQ, Department) recommends that the Environmental Quality Commission (EQC, Commission) adopt the proposed PM₁₀ attainment and maintenance plan, and supporting rules, as presented in Attachments A-B.

Background and Need for Rulemaking For over twenty five years, DEQ has worked with the people of the Rogue Valley to reduce particulate pollution (known as PM₁₀) and protect public health. This is one of Oregon's great air quality success stories. "PM₁₀" stands for particulate matter measuring 10 micrometers or less in diameter. PM₁₀ pollution is created primarily from various combustion processes (i.e. wood burning, industrial manufacturing, transportation), and is considered a risk to human health because of the body's inability to effectively filter out small particles of this size¹. The work of reducing PM₁₀ in the Rogue Valley has involved the communities of Jackson County, Ashland, Phoenix, Talent, Medford, Jacksonville, Central Point, White City, and Eagle Point, all of whom share a common airshed in the Rogue Valley. This common airshed also defines the air quality planning boundary for the Valley, known as the Medford-Ashland Air Quality Maintenance Area (AQMA).

During the 1980s, particulate pollution in the AQMA reached some of the highest levels in the nation and violated federal air quality health standards. As a result, the Rogue Valley was designated as a nonattainment area (*i.e. an area not in compliance with standards*) for particulate (PM₁₀) under the 1990 Clean Air Act Amendments.

¹ Fine particulate can become lodged in the respiratory system where it can be an irritant, as well as trigger biochemical and physical changes in the lungs. Children, the elderly, and others suffering from respiratory or heart disease are at greatest risk from PM₁₀ exposure.

At that time, DEQ worked with Valley communities to develop new emission reduction strategies to correct the violation of PM₁₀ standards. The result was the area's first PM₁₀ attainment plan in 1991. That plan included new emission reduction requirements for existing major industry, the residential woodstove curtailment and open burning programs, road cleaning programs to reduce dust, as well as other measures to protect the Valley from forest burning smoke. The plan also included strict requirements for limiting emissions growth from new and expanding major industry. This initial plan was designed to bring the Medford-Ashland AQMA into compliance with PM₁₀ standards by 1994.

Air quality monitoring in the AQMA shows that PM₁₀ standards were met in 1992, two years in advance of the December 1994 Clean Air Act deadline, and PM₁₀ levels have remained well below federal standards ever since. Meeting PM₁₀ standards means that the Environmental Protection Agency (EPA) can now revise the legal status of the Rogue Valley from *nonattainment* to *attainment* (i.e. in compliance with standards).

This proposed rulemaking includes an updated PM₁₀ *attainment plan* for the Medford-Ashland area, and a *maintenance plan* that demonstrates PM₁₀ standards will continue to be met through at least the year 2015. The attainment plan documents that PM₁₀ standards were met by the applicable Clean Air Act deadline, and demonstrates current compliance with standards. The maintenance plan ensures that PM₁₀ standards will continue to be met into the future. Both plans must be approved by EPA in order to revise the Valley's legal status from nonattainment to attainment for PM₁₀.

The initial Medford PM₁₀ attainment plan was submitted to EPA in 1991. All emission reduction measures adopted in that plan were successfully implemented; however the plan itself was never approved by EPA due to unresolved issues with the technical (modeling) analysis and demonstration of compliance. EPA has reviewed the Department's current air quality analysis and is expected to approve this 2004 attainment and maintenance plan.

This attainment and maintenance plan (*the plan*) is based on recommendations from the Medford-Ashland Air Quality Advisory Committee (see attachment E), and has been greatly influenced by the significant public comment received.

The plan continues all of the PM₁₀ strategies that have been so successful in reducing emissions in the Valley. These include:

- A mandatory woodstove curtailment program.
- Emission limit standards for existing industrial processes.
- Local open burning ordinances.
- Enhanced road cleaning program in Medford and White City.
- Management of prescribed forestry burning year round, and special protection for the Rogue Valley during the winter months.

The plan also continues the strictest requirements for managing emissions growth from future new and expanding major industry under the New Source Review (NSR) program. These include:

- a very low emission threshold level (5 tons/year) for triggering NSR,
- the requirement to install state-of-the-art emission control technology, and
- the requirement to obtain emission offsets and demonstrate an air quality benefit (20% improvement in air quality).

During the public comment period, DEQ sought input on its initial proposal to replace the emission offset requirement with an emissions growth allowance for new and expanding major industry. Two main issues influenced DEQ's final recommendation to retain the emission offset requirement. The first is the general public support for retaining all existing air quality requirements, even if it means less economic opportunity for the Valley. The second is the request from commenters that DEQ give greater consideration to recent medical evidence showing the potential for adverse health effects from fine particulate pollution.

The plan contains an air quality modeling analysis demonstrating that the Rogue Valley will continue to meet PM₁₀ standards into the future. The plan also establishes an allocation for motor vehicle emissions, and contains contingency measures to address any unexpected violation of standards.

Effect of Rule The proposed PM₁₀ attainment and maintenance plan and supporting rules will ensure the Rogue Valley will continue to meet federal PM₁₀ standards through at least the year 2015. It allows EPA to redesignate the Medford-Ashland Air Quality Maintenance Area (AQMA) to attainment for PM₁₀ (under Oregon's program the area then becomes a PM₁₀ maintenance area).

Retaining the strictest air quality requirements for new and expanding major industry (i.e. emission offsets) means that it will continue to be difficult for the Rogue Valley to accommodate new and expanding industrial facilities that produce particulate pollution.

Commission Authority The Commission has authority to take this action under ORS 468.020, ORS 468A.025, and ORS 468A.035.

Stakeholder Involvement The Department developed this plan with the help of the Medford-Ashland Air Quality Advisory Committee. The Committee reflected a cross section of community interests, including representatives from each city in the AQMA and Jackson County, local business and environmental interests, citizen advocate groups, local industry, and others (see Attachment E for a Committee membership). The Department worked closely with the Committee on the selection of technical analysis tools (such as emission factors and air quality models), and on evaluating options for air quality strategies, in particular the requirements for new and expanding major industry. The Department's proposal reflects a Committee consensus on most issues. Where there was disagreement, DEQ documented and considered the perspectives of all Committee members.

The most challenging issue for the advisory committee centered on requirements for new and expanding major industry. Under the Clean Air Act, once an area's nonattainment status is lifted, permitting requirements may be eased to reflect minimum federal standards for attainment areas. The Department discussed the options for industrial permitting with the advisory committee. The Committee unanimously recommended the following:

- Keep the emissions threshold (5 tons/year and 50 lbs/day) used to trigger the industrial New Source Review (NSR) process²; and

² Everywhere else in Oregon the New Source Review trigger level for PM₁₀ is 15 tons/year

- Keep the requirement that all new and expanding major industry install state-of-the-art emission control technology (known as Lowest Achievable Emission Rate-LAER) regardless of cost.

These recommendations were widely supported by commenters. The Committee did not, however, reach consensus on how to manage future industrial emissions growth, and was split almost evenly on this question. Two main options were considered by the Committee: 1) to retain the current emission offset and air quality benefit requirement, or 2) to replace the emission offset requirement with an emissions growth allowance. A slim majority of committee members recommended the industrial growth allowance option as providing an equitable balance between air quality protection and new economic opportunity. The minority of Committee members recommended that the current emission offset requirement be retained.

A majority of committee members and DEQ agreed that if a growth allowance were created, a PM₁₀ safety-margin (air quality cap) should also be established to prevent industrial emission increases from increasing PM₁₀ levels to federal standards. Based on the majority committee recommendation, the Department's initial proposal sought to replace the current emission offset requirement with an industrial growth allowance, and establish a PM₁₀ safety-margin level (cap) 5% below federal standards.

The Department has revised its initial proposal regarding the industrial growth allowance based on issues and concerns raised through the public comment process. After considering public comment, the Department recommends retaining the current requirements for new and expanding major industry, including emission offsets.

DEQ wishes to thank the Medford-Ashland Air Quality Advisory Committee for their years of service, and appreciates very much the insight and advice brought to many complex and difficult issues.

Public Comment The Department's initial plan proposal was released for public review in November 2003. The Department held a public workshop in Medford on December 9, 2003, and held a public hearing on December 16, 2003. Due to very high public interest, the comment period was extended to January 30, 2004, and an additional hearing was held on January 21.

In its initial proposal, DEQ sought to replace the current emission offset requirement with a growth allowance for new and expanding major industry. As mentioned above, the allowance would have permitted some increase in industrial emissions while still keeping air quality below PM₁₀ standards, and would have provided some new economic opportunity for the Valley. The proposal sparked intense public interest and debate over air quality goals in the Valley. The Department received comments from 4,697 people via email, petition drives, comment cards, letters, and phone calls. This was the largest response to a DEQ issue in recent history. The vast majority of commenters were opposed to DEQ's proposal to establish an industrial growth allowance, and asked DEQ to retain current (stricter) air quality requirements to better protect public health. A few commenters supported the plan as proposed, and some offered a variety of compromise positions on managing industrial emissions growth.

Many commenters also asked DEQ to give greater consideration to recent medical evidence showing the potential for adverse health effects from fine particulate pollution at levels below current federal standards. These commenters argued that in light of this research now is not the time to ease air quality requirements by allowing new and expanding industry to increase particulate emissions.

Other commenters argued that there are no emission offsets available for a new or expanding major source; therefore, the emission offset requirement can not be satisfied. This in effect creates a ban on any new particulate producing industries, even relatively small, clean facilities, and given that the Valley is in compliance with standards, retaining the offset requirement would be an unnecessary restriction.

Other commenters argued that the emission growth allowance option is allowed by the Clean Air Act, and strikes an equitable balance between air quality protection and new economic opportunity.

The Department took considerable time to carefully review both oral and written comments. DEQ greatly appreciates the time and effort taken by the public to express their views. While the initial growth allowance approach would maintain air quality within PM₁₀ standards, the comments received make clear that Rogue Valley communities wish greater protection of air quality and public health by keeping the emission offset requirement, even if this means reduced economic opportunity.

As a result of issues raised during the public comment period, DEQ is recommending that requirements to obtain emission offsets and demonstrate an air quality benefit remain in place. This means that the Department recommends not establishing the industrial growth allowance initially proposed.

The issues and concerns raised by the public, stakeholders, and elected officials greatly influenced DEQ's final recommendation by helping us better understand community priorities for balancing environmental and economic goals. The public comment process and testimony received is discussed further in the Summary of Public Comment and Department Response (Attachment D).

A complete record of testimony received has been made available to the Commission, and is available for review by the public at the Portland DEQ office (811 SW 6th Ave.) and the Medford DEQ office (221 Stewart Ave, Suite 201).

Key Issues

The most significant issue was whether to retain the most stringent air quality requirements for new and expanding major industry given that air quality is significantly below federal standards. The decision involved balancing important environmental and economic priorities, as discussed above.

Next Steps If adopted by the EQC, the plan will be submitted to the EPA for approval, with a request that the legal status of the Rogue Valley be revised from nonattainment to attainment for PM₁₀.

Emission reduction strategies will continue to be implemented by the Department and local Jackson County staff. The Department has worked with the local media in Jackson County to convey to the public the summary of testimony received, how that testimony shaped the Department's recommendation to the Commission, as well as the rationale supporting the Department's recommendation.

Attachments

- A. Proposed Medford-Ashland PM₁₀ Attainment and Maintenance Plan
- B. Proposed Rule Revisions: Supporting Oregon Administrative Rules
- C. Presiding Officer's Report on Public Hearings
- D. Summary of Public Comments and Agency Responses
- E. Advisory Committee Membership
- F. Relationship to Federal Requirements Questions
- G. Statement of Need and Fiscal and Economic Impact
- H. Land Use Evaluation Statement

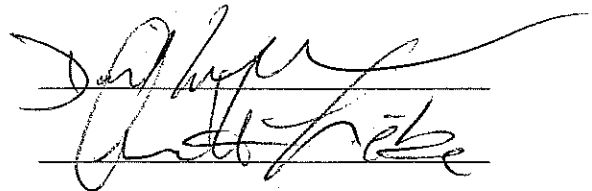
Available Upon Request

- 1. Legal Notice of Hearing
- 2. Cover Memorandum from Public Notice
- 3. Written Comment Received (*a fee may be charged for copies*)
- 4. Rule Implementation Plan

Approved:

Section:

Division:

Two handwritten signatures in black ink, one above the other, each written over a horizontal line. The signatures are cursive and appear to be the name David Collier.

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Attachment A

Proposed Medford-Ashland PM₁₀ Attainment & Maintenance Plan

**State of Oregon
Department of Environmental Quality
Air Quality Division**

**State Implementation Plan
for Particulate Matter (PM₁₀) in the Medford-
Ashland Air Quality Maintenance Area**

**A Plan for Meeting and Maintaining
The National Ambient Air Quality Standards
For PM₁₀**

December 10, 2004

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Acknowledgments

“When I first came here in the 1970’s the furnace was shooting fire 100 feet in the air”.

- Gary Grimes, former Medford DEQ Air Quality Manager

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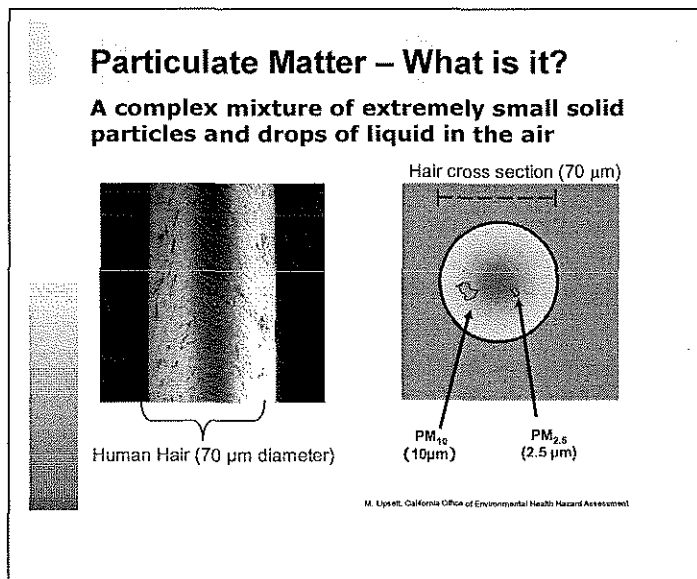
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Executive Summary

The U.S. Environmental Protection Agency (EPA) adopted National Ambient Air Quality Standards (NAAQS) for PM₁₀ on July 1, 1987. The acronym “PM₁₀” stands for particulate matter of a size less than or equal to 10 micrometers (µm) in diameter, or about 1/7th the diameter of a human hair. Exposure to high levels of PM₁₀ is considered a risk to human health due to the body's inability to effectively filter out particles of this size. These particles can become lodged in the lungs aggravating chronic respiratory diseases such as asthma, bronchitis, and heart disease. Populations especially at risk include children, the elderly, and those with existing health problems. There is both a daily standard for PM₁₀ (based on a 24-hour average), and an annual average standard. The daily PM₁₀ standard is 150 micrograms per cubic meter (ug/m³), and the annual average standard is 50 ug/m³.

Compliance with the daily standard is evaluated by looking at the number of times the standard is exceeded in any three year-period (at the same location). If the average number of exceedances in any three-year period is 1.0 or less, the area is in compliance. If the average number of exceedances is 1.1 or more, the area is in violation of standards¹. The annual PM₁₀ standard is violated if the three-year average of annual average values exceeds 50 ug/m³. In Oregon, the daily PM₁₀ standard has been the more difficult to meet. Under the Clean Air Act, an area that violates standards is designated as “nonattainment”, and must adopt emission reduction measures to bring the area back into compliance.

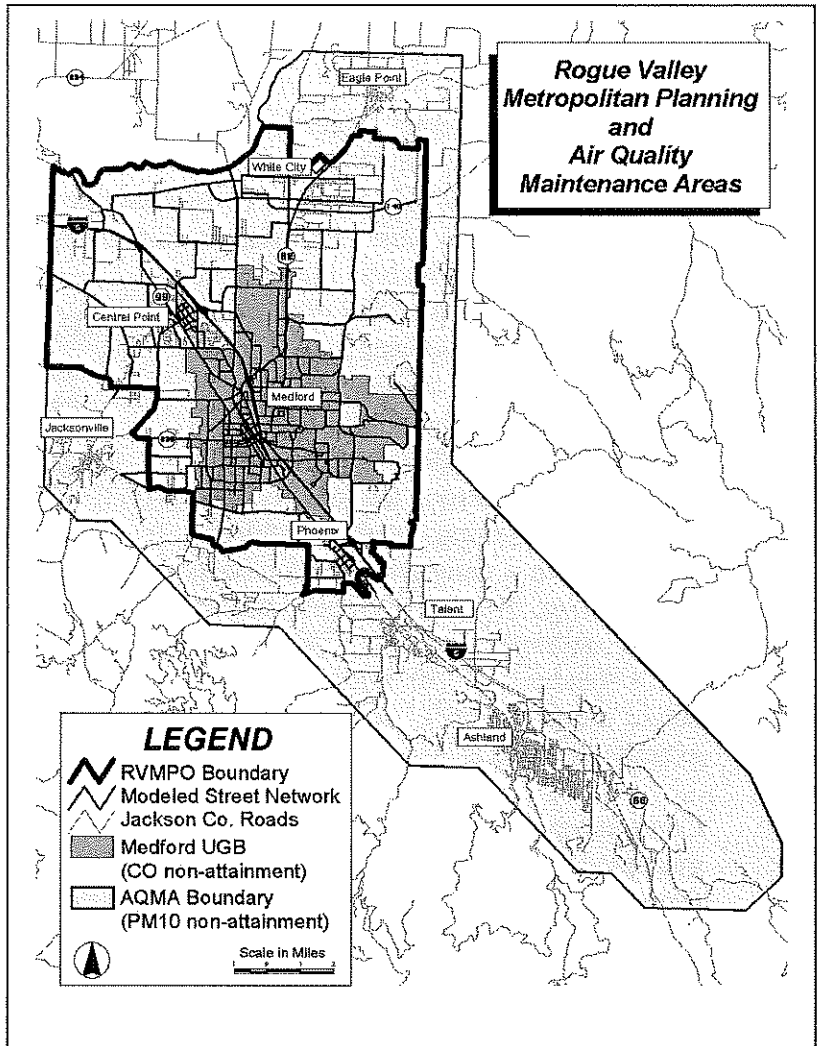
The Medford-Ashland Air Quality Maintenance Area (AQMA) is the designated PM₁₀ nonattainment boundary for the greater Medford area. The AQMA encompasses much of the Rogue Valley of Southwest Oregon, and includes the communities of Ashland, Talent, Phoenix, Medford, Central Point, Jacksonville, White City, Eagle Point, and the intervening lands of Jackson County. The AQMA was established in the 1970's as the planning boundary that best describes the common airshed shared by Rouge Valley citizens. The Figure below shows the planning boundary for the Medford-Ashland AQMA, as well as the boundary for the local metropolitan planning organization.



¹ For example, if 3 exceedances occurred in a three-year period, then the average number of exceedances will be 1.0 (i.e. 3 exceedances divided by 3 years = 1.0). If 4 exceedances occurred in the three-year period, the average number of exceedances would be 1.3 (violation).

PM₁₀ measurements taken in the AQMA in the mid to late 1980's showed that the 24-hour PM₁₀ health standard was exceeded an average of 20-25 days per year during the winter months. During this time, the maximum 24-hour PM₁₀ concentration measured in Medford was over 300 µg/m³ as compared to the 24-hr average PM₁₀ standard of 150 µg/m³. Annual average PM₁₀ concentrations in Medford during the 1980's ranged from about 58 to 68 µg/m³ compared to the average annual PM₁₀ standard of 50 µg/m³.

Because of these measured violations, the Medford-Ashland AQMA was initially listed by EPA as a Group 1 PM₁₀ planning area², leading to a nonattainment area designation under the 1990 Clean Air Act Amendments. The Clean Air Act requires states to develop and adopt State Implementation Plan (SIP) revisions to assure that areas exceeding standards are brought into compliance within the time frames prescribed by the Clean Air Act. Once the area has returned to compliance, states must prepare an additional plan ensuring continued compliance with standards for at least ten years.



There have been several PM₁₀ plans developed for the Medford-Ashland AQMA. The initial *Attainment Plan* adopted in 1991 contained a suite of emission reduction strategies that brought the area into compliance with PM₁₀ standards by the required Clean Air Act deadline of December 31, 1994. The Attainment Plan was updated in 1998, and is updated again here in this 2004 Attainment Plan. This document also includes a PM₁₀ *Maintenance Plan* for the AQMA. The maintenance plan continues the successful PM₁₀ strategies for the AQMA, and provides an air quality analysis to ensure continued compliance with PM₁₀ standards through at least the year 2015.

²“Group 1” areas were those areas known to violate PM₁₀ standards, and were identified for designation to nonattainment status when the Clean Air Act was amended in 1990.

The attainment and maintenance plan (*the plan*) will be submitted for approval to the Environmental Protection Agency (EPA) along with a request that the legal status of the Medford-Ashland AQMA be revised from nonattainment to attainment for PM₁₀.

Air Quality Trends

Emission reduction strategies adopted in the AQMA have been very successful in reducing daily and annual PM₁₀ values to levels that are well below federal standards. Figures 1 and 2 show the trend in daily and annual average PM₁₀ values measured at the key monitoring sites of Welch & Jackson Streets (Medford) and the White City Post Office.

Figure 1: Daily and Annual Average PM₁₀ Trend Medford (Welch & Jackson Site)

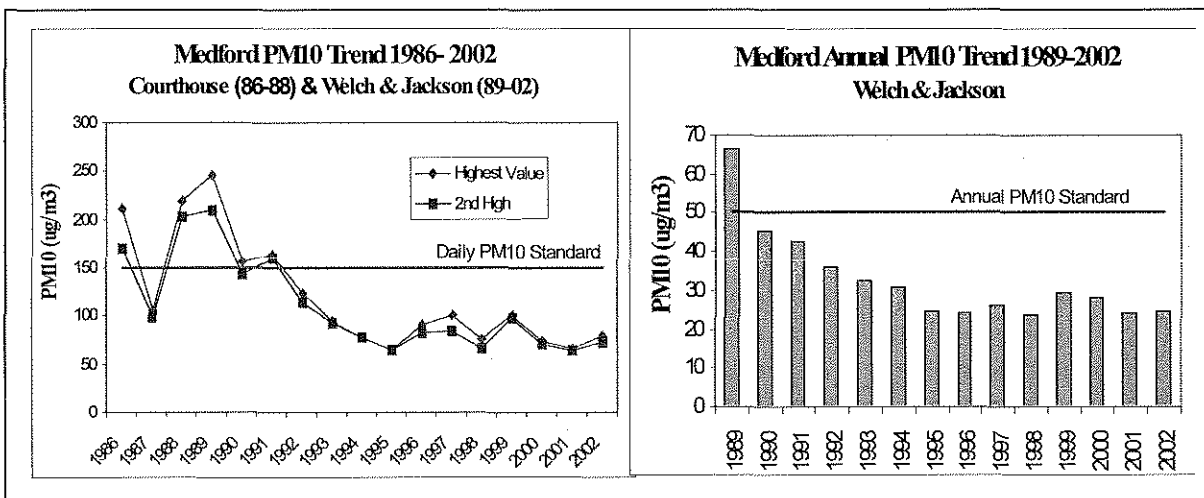
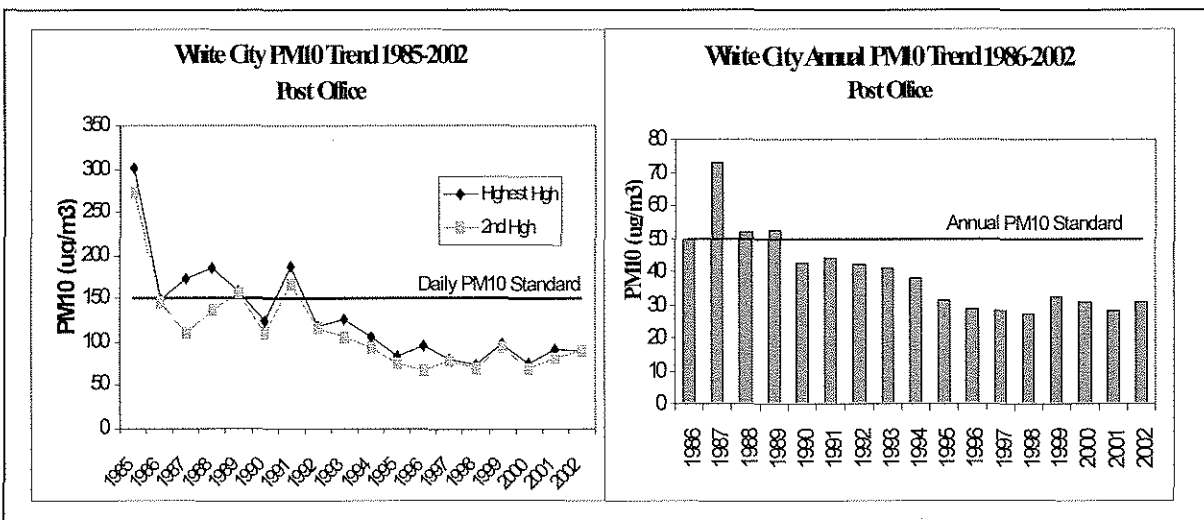


Figure 2: Daily and Annual Avg. PM₁₀ Trends for White City (Post Office Site)



Summary of Attainment and Maintenance Analysis Approach

The Clean Air Act required that the Medford-Ashland AQMA demonstrate compliance with PM₁₀ standards by no later than December 31, 1994. The initial PM₁₀ attainment plan submitted in 1991 adopted the emission reduction measures necessary to bring the area into compliance by the Clean Air Act deadline. Ambient monitoring at both the Welch & Jackson and White City monitoring sites show that PM₁₀ levels have been well below standards since 1992.

In order for EPA to redesignate the AQMA to attainment, the Department must demonstrate that: a) PM₁₀ standards are currently being met in the AQMA; b) standards would continue to be met even under worst-case conditions (i.e. worse-case emissions and meteorology); and c) that the AQMA will continue in compliance with standards for at least the next 10 years. This demonstration involves three analysis approaches:

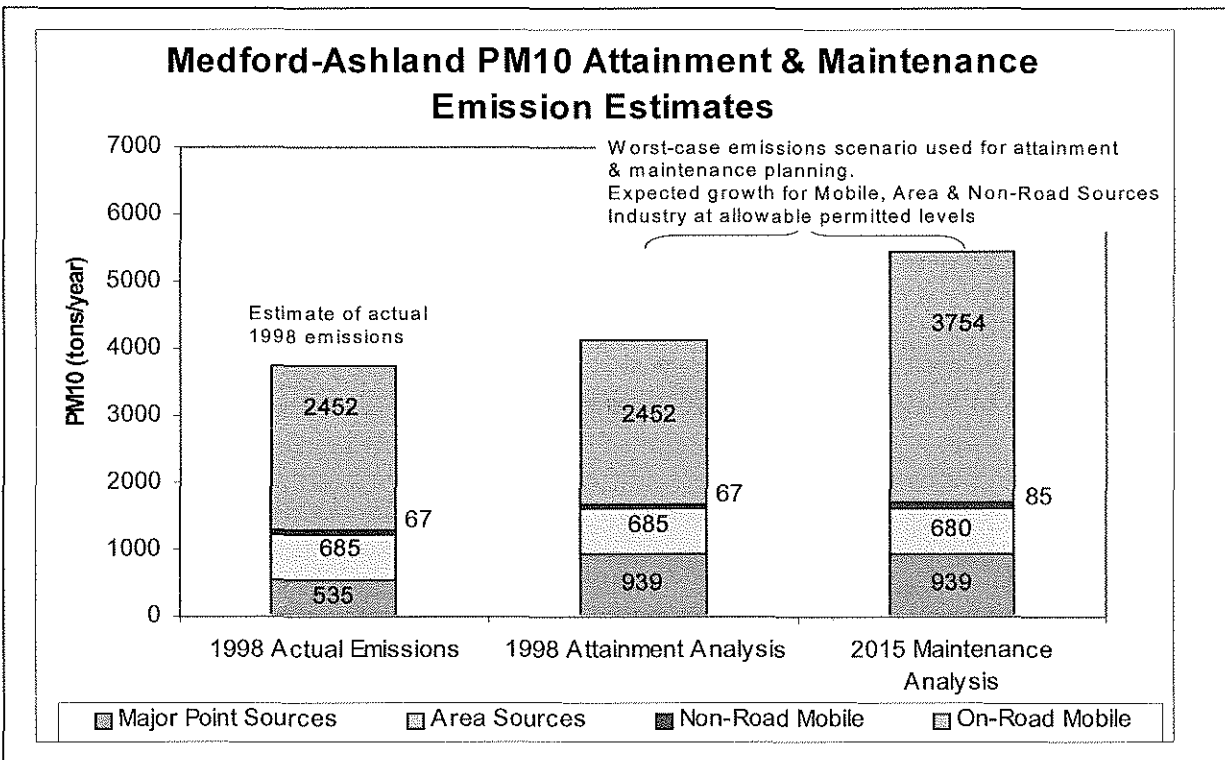
1. Current Compliance (Actual Conditions): Monitoring data reflects actual maximum PM₁₀ levels measured in the AQMA, and shows that the AQMA has been in compliance with standards since approximately 1992. Monitoring data demonstrates that the AQMA met the 1994 Clean Air Act attainment deadline, and has continued in compliance with PM₁₀ standards ever since.
2. Attainment Demonstration (Modeling Analysis of Current Potential PM₁₀ Levels): The attainment analysis must evaluate the current potential for PM₁₀ levels to increase under worst-case conditions. Emissions used in the attainment analysis reflect actual 1998 emissions from all source categories, except major industry. For the worst-case analysis approach, EPA requires that major industrial emissions be considered at legally allowable (maximum permitted) levels, not their actual 1998 emission levels. The Department selected 1998 for the attainment analysis because the emissions inventory for that year provides the most accurate estimate of PM₁₀ emissions currently available in the AQMA. The analysis also includes the air stagnation meteorology routinely experienced in the AQMA. The worst-case analysis approach provides an estimate of PM₁₀ concentrations that could potentially occur in the AQMA.
3. Maintenance Demonstration (Modeling Analysis of Future Potential PM₁₀ Levels): The maintenance analysis is based on an emissions projection to the year 2015. The emissions forecast reflects anticipated emissions growth since 1998 resulting from changes in population, housing, employment, motor vehicle travel, and other factors. Again, major industrial sources in the maintenance analysis are evaluated at their maximum allowable levels. The 2015 analysis also uses stagnation meteorology.

AQMA Emission Estimates and Emissions Forecast

The emissions inventory (EI) and emissions forecast groups emission sources into four main categories: **Area Sources** (such as woodstoves and open burning), **Mobile Sources** (cars & trucks), **Non-Road Mobile** (construction equipment, small engines, etc.), and **Major Point Sources** (Major Industry). The 1998 attainment EI and 2015

emissions forecast are shown in Figure 3. The largest emissions growth is expected in the mobile source category. Modest growth is expected for Non-Road sources; Area Sources are expected to decrease somewhat due to the continued replacement of older, high polluting woodstoves. Growth in the major industry category reflects the difference between actual 1998 reported emissions and maximum allowable permitted emissions.

Figure 3: AQMA PM₁₀ Emissions Inventory (1998) and Emissions Forecast (2015)



Compliance Analysis (Summary of Attainment and Maintenance Air Quality Modeling)

The attainment and maintenance demonstrations rely on an air quality dispersion modeling analysis that estimates potential PM₁₀ concentrations throughout the AQMA. Both the attainment analysis and maintenance analysis demonstrate compliance with PM₁₀ standards, and show that no additional PM₁₀ emission reduction strategies are currently needed in the AQMA.

Figures 4 through 7 show the model predicted PM₁₀ levels (ranked highest to lowest) for the attainment and maintenance analysis (annual avg. and daily PM₁₀). Again, there are no predicted violations of either the annual average or daily (24-hr avg.) PM₁₀ standards. The highest predicted (worst-case) annual average PM₁₀ levels are 49.2 ug/m³ in 1998 and 49.3 ug/m³ in 2015. The highest predicted (worst-case) daily compliance levels (4th highest) are 149.4 ug/m³ in 1998 and 147.8 ug/m³ in 2015. The highest predicted PM₁₀ levels occur within the core of the White City industrial area. Peak PM₁₀ levels in this

area are very similar in both the attainment and maintenance analysis because maximum allowable industrial emissions were used in both cases. PM_{10} concentrations decrease very quickly with distance from the core industrial center, and are substantially below standards in adjoining commercial and residential areas.

The attainment and maintenance modeling analysis is described further in sections 4.14.6.0 and 4.14.6.2

Figure 4: Attainment Analysis: Worst-Case Annual Avg. PM_{10} Levels (1998)

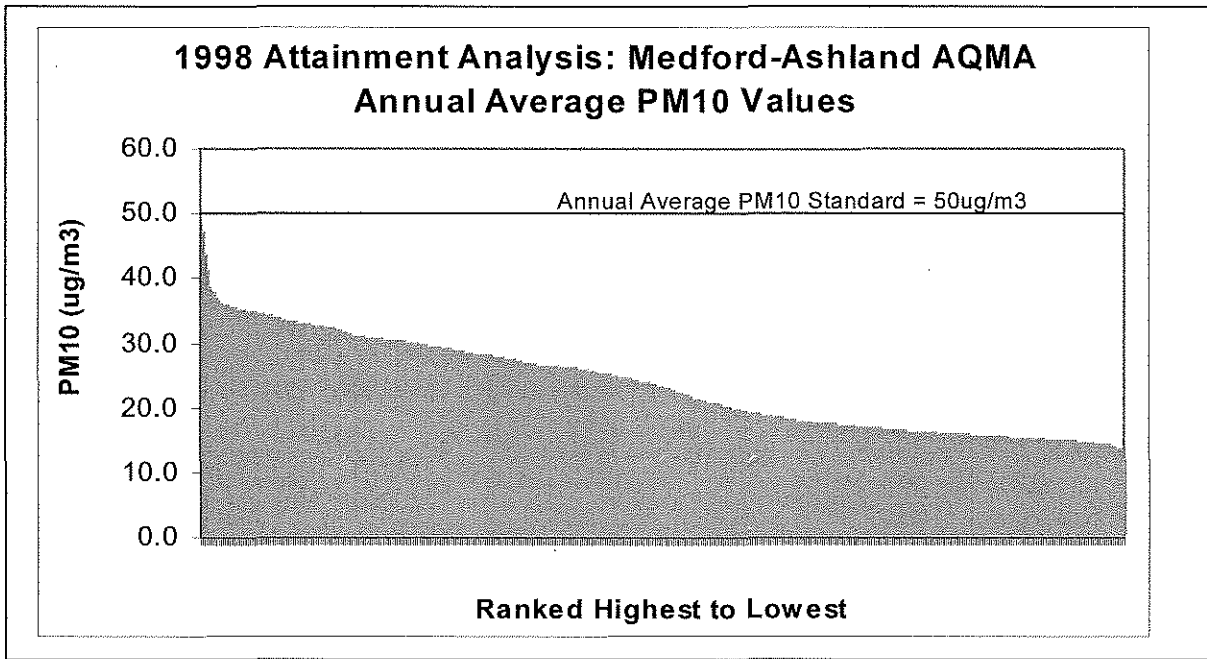


Figure 5: Attainment Analysis: Worst-Case Daily PM_{10} Levels (1998)

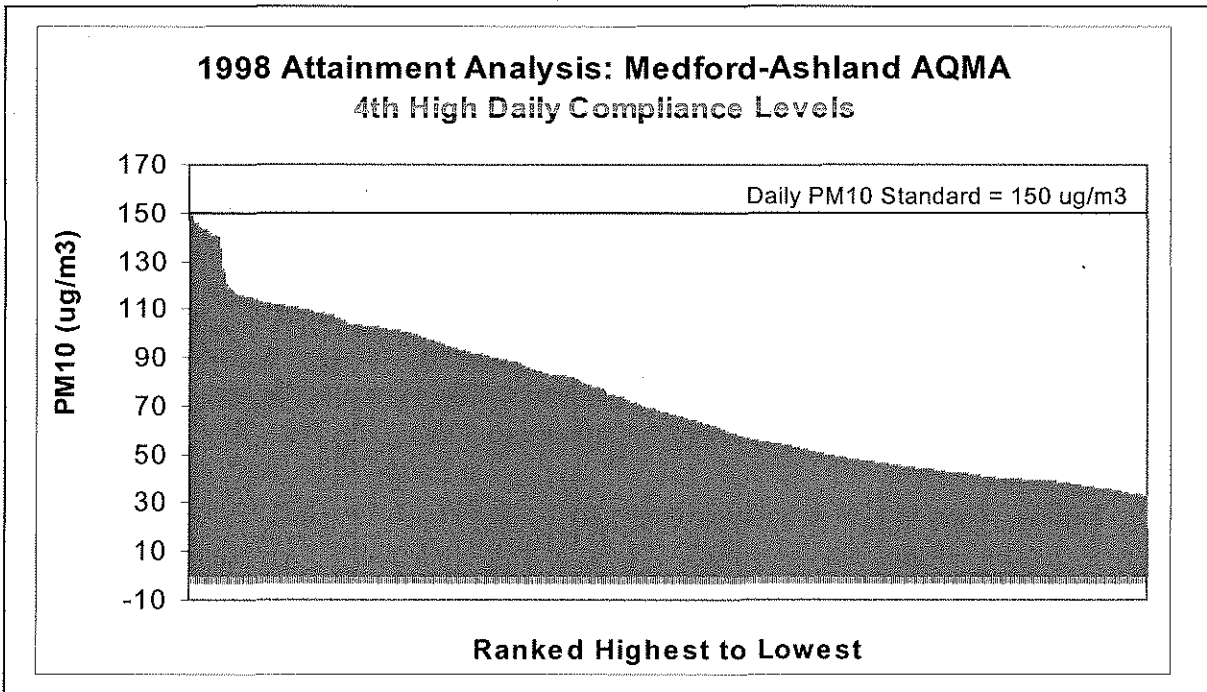


Figure 6: Maintenance Analysis: Worst-Case Annual PM₁₀ Levels (2015)

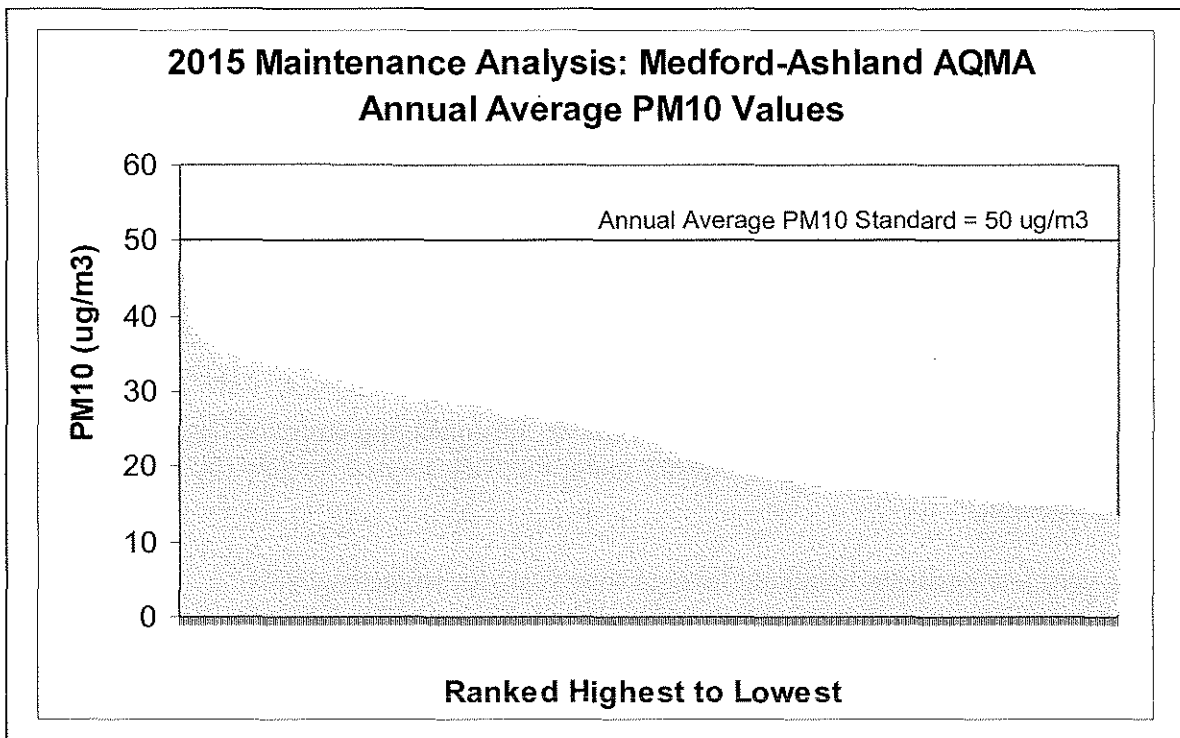
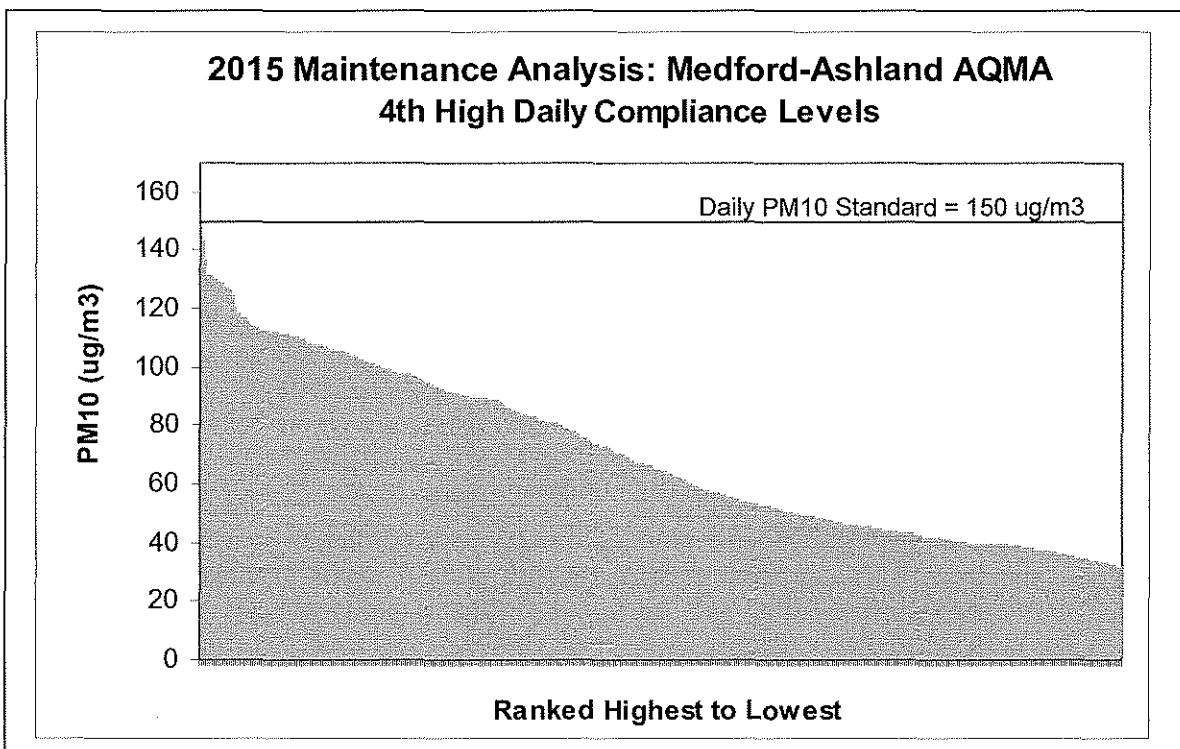


Figure 7: Maintenance Analysis: Worst-Case Daily PM₁₀ Levels (2015)



Air Quality Strategies for PM₁₀

The plan continues all of the PM₁₀ strategies that have been so successful in reducing emissions in the Valley. These include:

- A mandatory woodstove curtailment program.
- Emission limit standards for existing industrial processes.
- Local open burning ordinances.
- Enhanced road cleaning program in Medford and White City.
- Management of prescribed forestry burning year round, and special protection for the Rogue Valley during the winter months.

The plan also continues the strictest requirements for managing emissions growth from future new and expanding major industry under the New Source Review (NSR) program. These include:

- a very low emission threshold level (5 tons/year) for triggering NSR,
- the requirement to install state-of-the-art emission control technology, and
- the requirement to obtain emission offsets and demonstrate an air quality benefit (20% improvement in air quality).

The New Source Review requirements are discussed further in Section 4.14.8.0.

The attainment and maintenance plan also provides an air quality analysis demonstrating current and continued compliance with PM₁₀ standards in all locations in the AQMA through at least the year 2015.

Transportation Conformity

The maintenance plan establishes a cap on future motor vehicle PM₁₀ emissions, called the “emissions budget”. The budget is used as part of the Transportation Conformity program which ensures that emissions from motor vehicles (both now and in the future) do not jeopardize air quality standards. The conformity program and emissions budget is described in more detail in Section 4.14.4.0

PM₁₀ Contingency Plan

The maintenance plan establishes a process to prevent or correct any measured violation of PM₁₀ standards. This process of investigation and (if needed) corrective action is called the “contingency plan”. The contingency plan establishes early warning action levels for both daily and annual average PM₁₀ levels (120 ug/m³ (24-hr avg.) and 40 ug/m³ (annual average). PM₁₀ levels measured above these early warning thresholds will trigger a process to investigate the cause of the event and assess the risk to PM₁₀ standards. The Air Quality Advisory Committee could also be convened to assist the Department in its investigation. The contingency plan is described further in Section 4.14.9.0

Conclusion

Monitoring data shows that the Medford-Ashland AQMA successfully met the Clean Air Act attainment deadline of December 31, 1994, and has remained in compliance with standards as of late 2004. The attainment modeling analysis shows that even under worst-case meteorology and maximum allowable emissions for major industry, the AQMA would be in compliance with PM₁₀ standards. The maintenance analysis shows that the AQMA will continue to be in compliance through at least 2015 (even under worst-case conditions). The analysis demonstrates that no new emission reduction strategies are needed to maintain compliance. However, relatively high predicted PM₁₀ levels support the need to continue the existing PM₁₀ strategies. These strategies will also help avoid violations of the new federal fine particulate standards (known as PM_{2.5}).

On-Going Prevention-Future Air Quality Work

The Department will continue to work with Rogue Valley communities to address important air pollution issues, particularly in the areas of air toxics, growth in motor vehicle travel, prescribed forestry burning, and emissions from heavy-duty diesel vehicles.

State Implementation Plan for PM₁₀ Medford-Ashland Air Quality Maintenance Area (AQMA)

4.14.1.0 Introduction

On July 1, 1987, the U.S. Environmental Protection Agency (EPA) promulgated federal ambient air quality standards for particles less than or equal to 10 micrometers in aerodynamic diameter (PM₁₀) to replace the Total Suspended Particulate (TSP) standard¹. The standard became effective 30 days later on July 31, 1987. On August 7, 1987, EPA classified the Medford-Ashland Air Quality Maintenance Area as a Group I PM₁₀ nonattainment area (52 FR 29383). Group I areas were those which had a greater than 95 percent probability of exceeding the PM₁₀ National Ambient Air Quality Standards (NAAQS). Air monitoring in the mid 1980's showed that air quality within the Medford-Ashland AQMA violated PM₁₀ standards (NAAQS).

Section 110 of the federal Clean Air Act required States to adopt and submit plans (State Implementation Plans or SIPs) to EPA within nine months after the effective date of the standard. The plan must provide for attainment of the standard as expeditiously as practicable, but no later than the Clean Air Act deadline of December 31, 1994².

The initial Medford-Ashland PM₁₀ Attainment Plan was developed in the late 1980's and submitted to EPA in 1991. It adopted a suite of emission reduction strategies that have been successful in bringing air quality into compliance with PM₁₀ standards by the Clean Air Act deadline. Strategies were developed jointly by the Department and local Air Quality Advisory Committee, and included a mandatory residential woodsmoke curtailment program, restrictions on open burning, and lower emissions limits for major wood products industry. The plan was successful in bringing the AQMA into compliance by the Clean Air Act deadline. There has not been an exceedance of the 24-hr average or annual average PM₁₀ standard in the Medford-Ashland Air Quality Maintenance Area (AQMA) area since 1991.

In 1996, the Department began working with a local advisory committee to update the attainment plan and develop the required maintenance plan that will allow EPA to revise the legal standing of the AQMA from nonattainment to attainment for PM₁₀. This document includes a PM₁₀ attainment and maintenance plan for the Medford-Ashland AQMA. The plans will be submitted for approval to the Environmental Protection Agency (EPA) along with a request that the legal status of the Medford-Ashland AQMA be revised from nonattainment to attainment for PM₁₀.

¹A micrometer (um) is a unit of length equal to about 1/25,000 of an inch. For comparison, the thickness of a human hair is about 100 to 200 micrometers.

² Clean Air Act Section 188 (c)(1).

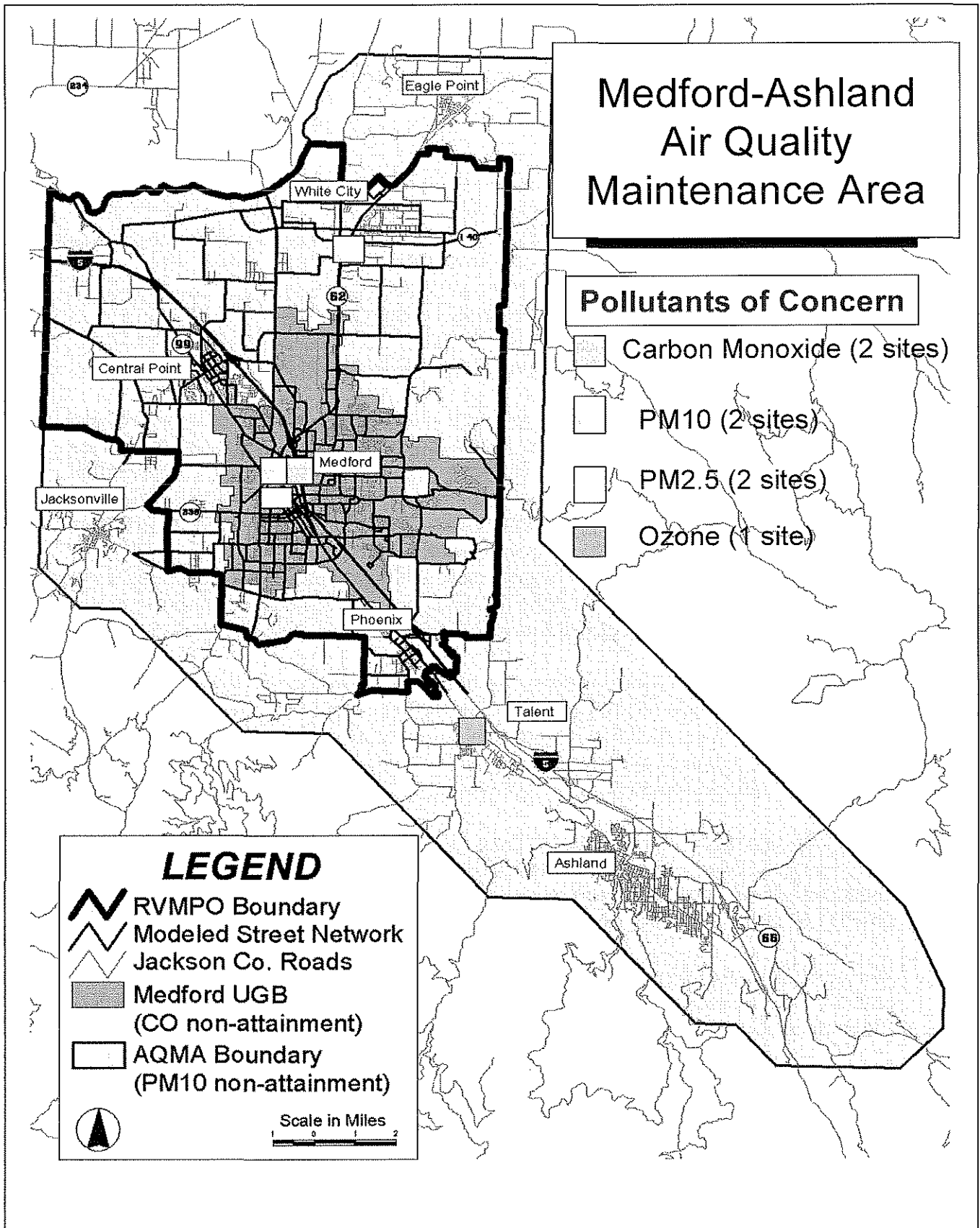
4.14.1.1 Area Description

The Medford-Ashland AQMA is located in a mountain valley formed by the Rogue River and one of its tributaries, Bear Creek. The major portion of the valley ranges in elevation from 1,300 to 1,400 feet above sea level. Mountains surround the valley on all sides: to the east, the Cascades, ranging up to 9,500 feet; to the south, the Siskiyou, ranging up to 7,600 feet; and to the west and north, the Coast Range and Umpqua Divide, ranging up to 5,500 feet above sea level.

The Medford-Ashland AQMA is outlined in Figure 8. The Figure also shows general monitoring locations for several criteria pollutants within the AQMA. The AQMA covers about 228 square miles and approximates the Bear Creek Basin. The area is also generally described as the Rogue Valley. The AQMA defines the current PM₁₀ nonattainment area, and will continue to define the planning boundary for particulate control strategies adopted in this plan.





The PM₁₀ nonattainment area must be large enough to include all of the local areas that may contribute to a violation of PM₁₀ standards. The boundary must also be large enough to include potential future PM₁₀ problem areas resulting from residential, industrial or transportation growth. The ambient monitoring network, as well as emission forecasts for the area indicate that the current AQMA boundary will continue to be the appropriate planning area for particulate in the Rogue Valley.

Figure 8: Map of Medford-Ashland AQMA








Medford-Ashland
Air Quality
Maintenance Area

Pollutants of Concern

-  Carbon Monoxide (2 sites)
-  PM10 (2 sites)
-  PM2.5 (2 sites)
-  Ozone (1 site)

LEGEND

-  RVMPO Boundary
-  Modeled Street Network
-  Jackson Co. Roads
-  Medford UGB
(CO non-attainment)
-  AQMA Boundary
(PM10 non-attainment)



Scale in Miles
0 1 2

The AQMA boundary has been used for the special industrial air pollution control rules adopted in 1978, 1983 and 1989. The Department of Environmental Quality and Jackson County Health Department have also identified an area within the AQMA that is referred to as the critical PM₁₀ control area. This area includes all of the PM₁₀ problem areas, a significant portion of the AQMA population, and all the major industry in the AQMA.

Economy of the Rogue Valley.

The Rogue Valley's population and economy, once heavily dependant on natural resource-based industries has been undergoing substantial change³. The demographics of the Rogue Valley have been significantly influenced in recent years by in-migration from other areas in Oregon and from out of state. According to a 1999 Employment survey, the top three reasons for moving to the Rogue Valley were: (1) to be with family and friends, (2) quality of life, and (3) retirement. The valley's changing demographics has played a significant role in the changing local economy. The quality of life and retirement priorities of local citizens also highlights the value placed on the protection of air, water, and land quality.

Basic industries in the Rogue Valley include agriculture, manufacturing, and certain service-producing industries such as education, health care, tourism, and entertainment. These businesses support secondary industries, such as retail trade, services, construction, transportation, and others. After experiencing strong economic growth during most of the 1990's, SW Oregon has been experiencing an economic slowdown. Between 1990 and 2000, the lumber and wood products industry experienced a 29% decline in employment. However, during that same period employment in the rest of the manufacturing sector increased approximately 34%. In 2002, the wood products industry continued to decline while overall employment in other sectors of the economy has continued to grow.

Historically, the wood products industry has been one of the largest sources of particulate pollution in the AQMA. During the 1980 and 1990's, state-of-the art emission controls were installed in many facilities, significantly lowering air pollution from these sources. Emissions have continued to decrease somewhat in recent years as manufacturing processes improve and additional controls are brought on-line.

Growth in non-timber jobs, such as those in the service, retail, health care, trades, transportation, communications and technology sectors, has helped diversify the areas employment base, providing much more stability to the region's economy. The strongest growth is expected to continue in the trade and service sectors.

Population and employment growth generally leads to increased emissions as the area's mobility and commercial infrastructure expands. These trends are reflected in the 2015 PM₁₀ emissions forecast and maintenance plan air quality modeling analysis.

³ Local economic profile taken from Oregon Employment publication, 2002 Regional Economic Profile for Jackson and Josephine Counties.

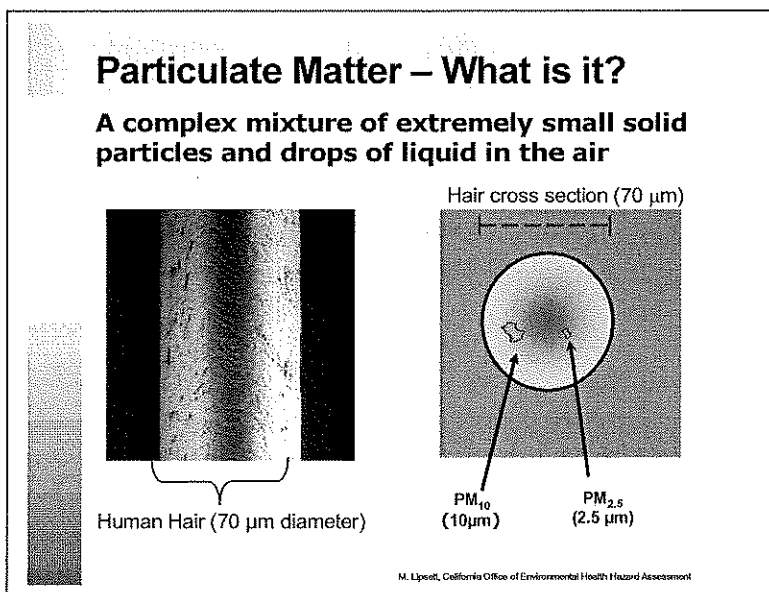
4.14.1.2: Health Effects of PM₁₀ and Woodsmoke

National ambient air quality standards are established by the U.S. Environmental Protection Agency (EPA) following extensive review by EPA's Clean Air Scientific Advisory Committee (CASAC) and the public. The Scientific Advisory Committee is a group of non-EPA scientists and medical experts that review the latest air quality studies and evaluate the health effects of particulate exposure. The CASAC then recommends air quality standards to EPA for protecting public health.

The CASAC's review of health effects information formed the basis for setting the PM₁₀ standards in 1987 and the particulate standard review in 1997. Findings of the 1997 CASAC review, as well as other peer-reviewers on the health effects of particulate are listed in the document Review of National Ambient Air Quality Standards for Particulate Matter, Policy Assessment of Scientific and Technical Information, July, 1996, EPA-452/R-96-013. EPA and the CASAC are currently reviewing the latest studies on the health effects of particulate exposure. EPA intends to update the particulate standards for both PM₁₀ and PM_{2.5} in 2005.

"PM₁₀" (particulate matter measuring less than or equal to 10 micrometers- μm) is considered a risk to human health due to the body's inability to effectively filter out particles of this size. These particles can become lodged in the alveolar regions of the respiratory system where they trigger biochemical and morphological changes in the lungs.⁴

For example, constriction of air passages (i.e., reduced air flow) occurs rapidly upon exposure to PM₁₀. Episodic and continuous exposure aggravates chronic respiratory diseases such as asthma, bronchitis, and emphysema that in turn restrict the lung's ability to transfer oxygen into the bloodstream. Traditionally, children, the elderly, and cigarette smokers are the most susceptible to lung dysfunctions and are therefore at greatest risk from PM₁₀ exposure.⁵ Continuous exposure



⁴J. Koenig, T.V. Larson, P. Jenkins, D. Calvert, N. Maykut and W. Pierson, "Wood Smoke: Health Effects and Legislation," Health Effects of Woodsmoke, Northwest Center for Occupational Health and Safety, January 20, 1988.

⁵U.S. Environmental Protection Agency, Second Addendum to Air Quality Criteria for Particulate Matter and Sulfur Oxides (1982: Assessment of Newly Available Health Effects). EPA 600/8-86-020-F. NTIS # PB-87-176574.

can inhibit the body's defense mechanism thus increasing susceptibility to acute bacterial and viral infections. The increased stress on the pulmonary system caused by PM₁₀ exposure is usually tolerable for those with healthy respiratory systems, however, it can lead to irreversible or fatal damage in people already suffering from cardiopulmonary disease, typically children, the elderly, the ill, and cigarette smokers.⁸

Among the sources of PM₁₀ emissions, woodsmoke from residential heating is of particular concern in the Medford-Ashland AQMA because it is created at essentially ground level within residential areas. Woodsmoke particles are less than 1 µm in diameter and remain suspended in the air for long periods of time. Because of their small size and their ability to remain airborne, they are easily inhaled and lodged in the alveolar region of the lungs. These particles can also act as carriers for toxic chemicals that are transported deep into the respiratory system. Some of these toxic substances are then absorbed into the bloodstream.

Woodsmoke contains fourteen carcinogenic compounds including benzo(a)pyrene, benzo(a)anthracene, and other polycyclic organic materials.⁶ Additionally, woodsmoke contains several other hazardous compounds such as aldehydes, phenols, carbon monoxide and volatile organic vapors. These compounds can cause or contribute to illness ranging from neurological dysfunctions and headaches to lung cancer. Because woodsmoke concentrations can be high in residential areas, a large segment of the population is routinely exposed to woodsmoke pollution in the winter months.

Other significant sources of particulate emissions in the Valley include some industrial processes and motor vehicle exhaust.

More information on the recent medical research and new particulate standards can be found at the following EPA Internet site: <http://cfpub1.epa.gov/ncea/cfm/partmatt.cfm>

⁶P.G. Jenkins, Washington Wood Smoke: Emissions, Impacts and Reduction Strategies, Washington of Ecology, Olympia, Washington. December, 1986.

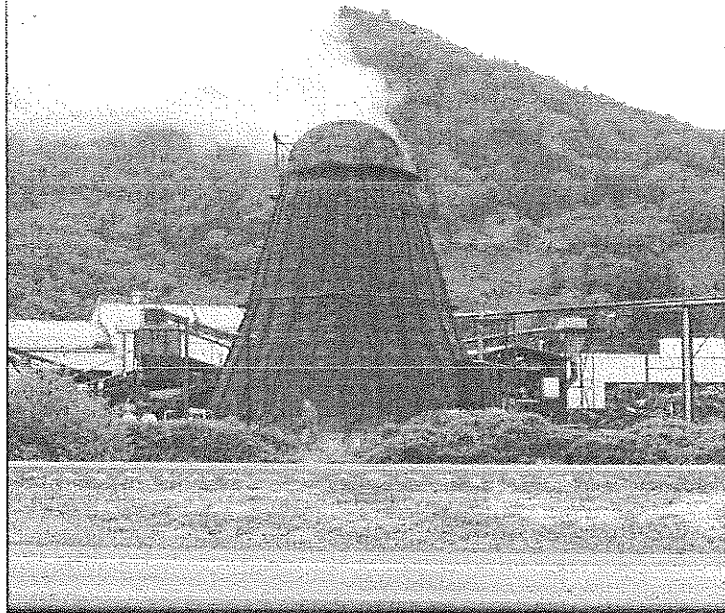
4.14.1.3 Brief History of Improving Air Quality in Rogue Valley Communities

Air quality in the AQMA has improved tremendously over the past several decades. The list below chronicles just some of the air quality accomplishments in the Rogue Valley (courtesy of the Jackson County air quality program staff).

1959-1960: The Medford City Council authorizes a joint study with DEQ (then the Oregon State Sanitary Authority) to investigate air quality conditions in Medford. The study confirms that Medford has a severe air pollution problem during certain periods. Orchard smudge pots, cinders from mills, automobiles, open burning, air stagnation, and other factors are cited as contributing to the problem.

1970's: Oregon Department of Forestry implements the Smoke Management Program to reduce smoke impacts from forest slash burning. Rogue Valley's air pollution problems are mostly attributed to the wood-products industry. The international oil embargo increases energy prices and more Rogue Valley residents turn to an abundant and affordable wood supply to heat their homes. Residential wood smoke pollution increases. In 1977, Jackson County and DEQ appoint the Medford-Ashland Air Quality Advisory Committee to identify

Wigwam Burner in Southern Oregon
(Circa 1970)



Residential woodstove smoke in Southern Oregon
(circa 1980)



air pollution sources and develop strategies for improvement. In 1979, the Environmental Quality Commission adopts emission control measures for some major industries in the Rogue Valley.

1980-1985: In 1980, Total Suspended Particulate from smoke measures 449 micrograms per cubic meter, the highest level in the Rogue Valley since monitoring began in 1979. The highest PM₁₀ reading ever recorded in the valley occurs on December 17th, 1985 (373 micrograms per cubic meter). In 1984-85, Jackson County implements a voluntary wood-burning ordinance designed to discourage residential wood-burning during air stagnation periods.

1986-1990: March 1988, DEQ and Jackson County work to obtain a \$485,000 Community Development Block Grant to replace noncertified woodstoves in low income homes. Local programs provide \$30,000 for weatherization. December 1988, Medford and Jackson County begin an updated voluntary wood heating curtailment program. In 1989, Medford and Central Point communities enact ordinances restricting residential open burning. Also in 1989, Medford and Central Point adopt the mandatory wood heating curtailment program. In 1990, grant funds continue to replace high polluting noncertified woodstoves in low income homes. Jackson County enacts an ordinance restricting residential woodheating on high pollution days. The program includes public education and outreach, compliance surveying, open burning and woodstove curtailment enforcement. Medford bans the installation of noncertified woodstoves. Jackson County Interagency Air Quality Team forms to focus on continued reductions in particulate pollution.

1991-2002: In 1991, the Oregon legislature bans the sale and installation of noncertified woodstoves statewide. A program is enacted linking agricultural burning to ventilation criteria. No burning is allowed on poor ventilation days. The Environmental Quality Commission adopts the Medford-Ashland PM₁₀ Attainment Plan required under the Clean Air Act. The plan includes control strategies for open burning, residential woodheating, and major point sources that will attain and ensure compliance with PM₁₀ standards. 1992 marks the first year since 1985 that Rogue Valley air quality does not violate federal PM₁₀ air quality standards. Oxygenated fuels are first required in the Rogue Valley in 1993 to help comply with Carbon Monoxide (CO) standards. December 1994, the Rogue Valley accomplishes three consecutive years of clean air for PM₁₀, meeting the Clean Air Act compliance deadline. 1994-2002, PM₁₀ and CO levels continue to decline in the Valley. In 1996, the Medford-Ashland Air Quality Committee is reformed to develop air quality plans for PM₁₀ and CO that ensure long-term compliance with standards. EPA approval of these plans will change the legal status of the Rogue Valley from nonattainment (noncompliance) to attainment (in compliance).

4.14.1.4: PM₁₀ Planning Process 1997-2003

In January, 1997, the Rogue Valley Council of Governments (RVCOG) completed an update to the Rogue Valley Regional Transportation Plan (RTP). The RTP defines the transportation systems for Medford, Central Point, Phoenix, White City, and that portion of Jackson County within the Metropolitan Planning Organization (MPO) boundary. The

RTP uses demographic information in conjunction with a travel-demand forecasting model to develop street network design options for regional automobile travel. Regional transportation plans in nonattainment and maintenance areas must also demonstrate that they will not conflict with air quality plans. This is accomplished through the transportation conformity program that ensures that future transportation emissions do not exceed the level of emissions allocated to the transportation sector during the air quality planning process. The RTP could not be adopted until transportation conformity was demonstrated.

During the conformity review process it was discovered that emission projections for the transportation planning horizon year of 2015 exceeded the emission projections for transportation identified in the 1991 PM₁₀ Plan (in the 1991 plan transportation emissions were only projected to the year 2000). The RTP could therefore not demonstrate conformity under the applicable "emissions budget" test, and could not be adopted by the Rogue Valley Council of Governments.

It was agreed that the 1991 PM₁₀ plan would be withdrawn from EPA⁷ so that the attainment plan could be revised and a long term maintenance plan developed to ensure compliance with PM₁₀ standards through the transportation planning horizon year of 2015. The temporary withdrawal of the plan allowed a different conformity test (Build/No-Build) to apply while the air quality plan was being revised. It also allowed the RTP to be adopted and for transportation funding to continue. The revised attainment and maintenance plan would re-establish an emissions budget for transportation conformity. Withdrawing the plan started a federal sanctions clock and imposed an 18 month deadline to resubmit a revised plan to EPA. The revised PM₁₀ plan was due to EPA by December, 1998.

Changes in EPA Planning Requirements

While work on the revised plan was progressing, the EPA adopted new national ambient air quality standards (NAAQS) for particulate (July 18, 1997). EPA adopted new standards for particulate matter equal to or less than 2.5 microns in size (PM_{2.5}), and also changed the method for determining compliance with the daily PM₁₀ standard. EPA also issued new planning guidance for the implementation of the PM_{2.5} and PM₁₀ standards.

EPA's guidance (Interim Implementation Guidance - IIG) changed the long standing approach to PM₁₀ planning in nonattainment areas. Under the policy, EPA no longer required that a long term maintenance plan be developed, or that compliance with PM₁₀ standards be demonstrated through modeling. EPA's new policy allowed the AQMA's PM₁₀ nonattainment area designation to be revoked once the Department submitted, and EPA concurred with, the following information: (1) monitored air quality data showing attainment for at least 3 years (1994-1996); (2) a letter from the Governor certifying that all of the control measures identified in the attainment plan are being implemented and

⁷ All emission reduction strategies identified in the 1991 attainment plan were adopted by the state and implemented successfully. However, EPA did not take formal action to approve the 1991 plan. This allowed the plan to be administratively withdrawn from EPA in 1997.

will be continued; and (3) documentation verifying that DEQ has the authority and ability to implement the new and revised particulate standards.

After considering the planning options available under the guidance, the Medford Advisory Committee recommended that DEQ forego development of a formal maintenance plan, and re-submit the original 1991 PM₁₀ control measures to EPA. The Committee also decided that additional control measures should be added to the plan to help protect future air quality. Submitting the original strategies was required to stop the plan withdrawal sanctions clock and as one of the necessary elements for redesignation to attainment. The additional measures focused on preventing future exceedances of the new PM₁₀ and PM_{2.5} NAAQS.

The original strategy measures identified in the 1991 PM₁₀ plan include:

- A mandatory woodstove curtailment program.
- Control technology requirements for major wood products industry.
- Lower emission limits for select industrial processes.
- Local open burning ordinances.
- Use of cleaner road sanding materials and street cleaning program;
- Management of prescribed forestry burning year round and special protection for the nonattainment area during the winter months under the Oregon Smoke Management Program.
- Emission growth management requirements for new and expanding major industry under the New Source Review program.

Strategies adopted by the Committee in 1998 included:

- A unified mandatory woodstove curtailment ordinance. This applies consistent woodstove curtailment and open burning requirements in each town within the Jackson County woodstove curtailment area boundary.
- Targeted roadway paving projects in Medford and White City.
- An education program for orchard owners about reducing soil trackout onto roadways.
- Enhanced street cleaning program in White City; and,
- A commitment from a major wood products a facility (Timber Products) to reduce particleboard press emissions by at least 90 percent no later than November, 2003.

In addition to the new strategies above, Timber Products Co. agreed to temporarily “freeze” or “escrow” approximately 79 tons per year of allowable permitted PM₁₀ emissions until particleboard press emissions at that facility are reduced by at least 90 percent.

A revised PM₁₀ plan including these new strategies was submitted to EPA in August, 1998.

Revised Planning Approach

In 1998, EPA was sued by various interest groups on issues related to the adoption of the new PM_{2.5} standards. An initial court ruling held that EPA had erred in setting the PM_{2.5} standards and in relaxing the way in which PM₁₀ compliance was determined. EPA has successfully defended the PM_{2.5} standard in court (a process taking several years), but chose not to appeal the court ruling regarding the relaxation of the PM₁₀ standard. EPA chose to reinstate the earlier compliance method for the PM₁₀ standard and reinstate all previous planning guidance for PM₁₀ areas. This means that a full maintenance plan, with air quality analysis of future PM₁₀ levels, is required in order for EPA to redesignate the Medford-Ashland AQMA to attainment.

In 1999, the Department and Medford-Ashland Air Quality Committee began work again on a revised PM₁₀ attainment and maintenance plan using EPA's final planning requirements. This new effort allowed the Department to update PM₁₀ emission estimates for mobile sources (cars & trucks) by using a new travel-demand model developed for the Medford area by the Oregon Department of Transportation. The Department also took this opportunity to update the air quality dispersion model used to predict PM₁₀ concentrations. The Department replaced the initial Oregon GRID model used in previous analysis with a state-of-the-art dispersion model (CalPuff). Of special importance is CalPuff's ability to better simulate particle deposition and the influence of air stagnation on wintertime PM₁₀ levels. Several years have been required to develop and verify the new air quality dispersion model for use in the AQMA.

The revised PM₁₀ attainment plan and PM₁₀ maintenance plan were completed in 2003 and offered for public review and comment in the winter of 2003/2004.

4.14.1.5: PM₁₀ Planning Requirements for the Medford-Ashland AQMA.

Summary of Attainment and Maintenance Analysis Approach

The Department must meet three planning and analysis requirements if the Medford-Ashland AQMA is to be redesignated to attainment status. First, the Department must demonstrate that the applicable Clean Air Act attainment deadline was successfully met. Secondly, EPA must approve an attainment analysis that evaluates contemporary PM₁₀ levels under worst-case conditions in all locations in the AQMA⁸. Thirdly, EPA must approve a maintenance analysis that evaluates potential future PM₁₀ levels in the AQMA, considering expected emissions growth. The maintenance analysis must evaluate emission growth for at least ten years beyond the time of EPA plan approval and redesignation. The Medford-Ashland PM₁₀ Maintenance Plan uses the year 2015 for a future planning horizon.

The attainment and maintenance plan relies on both monitored PM₁₀ data and modeling analysis to demonstrate current and future compliance with PM₁₀ standards. Monitoring data at the two key monitoring locations (Welch & Jackson, and White City Post Office)

⁸ The attainment and maintenance modeling analysis must show compliance with PM₁₀ standards at all locations within the AQMA (not just the two hot-spot monitoring sites in Medford and White City).

show consistent compliance with PM₁₀ standards since 1992. Section 4.14.2.0 summarizes PM₁₀ monitoring trends in the AQMA. The attainment and maintenance modeling analysis demonstrate that the AQMA would remain in compliance, even under worst-case meteorology and worst-case emissions scenarios.

For the worst-case planning approach, the attainment and maintenance analysis must use maximum allowable permitted emission levels (not actual emissions) for major industry in order to reflect potential PM₁₀ levels in the airshed. In addition, the analysis must evaluate airshed emissions under the extremely poor ventilation conditions often seen during winter air stagnation episodes.

The approach used to meet the three analysis requirements is summarized below:

1. Current Attainment (Actual Conditions): Monitoring data shows that the AQMA has been in compliance with PM₁₀ standards since 1992, and demonstrates that the AQMA successfully met the 1994 Clean Air Act attainment deadline. The AQMA has continued in attainment to date.
2. Attainment Analysis Modeling (Current Worst-Case Potential): The attainment analysis must evaluate the current potential for PM₁₀ impacts under “worst-case” conditions. The attainment analysis uses the 1998 emissions inventory, which is the Department’s most accurate for the AQMA. Modeled emissions include legally allowable emissions from major industry (not actual emissions in 1998), and 1998, 1999, 2000 local meteorology (including stagnation events)⁹. The attainment modeling analysis (using worst-case conditions) shows that the Medford-Ashland area would be in compliance with PM₁₀ standards at all locations in the AQMA even under worst-case conditions.
3. Maintenance Analysis Modeling (Future Worst-Case Potential): The maintenance analysis is based on an emissions projection to the year 2015. The emissions forecast reflects anticipated emissions growth resulting from changes in population, housing, employment, motor vehicle travel, and other factors. Again, major industrial sources are evaluated using their maximum allowable (permitted) emission levels. The 2015 analysis also uses the 1998-2000 worst-case stagnation meteorology.

Figure 9 shows estimated actual AQMA emissions for 1998, and the worst-case emission levels used in the attainment and maintenance analysis.

⁹ Meteorology used in the modeling analysis reflects actual weather data measured in the AQMA in 1998, 1999, and 2000, and include several extended air stagnation episodes.

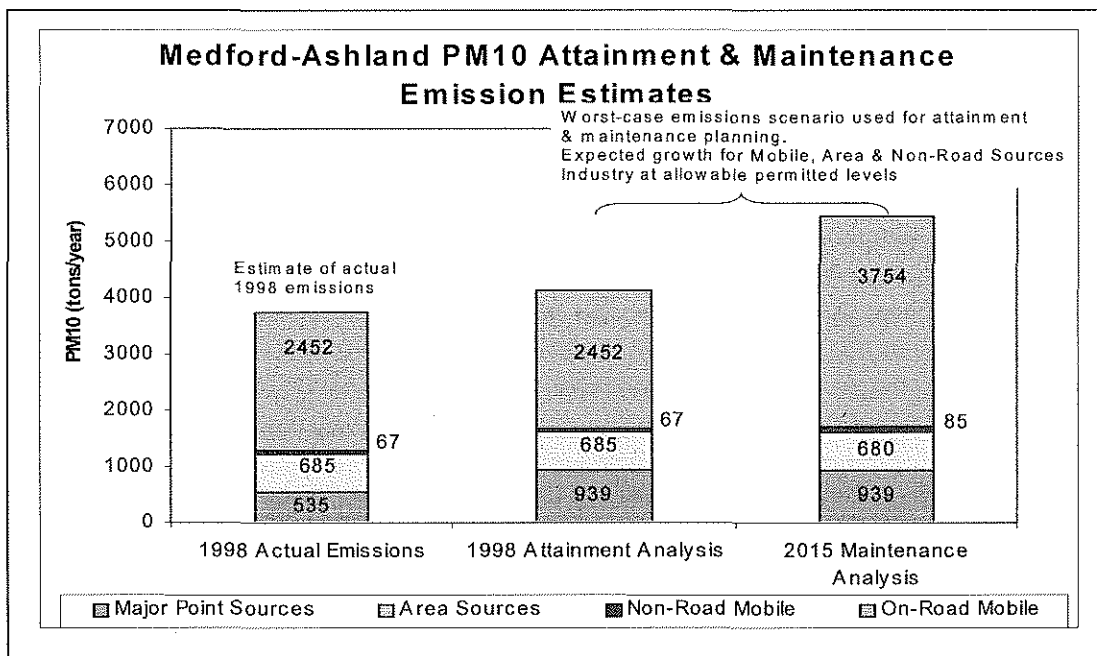


Figure 9: PM₁₀ Emissions in the AQMA: Actual Emissions, Worst-Case Levels

- Major Point Sources: Are those industrial facilities with PM₁₀ emissions greater than or equal to 5 tons per years.
- Area Sources: Include activities such as residential wood-heating, open burning, commercial space heating, etc.
- Non-Road Mobile Sources: Include sources such as small engines and construction equipment.
- On-Road Mobile Sources: Include cars and trucks, and reflects both exhaust (tailpipe) and road dust emissions.

4.14.1.6 Medford-Ashland Meteorology

The following description of climate and meteorology in the Medford-Ashland area is taken from the annual climatological summary prepared by the National Weather Service.¹⁰

Medford has a moderate climate of marked seasonal characteristics. Late fall, winter, and early spring months are damp, cloudy, and cool under the influence of marine air. Late spring, summer, and early fall are warm, dry, and sunny, due to the dry continental nature of the prevailing winds aloft that cross this area.

¹⁰ "Local Climatological Data, 1987 Annual Summary with Comparative Data, Medford, Oregon," National Oceanic and Atmospheric Administration, National Climatic Data Center, Asheville, North Carolina.

The rain shadow afforded by the Siskiyou and Coast Range results in a relatively light annual rainfall, most of which falls during the winter season. Summertime rainfall is brought by thunderstorm activity. Snowfall is quite heavy in the surrounding mountains during the winter. Valley snowfall is light. Individual accumulations of snow seldom last more than 24 hours and present little hindrance to transportation on the valley floor.

Few extremes of temperatures occur. High temperatures in the summer months average slightly below 90 degrees. High temperatures are always accompanied by low humidity, and hot days give way to cold nights as cool air drains down the mountain slopes into the valley. The length of the growing season is about 170 days, from late April to mid-October. The last date of 32 degrees in the spring normally occurs in mid-June and the first date of 32 degrees in the fall occurs in mid-September.

Valley winds are usually very light, prevailing from the north or northwest much of the year. Winds exceeding 10 mph during the winter months nearly always come from the southwest. Highest wind velocities are reached when a well-developed storm off the northern California coast causes a north or "Chinook" wind off the Siskiyou Mountains to the south; speeds to 50 mph are common and gusts to 70 mph have been recorded occasionally. Summer thunderstorms produce gusty winds to 40 or 50 mph that may come from any direction.

Fog often fills the lower portion of the valley during the winter and early spring months, when rapid clearing of the sky after a storm allows nocturnal cooling of the entrapped moist air to the saturation point. Duration of the fog is seldom more than three days. Geographical and meteorological conditions contribute to a potential smoke problem during the fall, winter, and early spring months. Smoke from local sources occasionally reduces visibility to 1 to 3 miles under stable conditions.

Air Stagnation-Worst-Case Conditions

Generally, the highest PM₁₀ concentrations in the AQMA occur during the winter when air stagnation and temperature inversion events trap particulate pollution near the ground. These stagnation events can persist for several days and increase particulate concentrations as air pollution builds up over time. Stagnation events occur regularly in the Rogue Valley and the PM₁₀ attainment and maintenance analysis must reflect these "worst-case" meteorological conditions. This provides a conservative analysis demonstrating that compliance with standards will not be jeopardized, even during air stagnation episodes.

Until recently it was thought that the meteorology of December 1985 represented the most severe stagnation event. However, a new evaluation of meteorology from 1985-2000 has shown that the air stagnation events occurring in 1998-2000, and particularly those of December 1999, reflect meteorology that is as conservative in most respects as that of December 1985. The newer meteorology also provides a more complete and accurate data record of meteorology than does the record for 1985. After deliberation, the advisory

committee recommended that the Department use the 1998-2000 stagnation meteorology for the attainment and maintenance analysis.

See Section 4.14.5.2 for a more detailed discussion of the stagnation meteorology used in the attainment and maintenance modeling analysis.

4.14.2.0 Ambient Air Quality

4.14.2.1 PM₁₀ Monitoring in the AQMA

Particulate monitoring began for Total Suspended Particulate (TSP) in 1969 at the Jackson County Courthouse near Oakdale and Main Streets in Medford. TSP monitoring began in White City near Agate Rd. in 1977. The Medford Aerosol Characterization Study (MACS) was conducted during 1979-81 and used various air quality modeling techniques (dispersion and chemical mass-balance) to help identify significant sources contributing to particulate impacts. Integrated nephelometry was added to the monitoring network in the late 1970's to provide information on hourly variation in particulate levels.

PM₁₀ monitoring began in Medford in 1983 and in White City in 1985. Based on measured violations of the PM₁₀ standard during 1983-86, the Medford AQMA was listed as a Group-I PM₁₀ area (area in non-compliance) in August 1987. The AQMA was subsequently designated as nonattainment for PM₁₀ under the 1990 Clean Air Act Amendments.

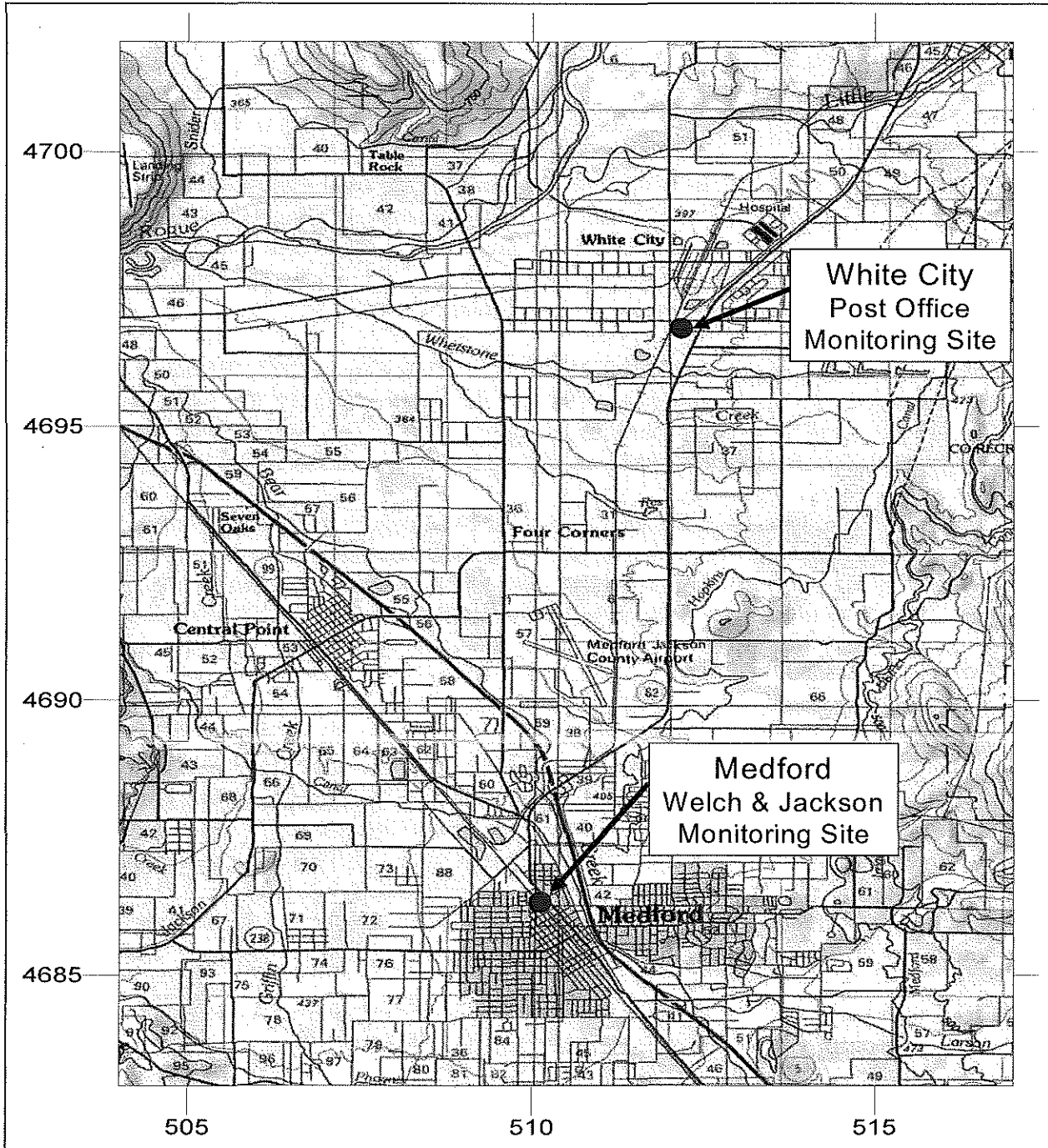
PM₁₀ monitors are placed in the areas of highest PM₁₀ concentration (PM₁₀ hot-spots), with the expectation that if PM₁₀ standards are met at these locations, air quality throughout the AQMA will also be in compliance. A particulate gradient study was conducted from September 1985 to February 1986 to better characterize PM₁₀ concentrations throughout the AQMA, identify areas of high PM₁₀ concentration, and determine if additional monitoring sites should be established. The gradient study captured the extended air stagnation events of December 1985 which resulted in the highest PM₁₀ levels measured to date in the Medford area. The study showed that PM₁₀ concentrations were highest at the Jackson County Courthouse site, the Oak & Taft Street site, and the area of Haven & Holly Streets. As a result of the study, additional PM₁₀ monitoring sites were located in Medford at Oak & Taft Streets and Welch & Jackson Streets. In White City, the study showed the highest PM₁₀ concentrations near the White City Post Office. EPA reference monitors were installed at all of the peak PM₁₀ impact sites in Medford & White City by December 1987. A subsequent gradient study in the winter of 1994/95 confirmed the placement of the monitoring network in the areas of highest PM₁₀ impacts.

The design of the next PM₁₀ gradient study will be evaluated after EPA completes its review and update of federal particulate standards (PM₁₀ and PM_{2.5}).

Monitoring Locations

Two EPA reference monitors are currently located in the AQMA: Welch & Jackson Street (Medford) and the White City Post Office. Figure 10 shows the location of the PM₁₀ monitoring network.

Figure 10: PM₁₀ Monitoring Locations in the AQMA



Quality Assurance

Data quality is evaluated in several ways. Each month, a systems audit is conducted in which each monitoring site is visited to evaluate whether the site location still meets established citing criteria, whether procedures are being followed, and to ensure that documentation is complete. Data quality is evaluated for precision (repeatability), accuracy, and completeness. Accuracy and precision are evaluated by calibrating the PM₁₀ monitor performance against standardized reference equipment.

Appendix A-1 offers a more detailed description of the PM₁₀ monitoring network and methodologies.

4.14.2.2: PM₁₀ Concentrations: Summary and Trends

Medford: Welch & Jackson (Primary Monitoring Site)

The Welch & Jackson monitor is the main reference PM₁₀ sampling site for Medford. Official sampling began in August 1989. Figure 11 shows all daily PM₁₀ data from 1989-2003. Figure 12 shows the trend in the four highest daily (24-hour average) PM₁₀ concentrations from 1989-2003. Figure 13 shows the number of “*expected exceedances*”, which is used to determine compliance with the daily PM₁₀ NAAQS. The number of expected exceedances can not exceed 1.0. The last exceedance of the daily PM₁₀ standard (150 ug/m³) at Welch & Jackson was in 1991.

Figure 11: PM₁₀ Trend at Welch & Jackson Monitoring Site (1989-2003)

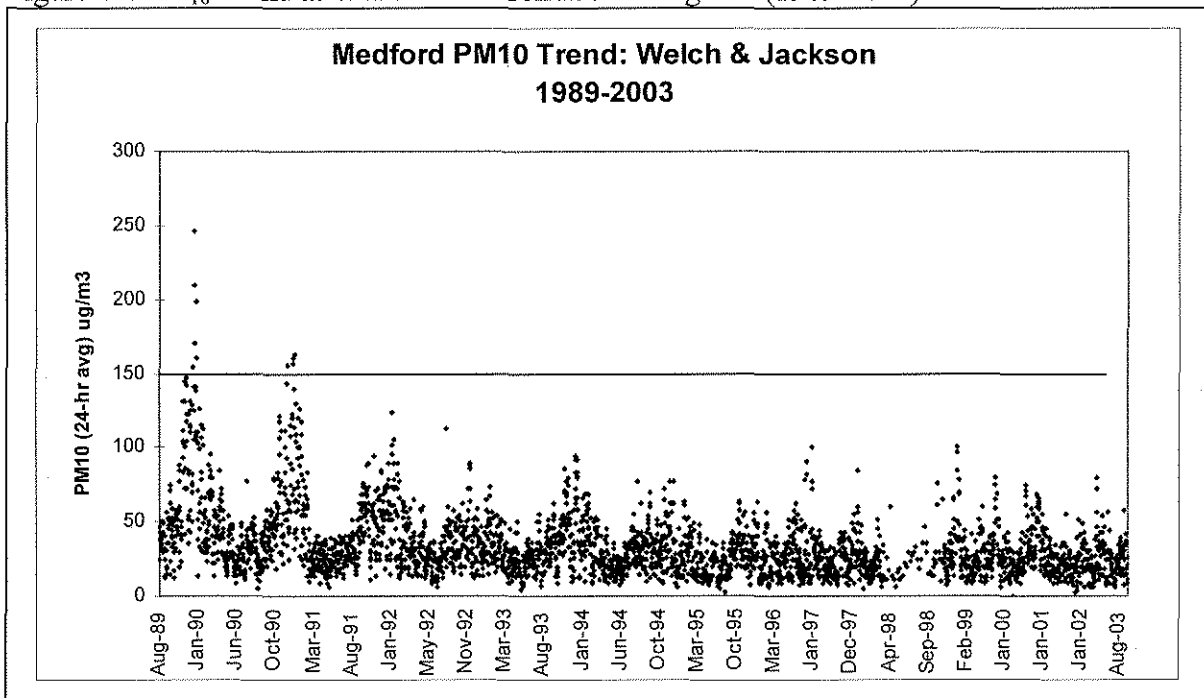


Figure 12: Trend in Peak Daily PM₁₀ values 1989-2003

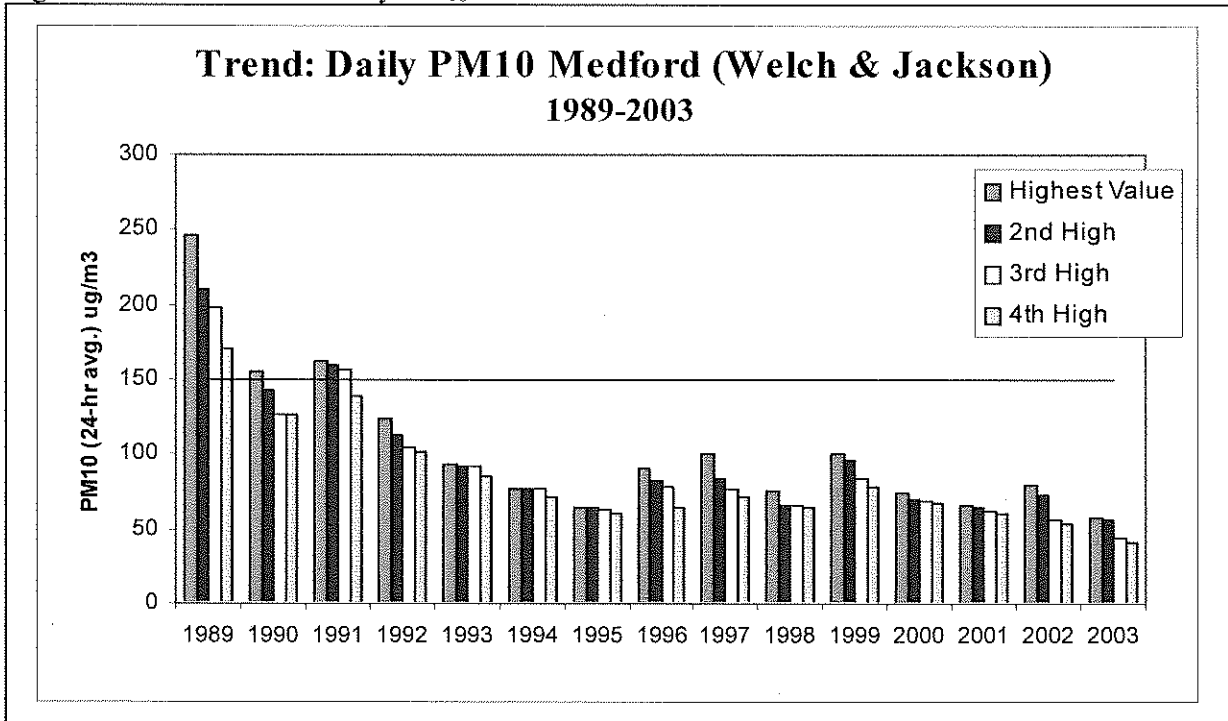


Figure 13: Number of Daily Exceedances & Expected Exceedances

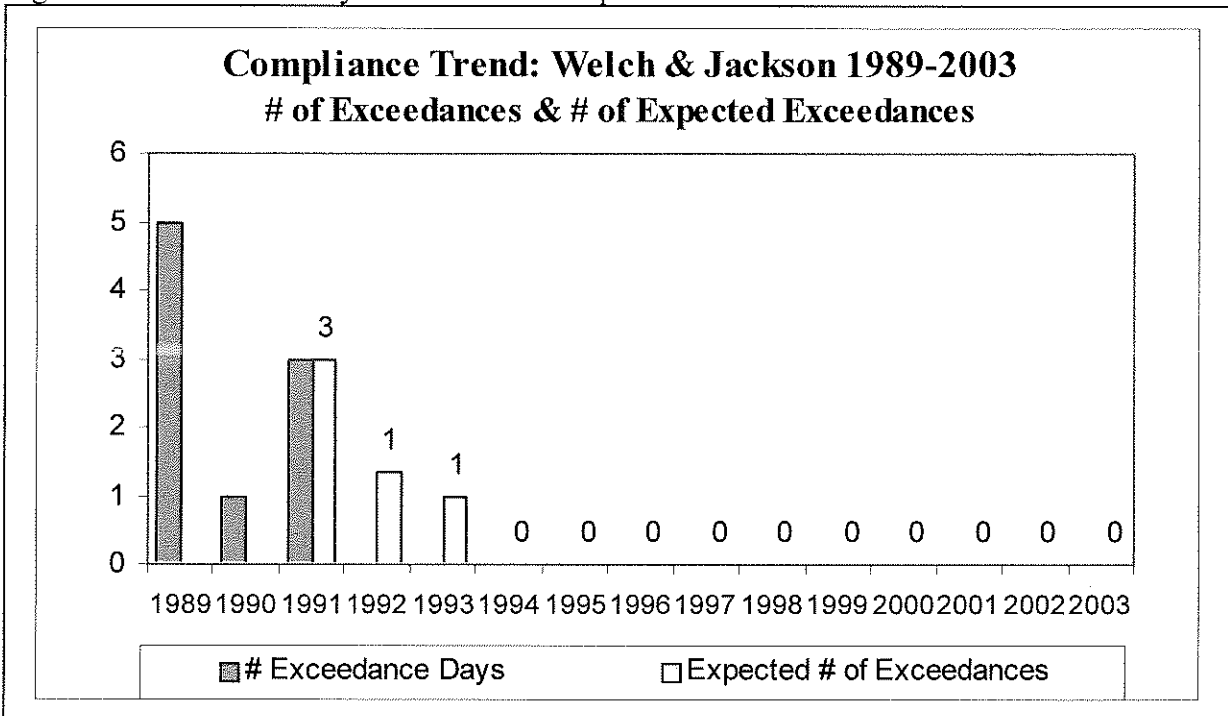
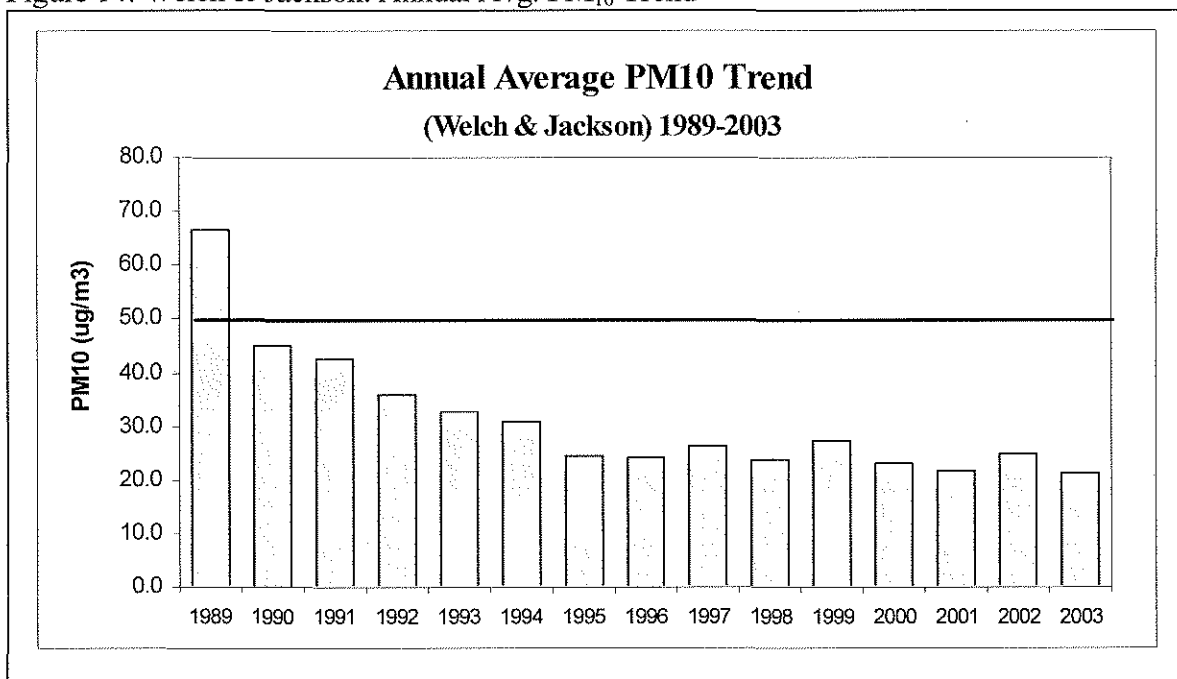


Figure 14 shows the trend in annual average PM₁₀ concentrations from 1989-2003. The last exceedance of the annual average PM₁₀ standard (50 ug/m³) was in 1989.

Figure 14: Welch & Jackson. Annual Avg. PM₁₀ Trend



White City: Post Office (Primary Monitoring Site)

The White City Post Office monitor is the main reference PM₁₀ sampling site for the White City area. Official sampling began in fall 1985. Figure 15 shows all daily PM₁₀ values from 1985-2003. Figure 16 shows the trend in the four highest daily (24-hour average) PM₁₀ concentrations from 1985-2003. Figure 17 shows the number of expected exceedances, which is used to determine compliance with the daily PM₁₀ NAAQS. The number of daily expected exceedances can not exceed 1.0. The last exceedance of the daily PM₁₀ standard at White City occurred in 1991.

Figure 15: PM₁₀ trend at White City Monitoring Site 1985-2002

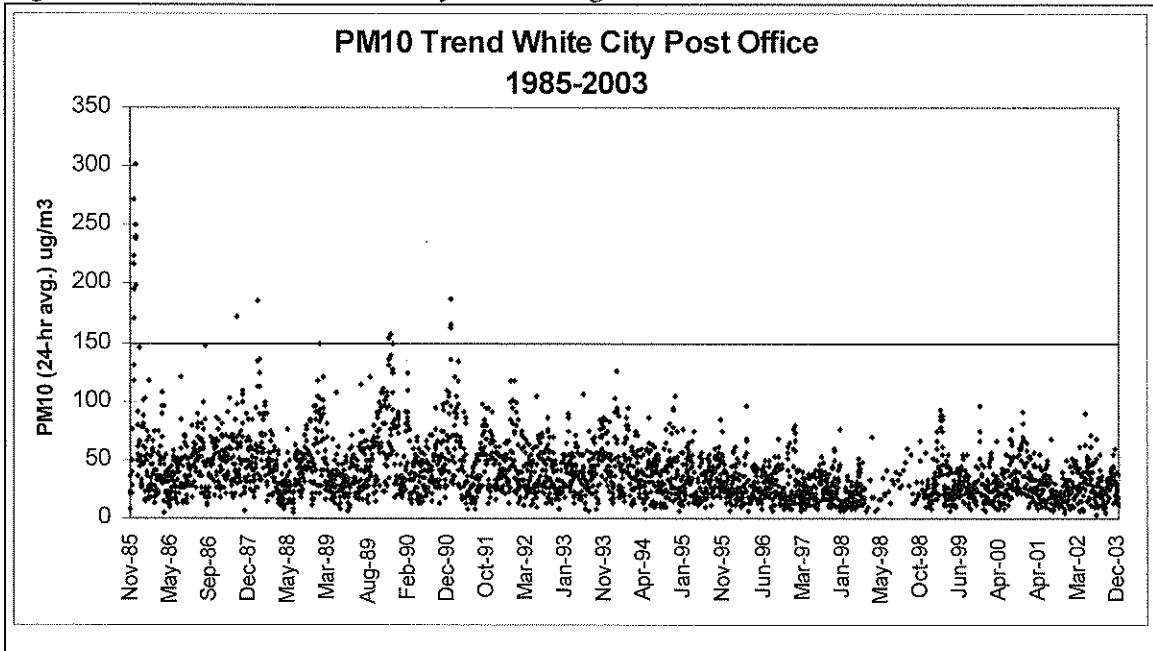


Figure 16: Trend in Peak Daily PM₁₀ Values

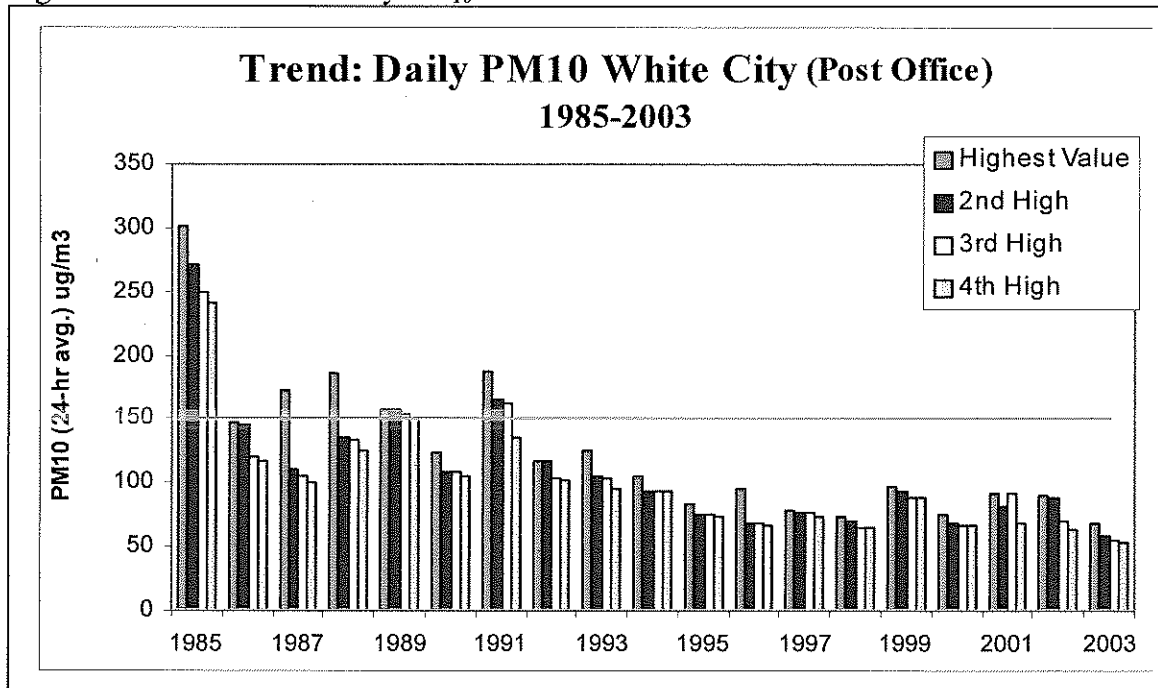


Figure 17: Number of Daily Exceedances & Expected Exceedances

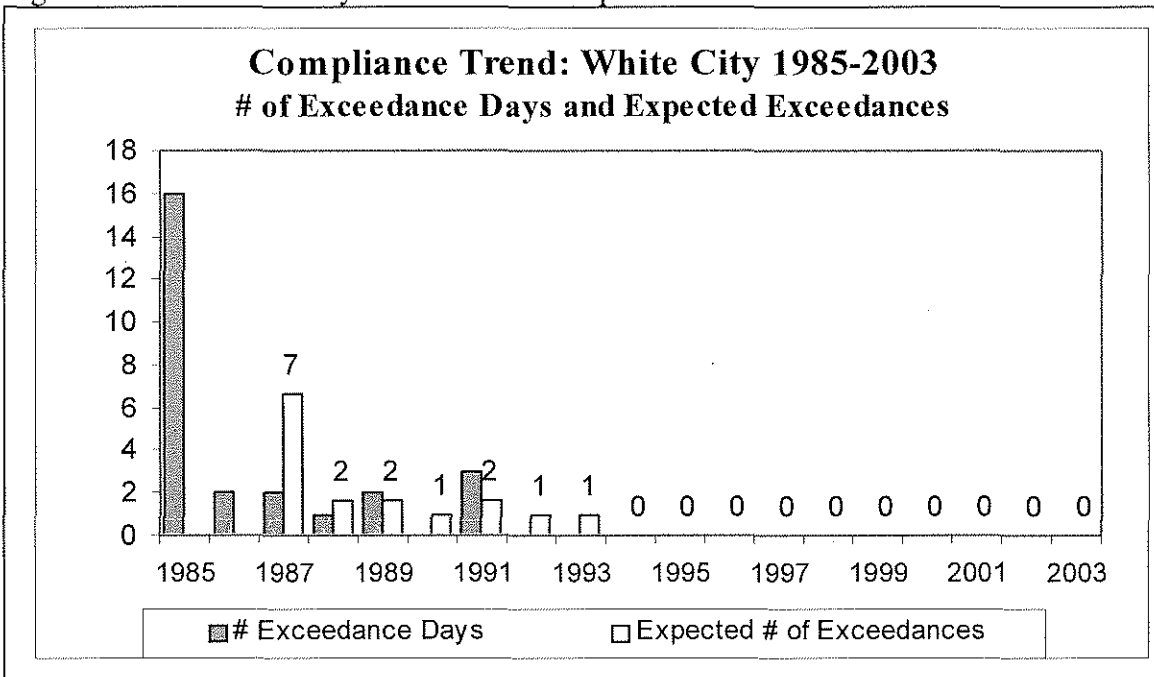
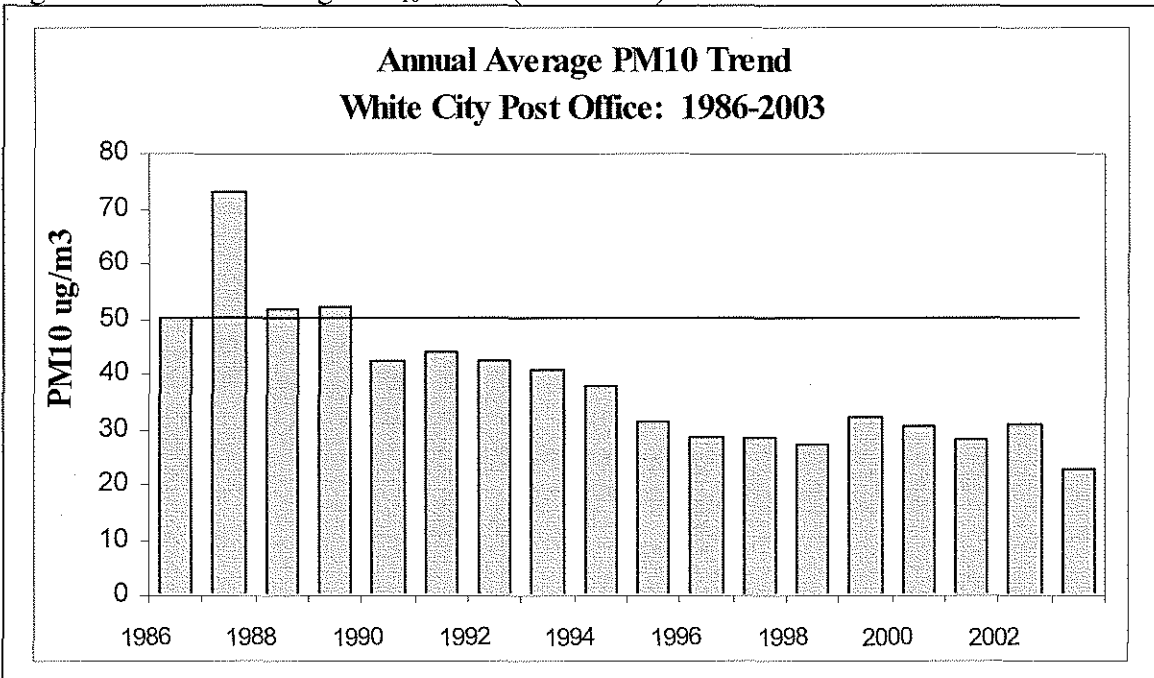


Figure 18 shows the trend in annual average PM₁₀ concentrations from 1986-2003. The last exceedance of the annual average PM₁₀ standard (50 ug/m³) in White City was in 1989.

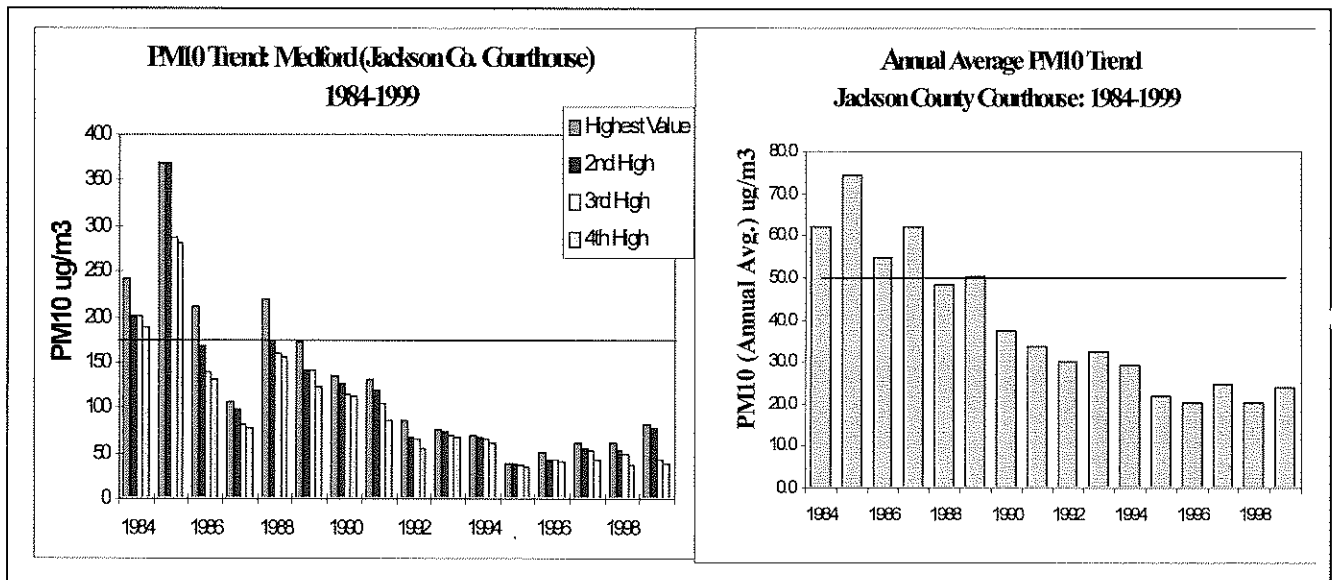
Figure 18: Annual Average PM₁₀ Trend (1986-2003)



Jackson County Courthouse (Historic Monitoring Site)

The Jackson County Courthouse was one of the original particulate monitoring locations in Medford. PM_{10} values measured at the Courthouse were not as high as those measured at the Welch & Jackson site. Overtime, the Welch & Jackson site became the primary reference site for Medford, and the Courthouse site was discontinued in 1999 as part of DEQ and EPA's overall network reduction plan. Figure 19 shows the trend in the four highest daily (24-hour average) PM_{10} concentrations at the Courthouse from 1984-1999. The last exceedance of the daily PM_{10} standard ($150 \mu g/m^3$) at the Courthouse was in 1988. Figure 19 also shows the trend in annual average PM_{10} concentrations at the Courthouse from 1984-1999. The last exceedance of the annual average PM_{10} standard ($50 \mu g/m^3$) at the Courthouse was in 1987.

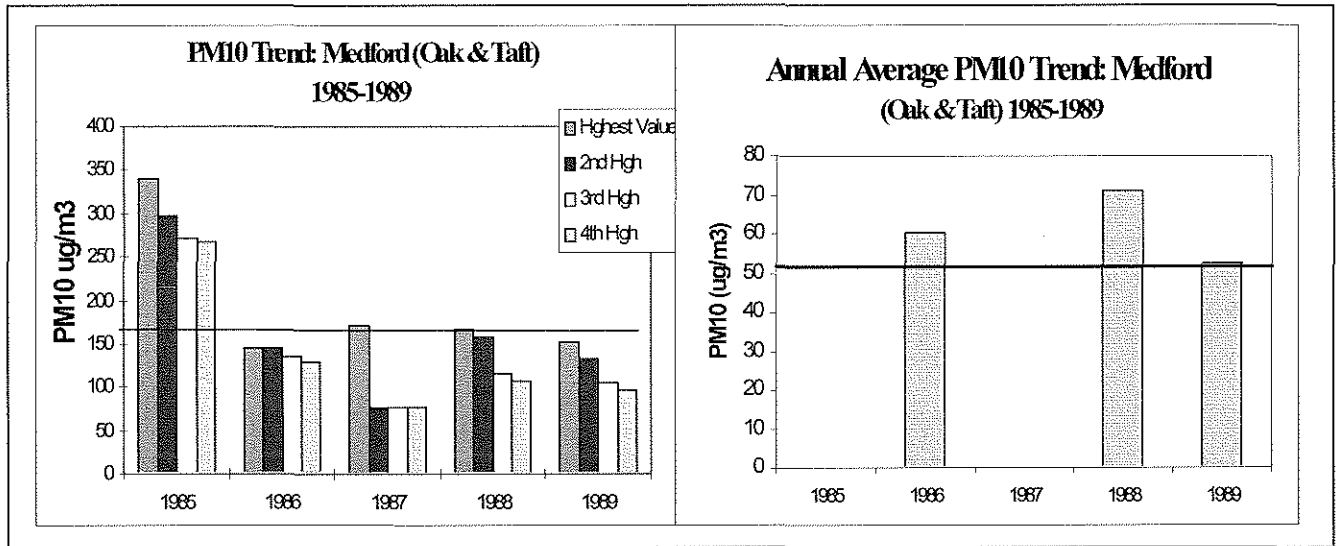
Figure 19: PM_{10} Trends at the Jackson Co. Courthouse Monitoring Site



Oak & Taft Street (Historic Monitoring Site)

The monitor at Oak & Taft Streets was part of the initial PM_{10} assessment of the Medford area in the mid-late 1980's. The site was discontinued in 1989 when Welch & Jackson became the official reference site for Medford. Figure 20 shows the trend in the four highest daily (24-hour average) PM_{10} concentrations at the Oak & Taft (1985-1989), and also the trend in annual average PM_{10} concentrations.

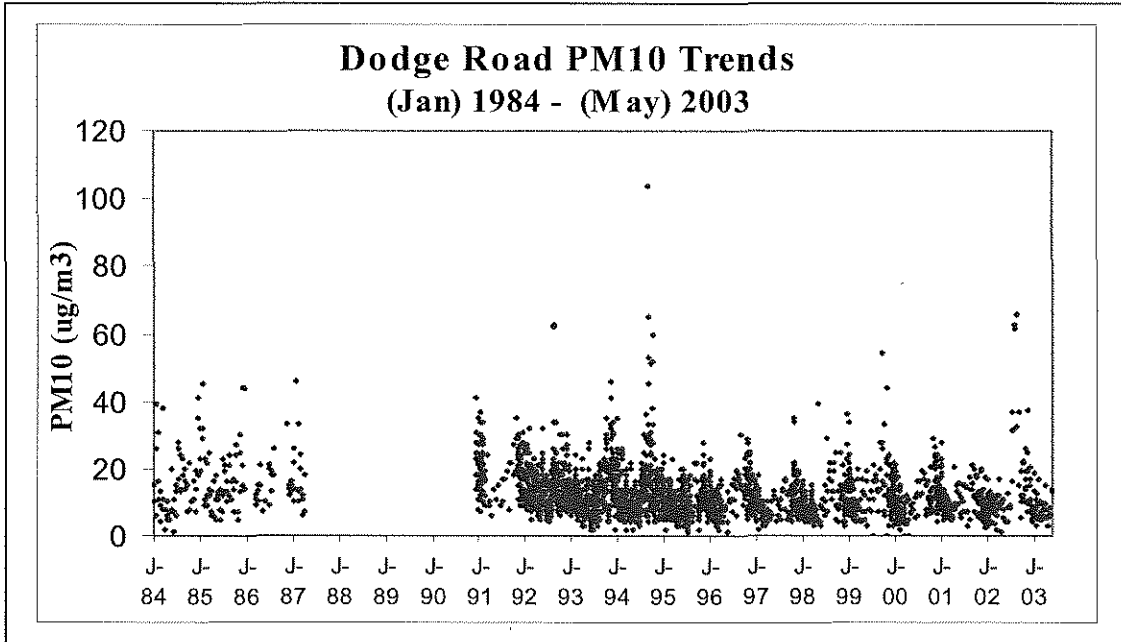
Figure 20: PM₁₀ Trends at the Oak & Taft Monitoring Site



4.14.2.3: Background Air Quality

PM₁₀ aerosols from sources outside the AQMA collectively contribute to measured PM₁₀ levels in the Medford area when the regional airmass is transported into the Rogue Basin. Sources of air pollution such as wildfires, slash and agricultural burning, entrained fine soils, and some secondary aerosols are believed to be the principal contributors to background air quality. A background particulate monitor has been operated at Dodge Road in Sam's Valley (N-NW of the AQMA) since 1979. Figure 21 shows the trend in background PM₁₀ concentrations since 1984. Generally, background PM₁₀ values are quite low, commonly averaging about 12 ug/m³. Occasional high values are documented and assigned a cause when known (such as wildfire impacts in 1994, 1999, 2002, etc.). Background PM₁₀ values are used as part of the attainment and maintenance analysis. The use of background in the modeling analysis is discussed in more detail in Section 4.14.5.0, *Dispersion Modeling Analysis*. State budget reductions closed the Dodge Rd. monitoring site from April 1987 through December 1990.

Figure 21: PM₁₀ Trend at the Dodge Road (Background) Monitoring Site



4.14.2.4: Reductions in peak PM₁₀ levels since 1989

Air quality strategies adopted in the 1991 attainment plan were designed to reduce 24-hour concentrations of PM₁₀ by at least 159 $\mu\text{g}/\text{m}^3$ (design value of 309 ug/m^3 - 150 $\mu\text{g}/\text{m}^3$) and the annual average by at least 18 $\mu\text{g}/\text{m}^3$ (design value of 68 ug/m^3 - 50 $\mu\text{g}/\text{m}^3$) by 1992. Emission reduction measures adopted in the attainment plan are legally enforceable; adequate to achieve the needed air quality improvements; and were designed to attain standards within the time frames prescribed by the Clean Air Act. Table 1 shows the affect of the strategy and the significant reduction in peak PM₁₀ levels since 1989.

Table 1: Peak Levels: 24-Hour Average PM₁₀ Particulate Summary ($\mu\text{g}/\text{m}^3$)

Year	Welch & Jackson PM ₁₀ ($\mu\text{g}/\text{m}^3$)		White City PO PM ₁₀ ($\mu\text{g}/\text{m}^3$)	
	Maximum (date)	2nd Highest (date)	Maximum (date)	2nd Highest (date)
1989	246 (12/21)	210 (12/23)	158 (12/20)	157 (12/23)
1990	156 (12/09)	143 (12/08)	124 (02/27)	109 (02/24)
1991	163 (01/04)	160 (01/03)	188 (01/05)	166 (01/03)
1992	124 (01/15)	113 (08/05)	118 (01/15)	117 (01/24)
1993	94 (12/22)	92 (12/23)	126 (12/24)	106 (03/29)
1994	77 (08/12)	77 (12/09)	105 (12/23)	94 (02/03)
1995	64 (02/06)	64 (11/03)	84 (11/04)	76 (01/20)
1996	91 (12/19)	82 (12/18)	96 (02/13)	68 (02/12)
1997	101 (01/09)	85 (12/29)	78 (12/29)	77 (01/09)
1998	76 (10/20)	66 (12/23)	74 (12/23)	70 (12/22)
1999	98 (01/04)	93 (01/05)	89 (1/05)	84 (01/05)
2000	72 (11/18)	68 (11/20)	73 (11/20)	67 (11/17)
2001	64 (1/3)	63 (1/4)	89 (1/2)	80 (1/3)
2002	80 (7/31)	73 (8/12)	90 (8/12)	89 (7/31)
2003	58 (11/14)	57 (01/18)	68 (1/09)	59 (11/14)

Summary: Meeting the Clean Air Act Attainment Deadline and Redesignation To Attainment

Monitoring data demonstrates that the Medford-Ashland AQMA successfully met the 1994 Clean Air Act attainment deadline, and has continued in compliance since then. The *Attainment and Maintenance Modeling Analysis* demonstrate that the AQMA will continue in compliance with PM₁₀ standards, even under worst-case conditions, through at least the year 2015.

These three demonstrations are sufficient for EPA to redesignate the Medford-Ashland AQMA to attainment for PM₁₀.

PM₁₀ EMISSION ESTIMATES FOR THE MEDFORD-ASHLAND AQMA

4.14.3.0: Overview

The analysis of ambient PM₁₀ levels begins with an assessment of PM₁₀ emissions occurring in the AQMA. Emissions are estimated for a wide variety of sources, and are summarized in four major categories.

- Major Point Sources: Are those industrial facilities with PM₁₀ emissions greater than or equal to 5 tons per year.
- Area Sources: Include activities such as residential wood-heating, open burning, commercial space heating, etc.
- Non-Road Mobile Sources: Include sources such as small engines and construction equipment. As with Area Sources, the Non-Road Mobile category reflects many small individual sources that can collectively produce a significant amount of emissions in the airshed.
- On-Road Mobile Sources: Include cars and trucks, and reflects both exhaust (tailpipe) and road dust emissions.

PM₁₀ emissions are estimated using many sources of information, including industrial permits, population, housing, and employment information, and estimates of motor vehicle travel in the AQMA. The PM₁₀ attainment and maintenance analysis use emission estimates in three different ways. First, a “base-year” emissions inventory (EI) is created to estimate actual PM₁₀ emissions occurring in the airshed. For the AQMA, the PM₁₀ base-year EI is for 1998. The base-year EI serves as the foundation for the future emissions forecast, and was used in validating the performance of the air quality dispersion model. More information on the air quality dispersion modeling process can be found in Section 4.14.5.0

The *Attainment Analysis* uses a variation of the 1998 base-year EI to portray a worst-case emissions scenario for the airshed. The attainment analysis uses 1998 emissions for all source categories except major industry. For major industry, actual 1998 emissions are replaced with each facility’s maximum allowable (permitted) emission level. This worst-case planning approach is required by EPA, and is designed to reflect the maximum potential for industrial PM₁₀ impacts in the AQMA.

The *Maintenance Analysis* uses an emissions forecast to the year 2015, and also reflects major industry emissions at maximum allowable levels. Section 4.14.3.1 summarizes the 1998 Base-Year EI for the AQMA. The attainment analysis EI is discussed in Section 4.14.3.2. Growth factors used in the emissions forecast are summarized in section 4.14.3.3, and the maintenance analysis EI is summarized in section 4.14.3.4. The complete emissions inventory and forecast for the AQMA is included as Appendix A2.

4.14.3.1: Base Year Emissions Inventory: 1998 Actual Emissions

The 1998 Base Year Emissions Inventory estimates actual PM₁₀ emissions that occurred within the AQMA from all source sectors, and serves as the basis for both the 1998 Attainment Analysis and the 2015 Maintenance Analysis.

Estimates are developed for both Annual and Daily PM₁₀ emissions; annual in (tons of PM₁₀ per year) and daily in (pounds of PM₁₀ per day). Daily emissions are adjusted to reflect a worst-case season during the year. Typically, the worst-case season occurs in the winter (November through February). Historically, this is the time period when the daily PM₁₀ standard is most likely to be exceeded.

Emissions from each source category were evaluated and adjusted accordingly to develop an appropriate inventory of winter season daily emissions. For example, emission estimates for Residential Wood Combustion were adjusted to reflect fluctuations in home heat demand during the winter. Not all emission source categories require adjustment. For example, production and emissions from major industry tend to be fairly constant throughout the year; therefore a seasonal adjustment from annual to a worst-case winter day is not needed. Some activities that occur during the summer months appear in the annual emission inventory but not in the worst-case (winter) daily emission inventory.

Another example of seasonal adjustment involves Mobile Sources. Daily emission estimates are based on annual average motor vehicle travel, adjusted for winter driving conditions and peak day commuter traffic volumes.

Summary: 1998 Emission Inventory (Actual Emissions)

Table 2 and Figures 22 through 25 show the emission inventory summary for the 1998 base-year. These reflect estimates of actual emissions in 1998, including reported actual emissions for major industry.

Table 2: 1998 Base-Year EI (Actual Emissions)

Medford-Ashland PM₁₀ Emissions		
<i>1998 Emissions</i>	<i>Tons per Year</i>	<i>Pounds per Day</i>
Stationary Point Sources	535.4	3,274
Stationary Area Sources	685.0	13,504
Non-Road Mobile Sources	67.2	605
On-Road Mobile Sources	2,452.1	14,179
Total	3,739.8	31,561

Figure 22: Actual 1998 Annual Emissions (tons/year)

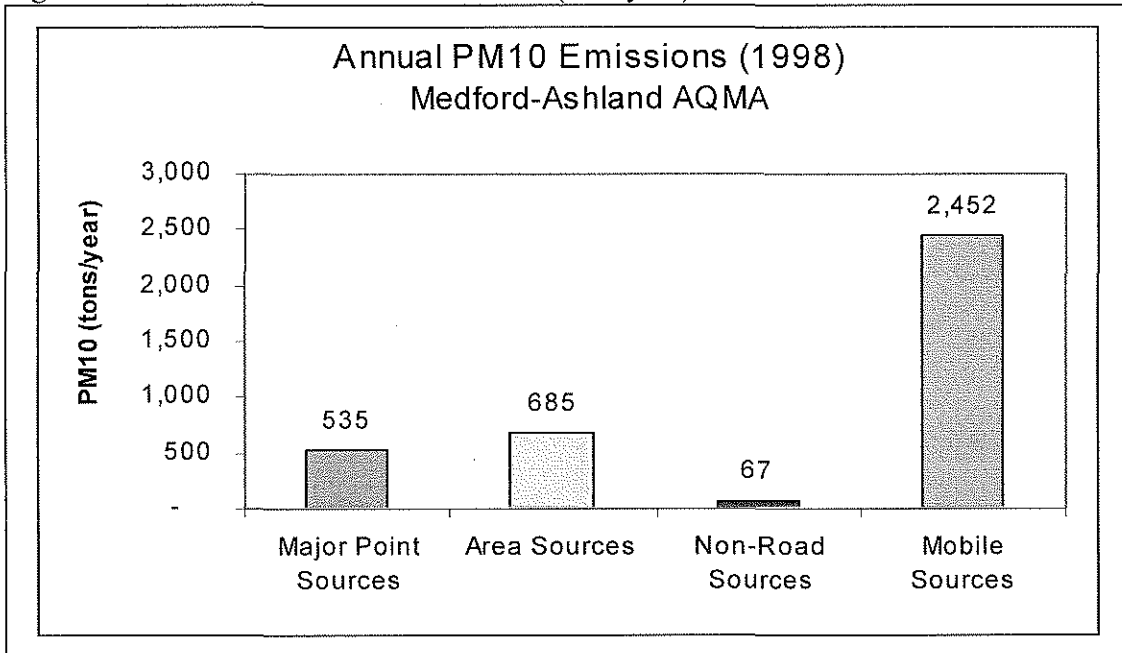


Figure 23: Percent Source Contributions (1998 Annual Emissions)

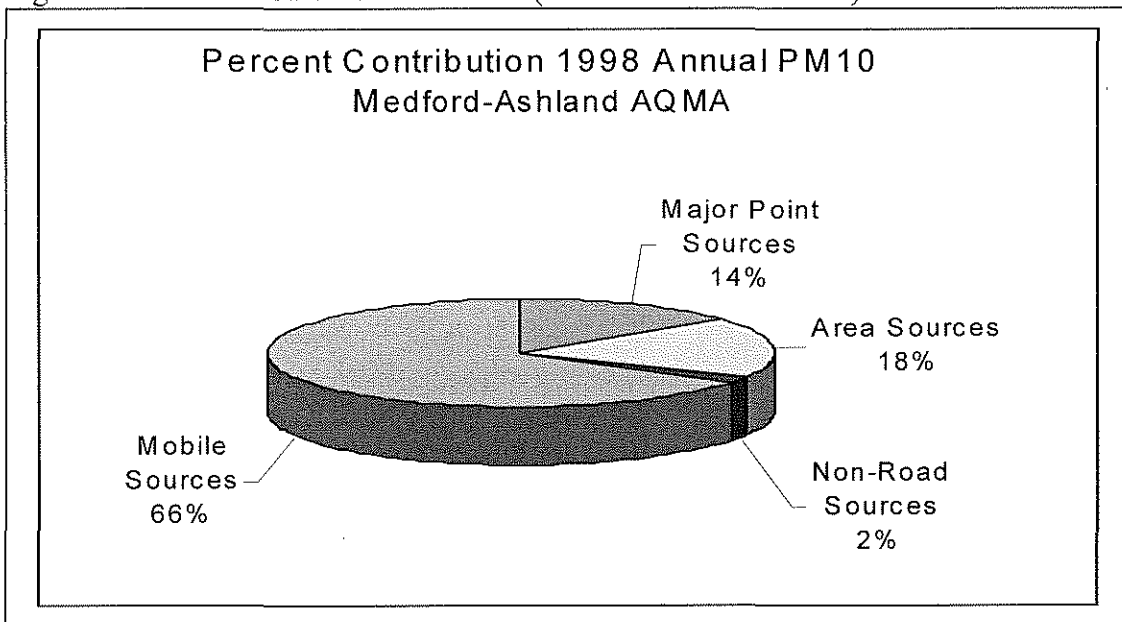


Figure 24: Actual 1998 Daily Emissions (lbs/day)

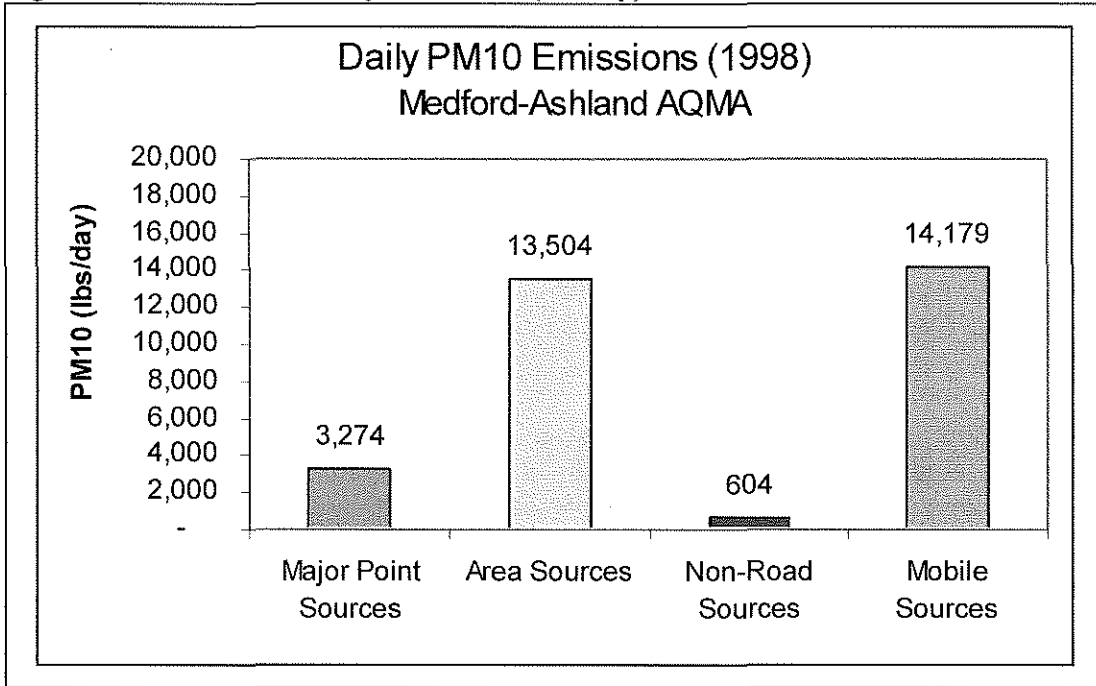
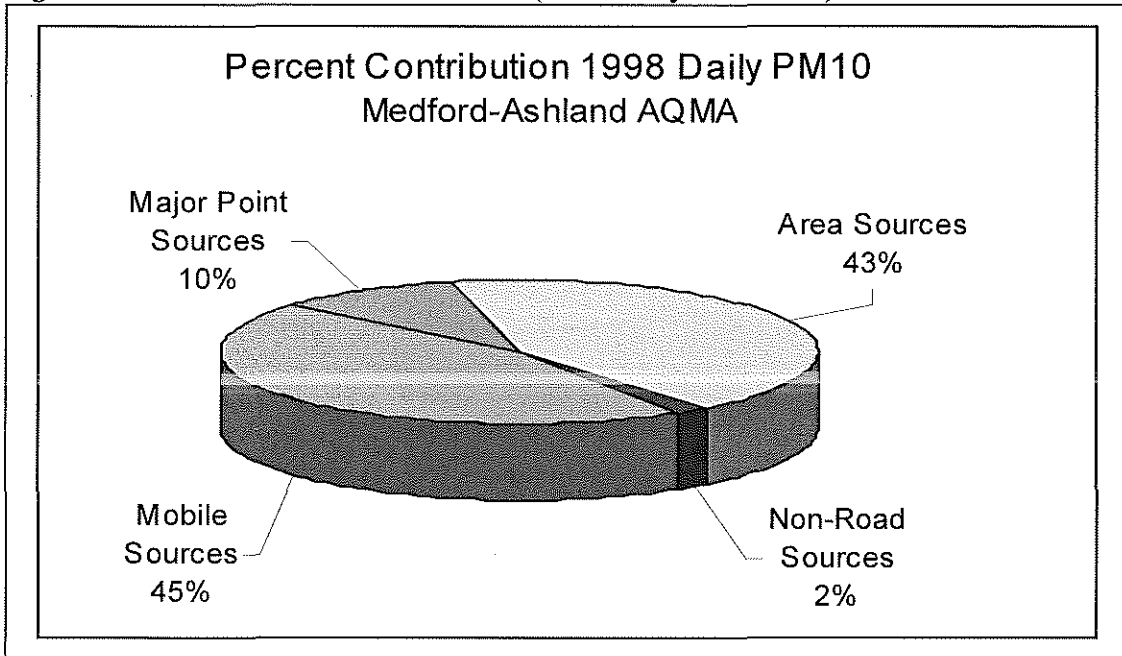


Figure 25: Percent Source Contributions (1998 Daily Emissions)



4.14.3.2: Attainment Analysis Emissions Inventory

The Attainment Analysis evaluates the current potential for impacts in the AQMA, under worst-case conditions. For this analysis, the Department used the 1998 inventory of actual emissions, substituting maximum permitted emission levels for major industry. These are the levels legally allowed in each facility's air quality permit. Figure 26 shows the difference between 1998 actual emission levels and allowable emission levels for major industry. Figures 27-30 summarize the attainment analysis EI.

Figure 26: Actual (1998) vs. Allowable Emission Levels for Major Industry.

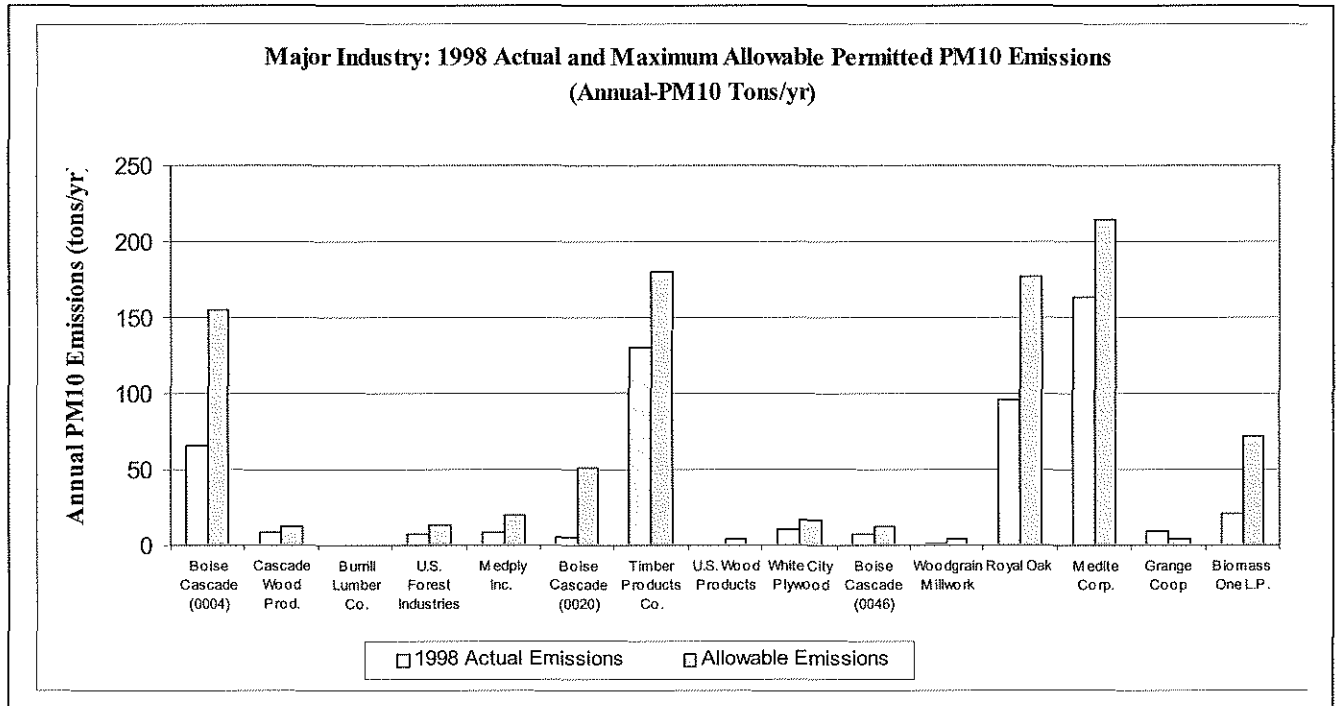


Figure 27: Attainment Analysis Emissions Estimate (Annual)

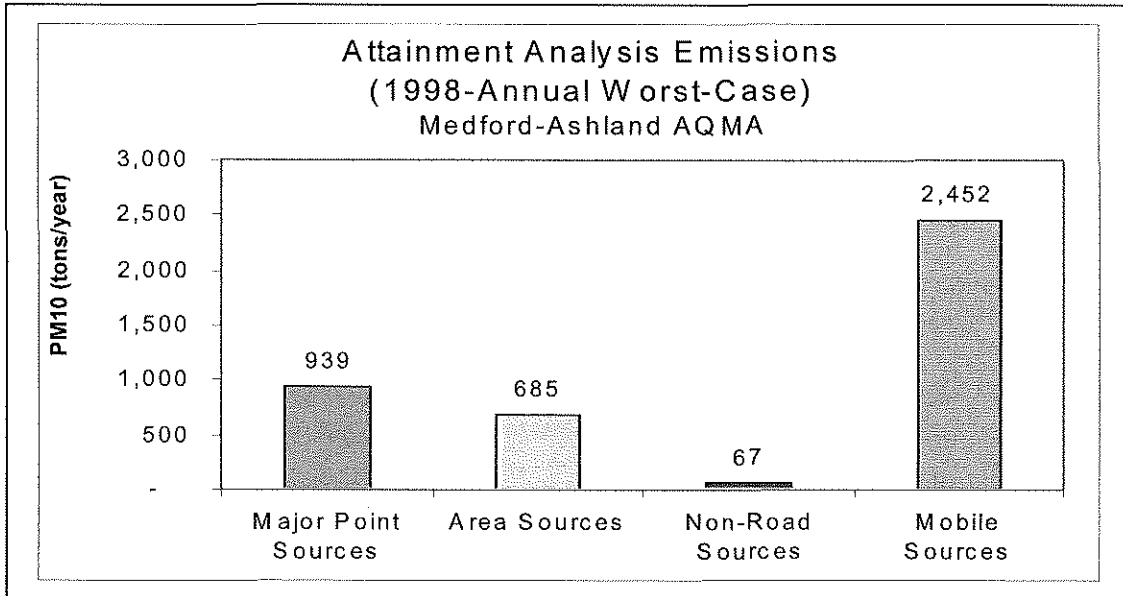


Figure 28: Percent Contribution by Source Category

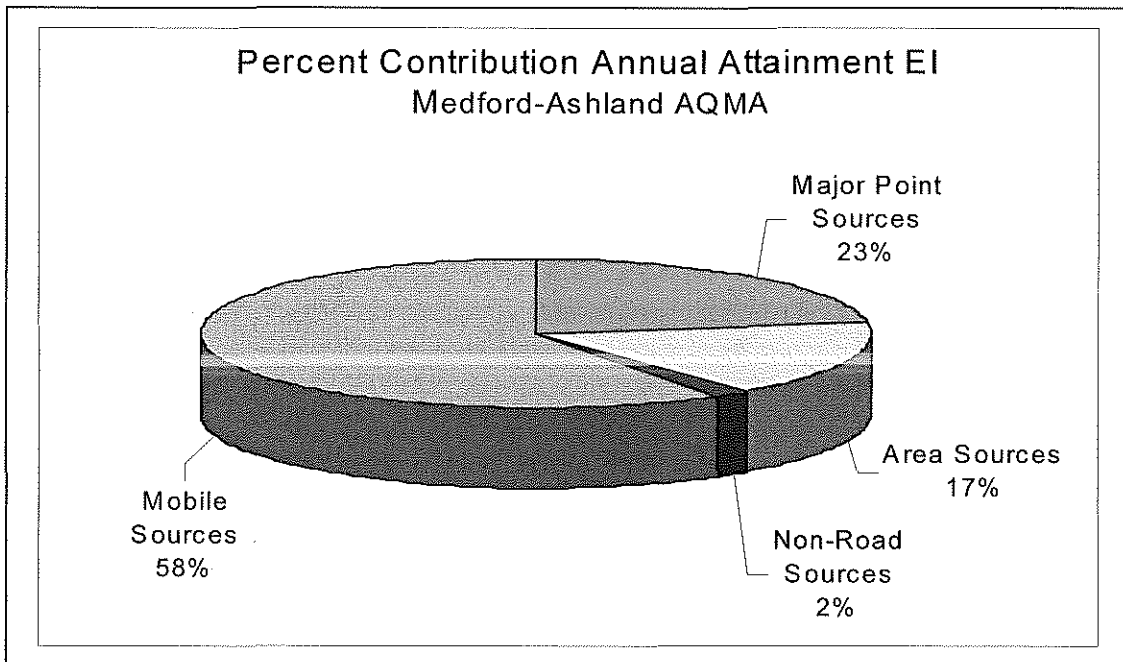


Figure 29: Attainment Analysis Emissions Estimate (Daily)

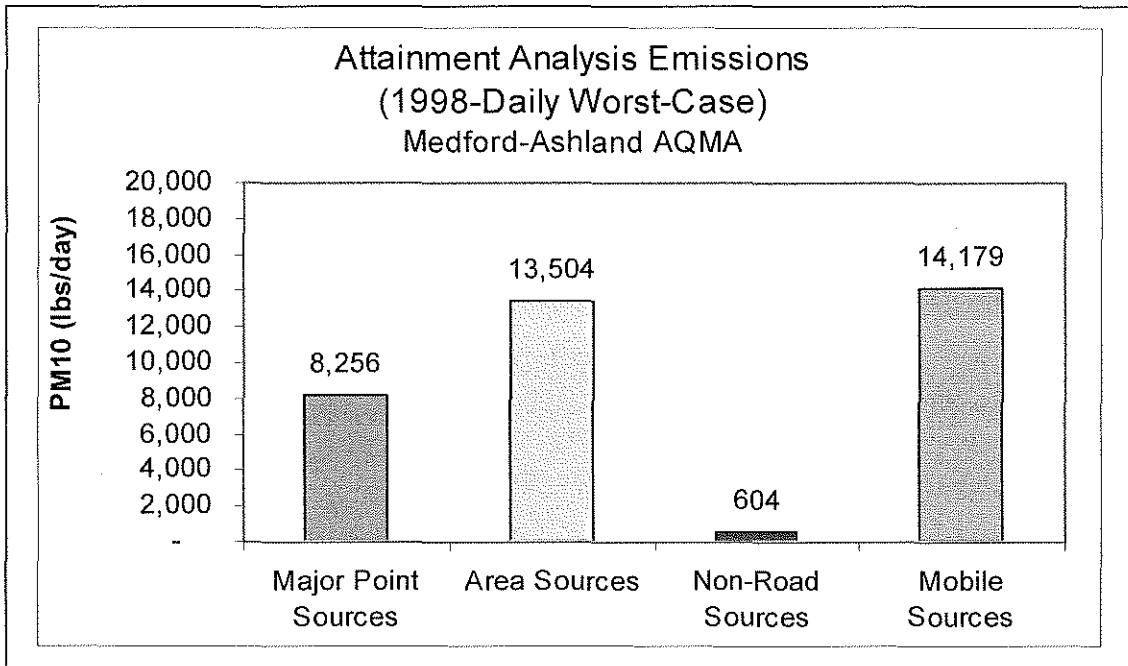
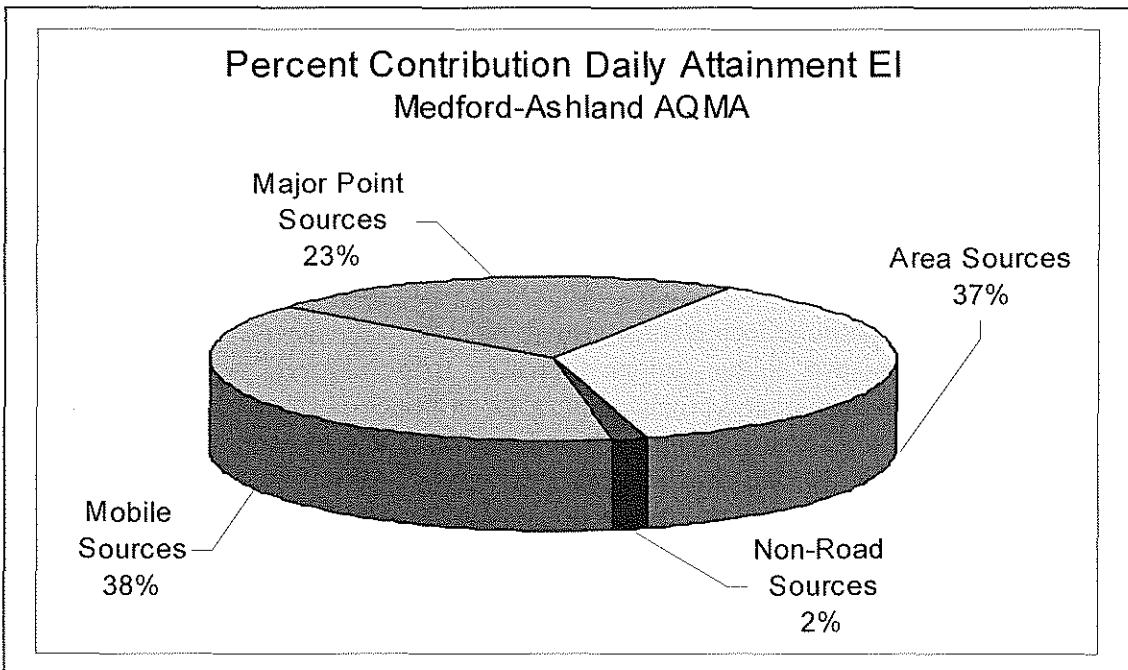


Figure 30: Percent Contribution by Source Category



4.14.3.3 Emissions Growth in the Medford-Ashland AQMA

Various growth factors were used to estimate future year PM₁₀ emissions. Key indicators used in the emissions forecast include population growth, economic forecasts, increases in motor vehicle travel (vehicle-miles-traveled, or VMT) and permitted emissions for major industrial sources. By executive order from the Oregon governor, growth and economic forecasts used by state and local agencies for planning purposes must be consistent with projections from the Oregon Office of Economic Analysis (OEA). OEA met with city and county staff from Rogue Valley communities to arrive at agreed upon population and employment forecasts.

EPA requires that maintenance plans be updated every 8-10 years to account for the latest changes in growth patterns. When the Medford-Ashland PM₁₀ Maintenance Plan is next updated, a new emissions projection will be done to reflect the latest population, employment, and motor vehicle travel forecast for the AQMA.

Population/Housing/Employment: Population, housing, and employment trends have been used to proportionally increase emissions from Area and Non-Road Mobile sources. Population, housing, and employment projections also influence the need for motor vehicle trips, and therefore influence the estimate of mobile emissions.

The Medford-Ashland AQMA includes both urban and rural areas, each growing at a different rate. Figure 31 illustrates the difference in average population growth rates between the urban and rural portions of the AQMA. The 20-year trend illustrated here (1976-1996) reflects an annual growth rate of approximately 2.6 percent per year for the incorporated areas of the AQMA, and a 0.5 percent per year rate in rural areas. The population of the AQMA in 1998 was estimated at 137,089 and projected to increase to approximately 173,564 by 2015. Housing units in the AQMA were estimated for 1998 at 53,837, and projected to increase to 64,101 by 2015. Table 3 shows average growth rates for key indicators in the AQMA. Figure 32 illustrates the average growth rate for AQMA population and housing.

The table and figures below reflect average growth rates for the AQMA. Each community in the AQMA has its own unique growth forecast. In developing the PM₁₀ emission inventory and forecast, current and projected land use information (population and housing density, as well as VMT), was geographically allocated to each community and the rural portion of the AQMA by the Rogue Valley Council of Governments and Oregon Department of Transportation. These allocations were initially done as part of the local transportation planning process. The PM₁₀ emissions inventory and forecast are consistent with this land use data.

Table 3: Key Growth Rates in the AQMA

Category	Annual Growth Rate (Linear, Non-Compounding)
Population	1.56% / year
Households	1.52% / year
Total Employment	1.41% / year
Average AQMA Vehicle Miles Traveled	2.90% / year

Figure 31: Historic Growth Trend (Urban/Rural)

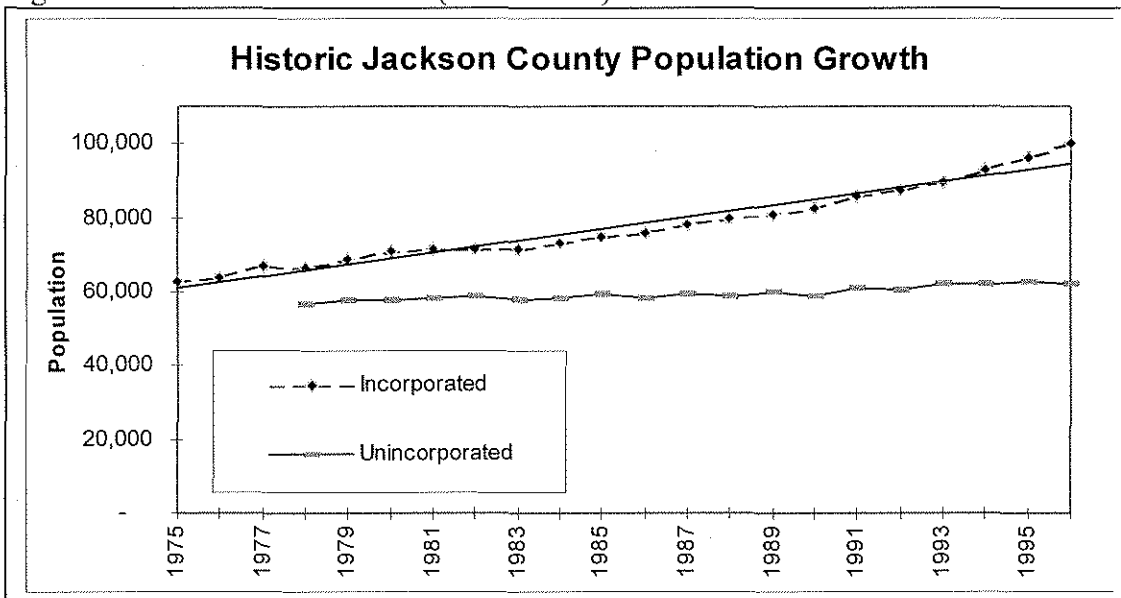
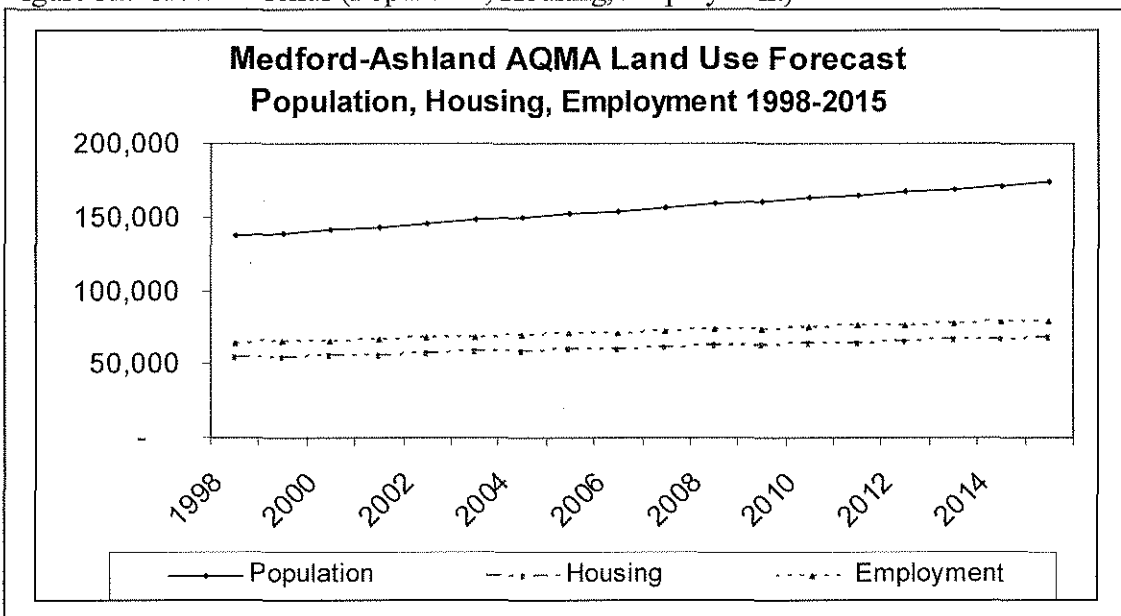


Figure 32: Growth Trends (Population, Housing, Employment)



4.14.3.4: Maintenance Analysis (2015 Emissions Forecast)

The Maintenance Analysis is based on the emissions forecast to 2015. The forecast reflects anticipated emissions growth resulting from changes in population, housing, employment, and motor vehicle travel. As in the Attainment Analysis, the Maintenance Analysis reflects major industry emissions at maximum allowable (permitted) levels.

Table 4 and Figures 33 through 36 show the maintenance emissions forecast.

Table 4: Summary of 2015 Emissions Forecast

<i>2015 Emissions</i>	<i>Tons per year</i>	<i>Pounds per Day</i>
Stationary Point Sources (allowable)	939	8,256
Stationary Area Sources	680	13,044
Non-Road Mobile Sources	85	765
Mobile Sources	3,754	20,999
Total	5,458	43,064

Figure 33: Maintenance Analysis Emissions Forecast (Annual)

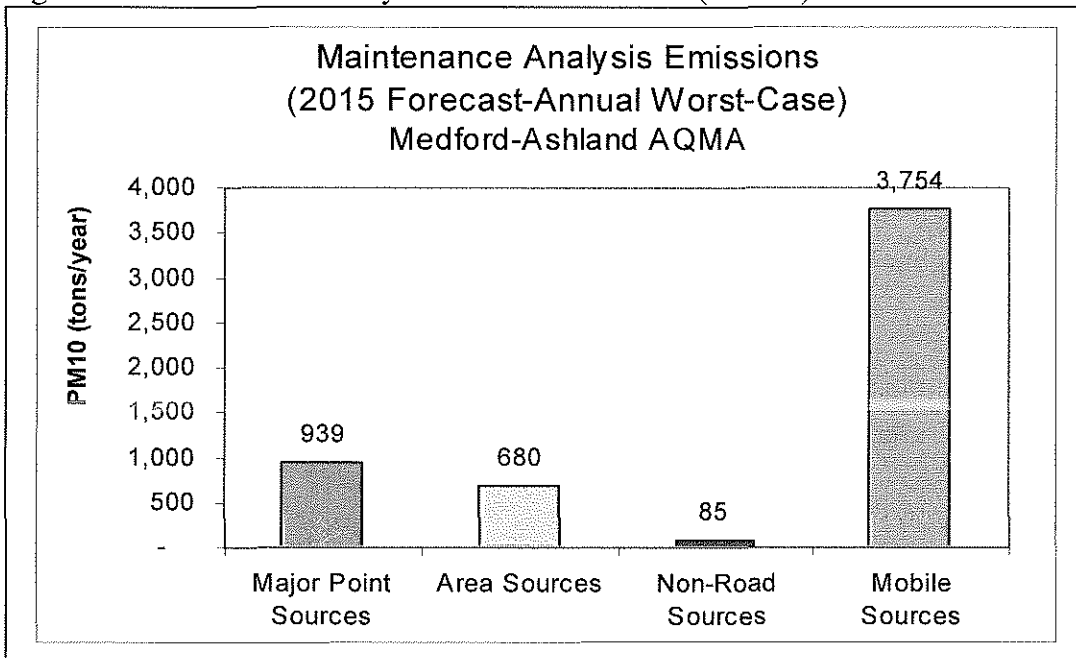


Figure 34: Percent Contribution by Source Category (Annual)

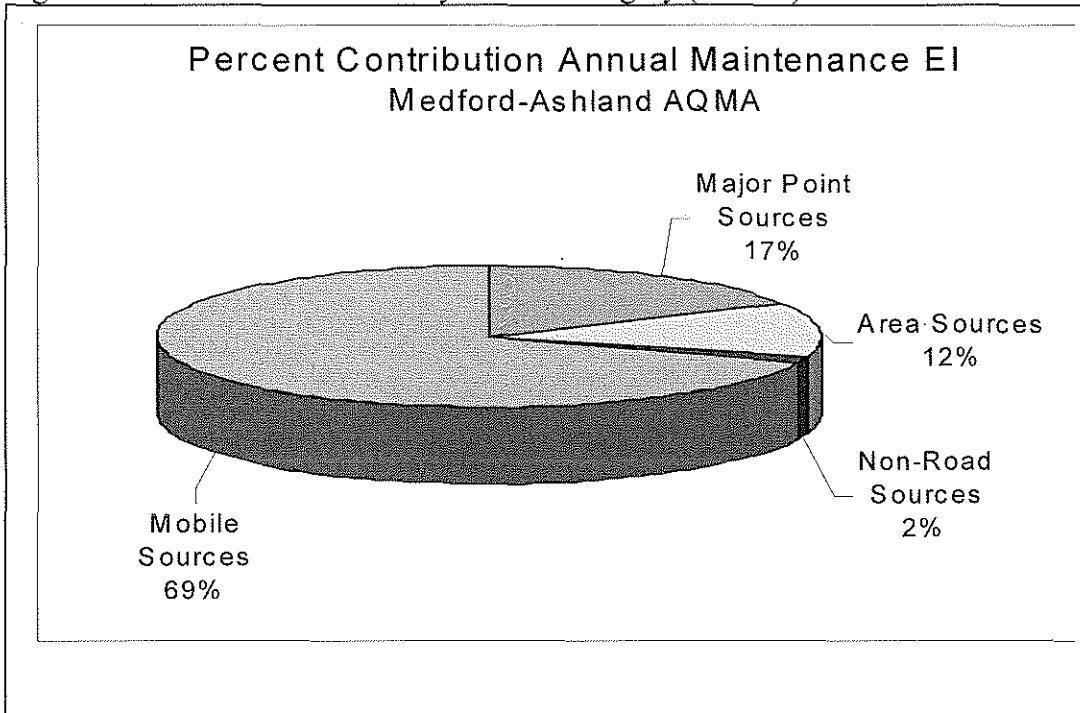


Figure 35: Maintenance Analysis Emissions Forecast (Daily)

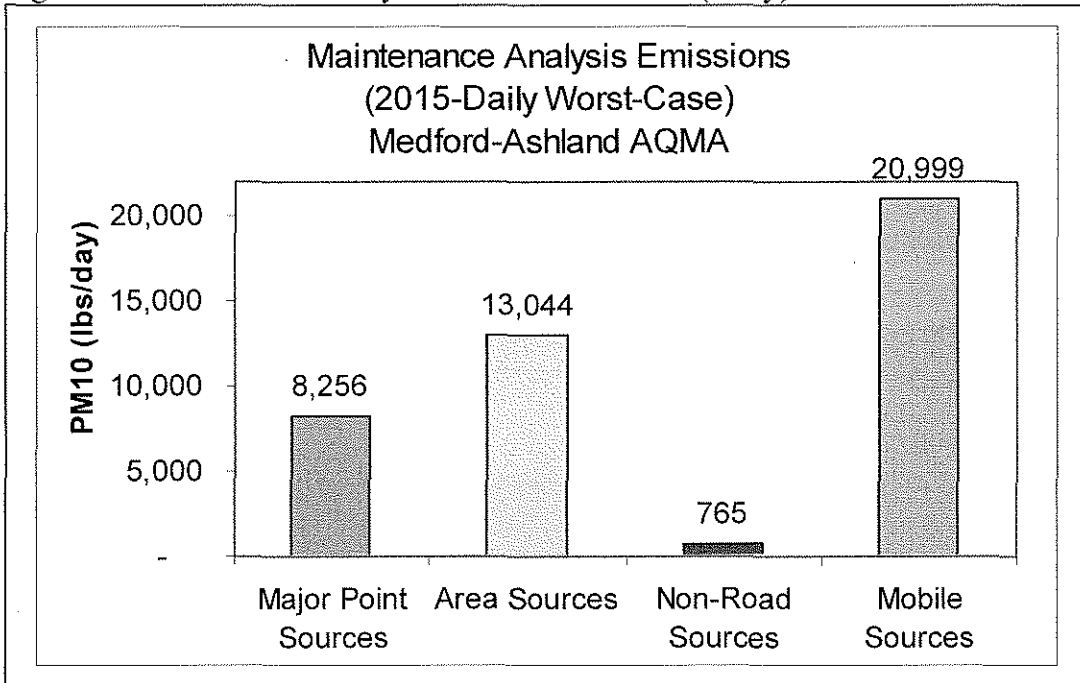
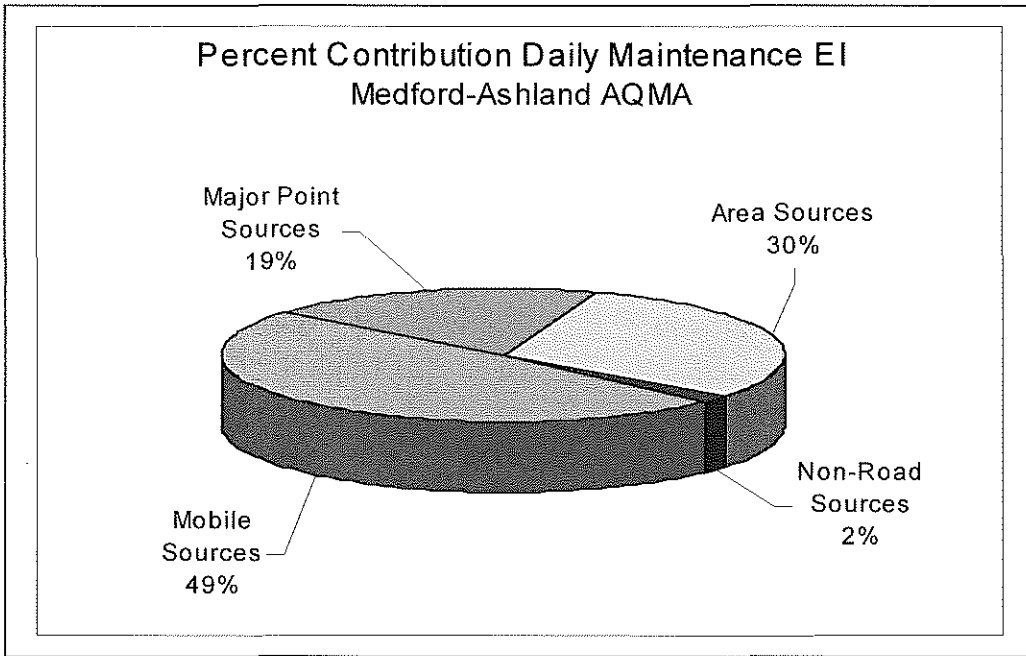


Figure 36: Percent Contribution by Source Category (Daily)



Comparison: 1998 Actual, Attainment Analysis (1998), 2015 Maintenance Analysis

Figures 37 and 38 below compare the three emission inventories used in the PM₁₀ planning process (1998 base-year, 1998 worst-case attainment emissions and 2015 worst-case emissions forecast).

Figure 37: Emissions Comparison (Annual): Base year, Attainment EI, Maintenance EI

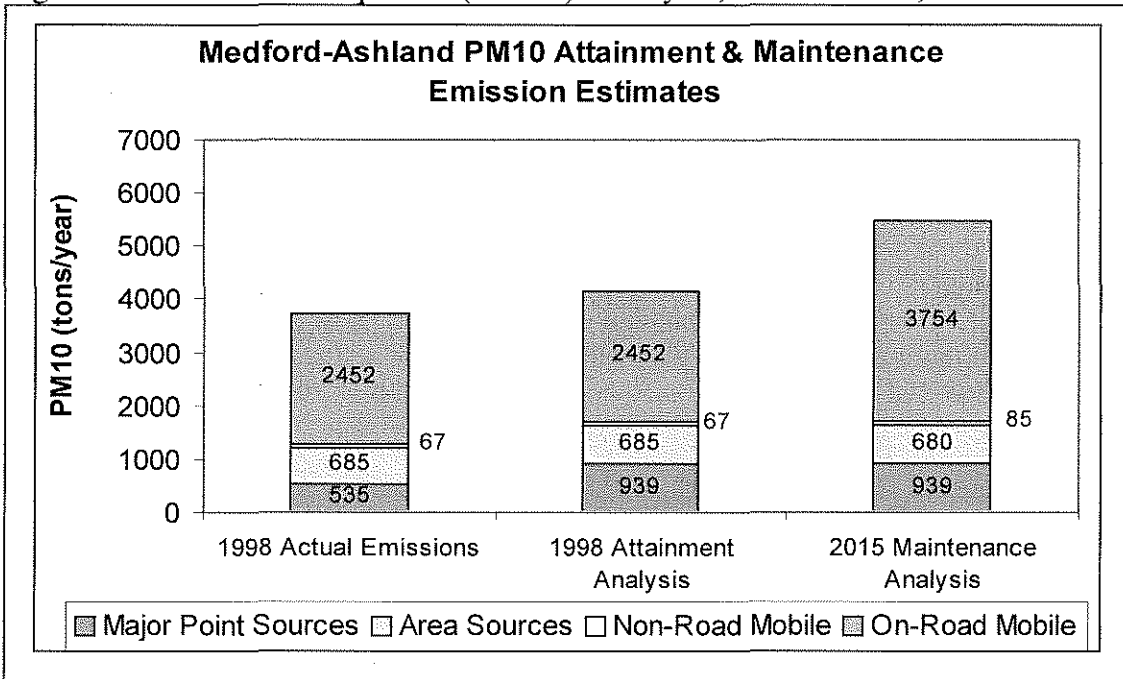
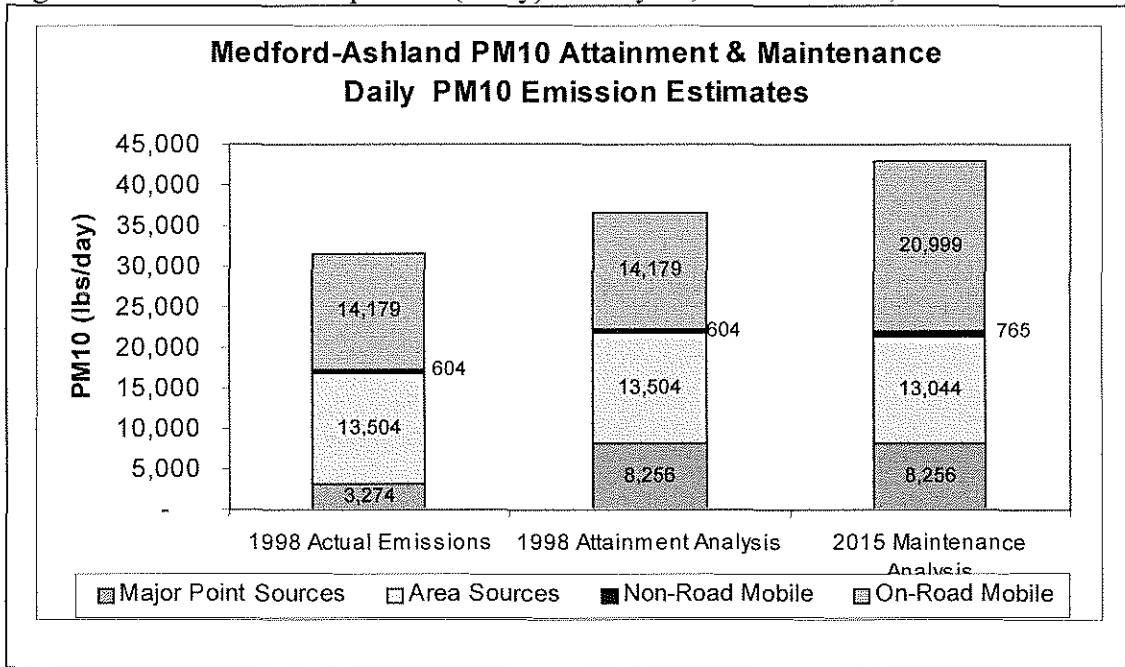


Figure38: Emissions Comparison (Daily): Base-year, Attainment EI, Maintenance EI



4.14.3.5 Geographic Distribution of Emissions (Spatial Allocation)

After emissions are estimated for each source category they are distributed geographically over the AQMA. The dispersion model uses a one-kilometer (1 Km) by one kilometer (1 Km) grid system to apportion emissions within the AQMA. Each grid is approximately 0.62 miles square. Each major industrial facility is assigned geographic coordinates using latitude and longitude information. Mobile source emissions are distributed to each grid based on road network and other information from the travel model. Area and Non-Road emissions are allocated to the grid system based on land use factors such as population, housing, and employment densities, as well as land use patterns (i.e. residential, commercial, and agriculturally zoned lands).

Figures 39 and 40 show an illustration of the spatial allocation of emissions for the 2015 maintenance analysis. The model uses these emission density maps together with meteorology to estimate ambient PM₁₀ concentrations within the AQMA. The modeling analysis is discussed further in Section 4.14.5.0.

Figure 39: Medford-Ashland AQMA Boundary and Modeling Grid Domain

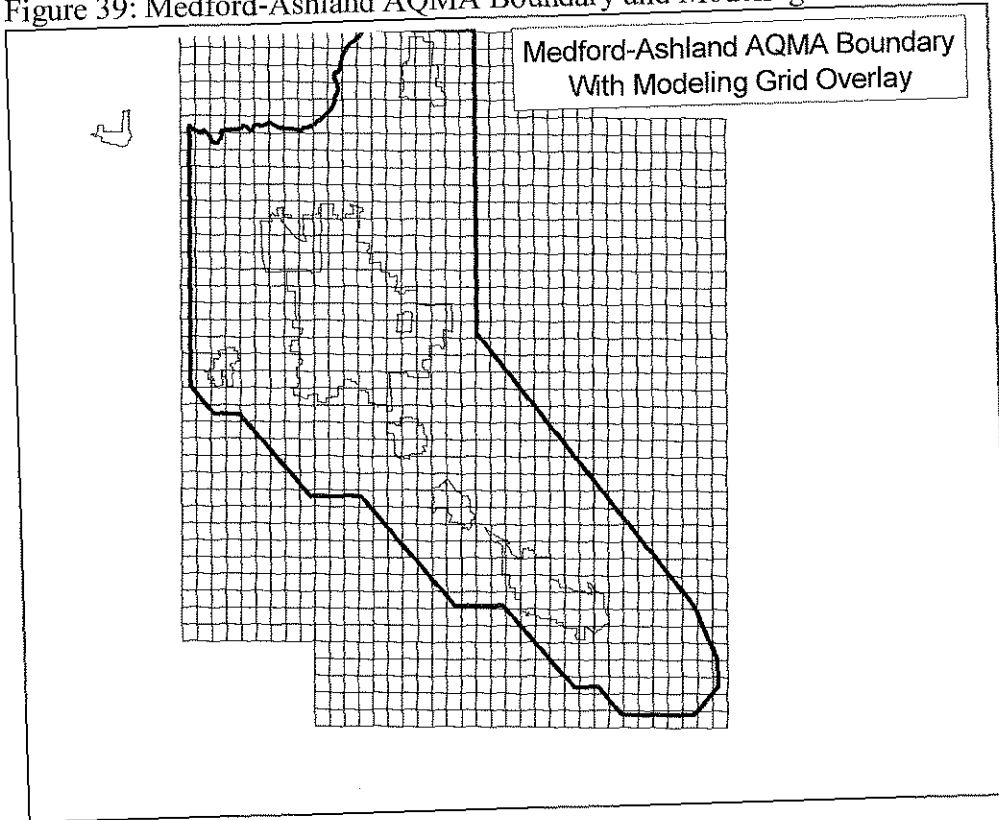
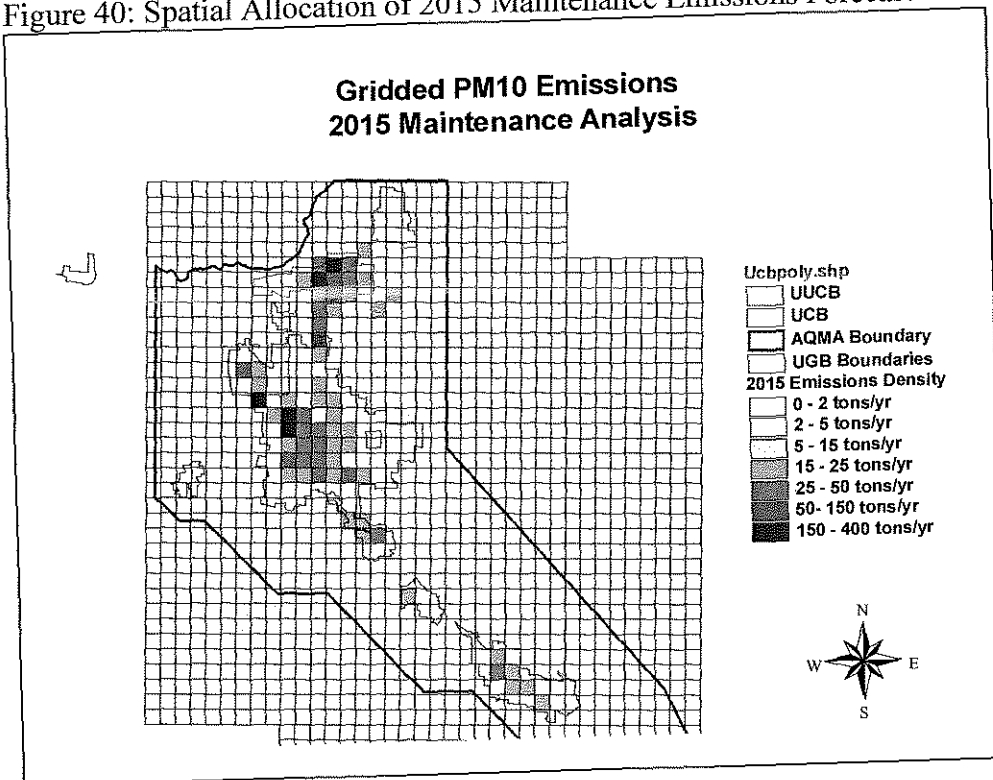
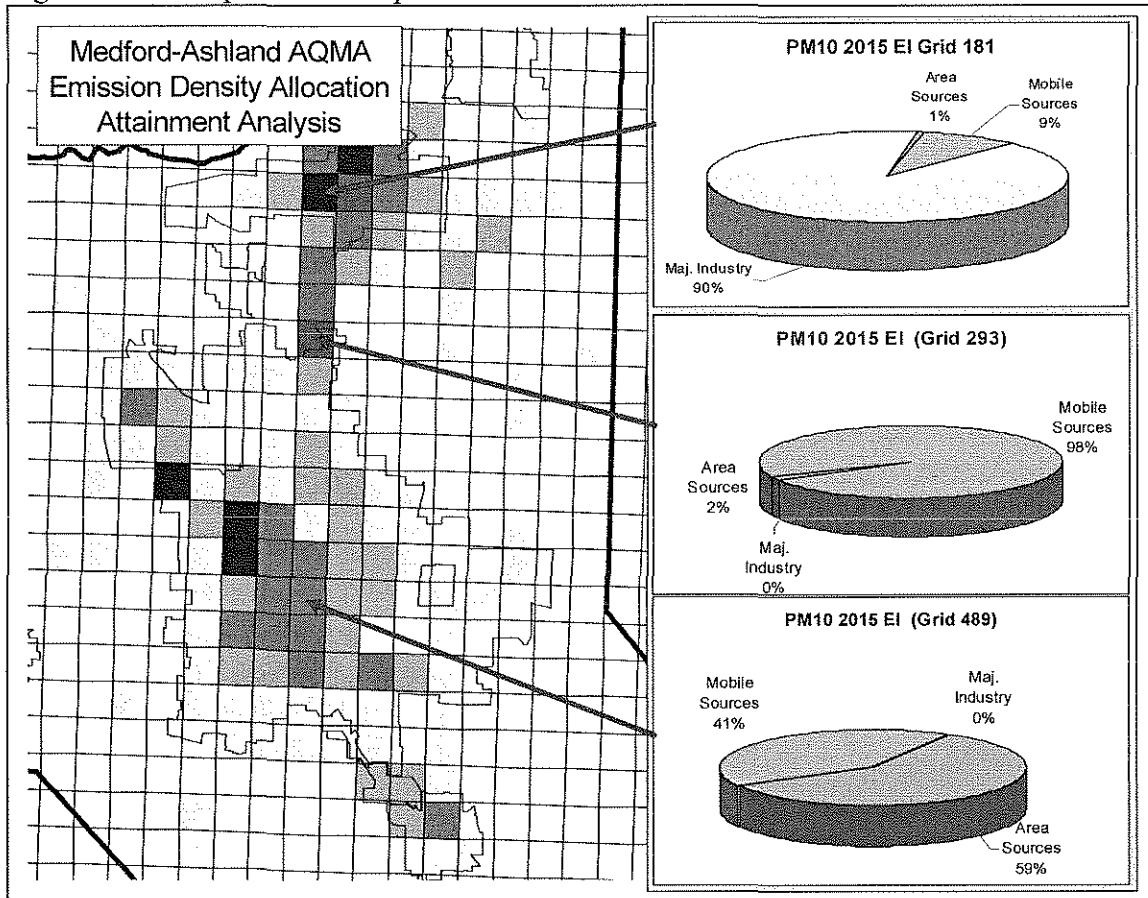


Figure 40: Spatial Allocation of 2015 Maintenance Emissions Forecast



The emission sources that most significantly contribute to ambient PM₁₀ impacts can vary greatly depending upon location in the AQMA. Figure 41 provides an example of three areas within the AQMA where different emission source categories play a key role in PM₁₀ impacts.

Figure 41: Example of Area Specific Emissions Contributions



4.14.3.6: Source Category Emission Summaries

MAJOR INDUSTRY

Within the Medford-Ashland AQMA, major point sources are defined as stationary industrial facilities emitting 5 tons per year or more of PM₁₀. Emission information is compiled from each facility's operating permit issued by the Department. Smaller sources that emit less than 5 tons per year of PM₁₀ are assigned to the "area source" category.

Emissions for major point sources can be considered in one of three ways: (a) actual emissions; (b) permitted emissions that reflect current operating needs (otherwise known as the Plant Site Emission Limit or "PSEL"; or (c) their maximum allowable permitted level. Actual emission levels are typically much lower than permitted limits. A facility can however increase emissions to allowable levels without evaluating the impact of the

increase on air quality. Therefore, EPA requires that PM₁₀ attainment and maintenance plans evaluate major industrial sources at their maximum allowable emission levels. Emissions “growth” for the major point source category reflects these maximum allowable emission levels. A comparison of 1998 actual emissions and maximum allowable emissions levels for each facility was presented previously in Figure 26. Detailed emissions information for each facility can be found in the Emissions Inventory Document (Appendix A2).

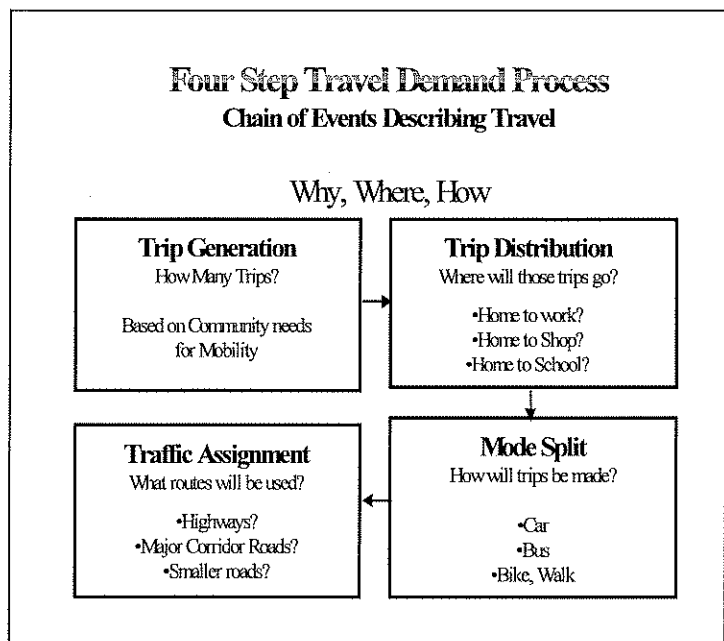
MOBILE SOURCES (CARS & TRUCKS)

Emission estimates for mobile sources (motor vehicles) are based on vehicle miles traveled (VMT) occurring within the AQMA. VMT estimates for both the 1998 and 2015 road network were developed by the Rogue Valley Council of Governments and the Oregon Department of Transportation (ODOT) using the latest local travel demand model. The travel model analysis boundary covers the greater Medford area and several adjacent communities, but not the entire AQMA. RVCOG hopes to expand the travel modeling area in the near future. For AQMA areas outside the travel model boundary, ODOT used highway performance monitoring and other traffic records to estimate and project VMT. The average growth rate for motor vehicle travel in the AQMA is approximately 2.9% per year. Mobile emission estimates reflect both current and expected motor vehicle travel on each link of the AQMA road network. VMT is allocated to the air quality dispersion modeling grid in order to estimate location specific PM₁₀ emissions and ambient impacts from motor vehicles.

Estimating emissions from cars and trucks requires information on local travel patterns and vehicle types comprising the local fleet, as well as the emissions characteristics of each vehicle type. There is limited detailed information available about the motor vehicle fleet in the Medford-Ashland area. The Department’s mobile emission estimates have used as much local data as possible to describe the characteristics of the Medford-Ashland motor vehicle fleet, but it has also been necessary to rely on national averages for some information. The following section provides a brief summary of key factors used to estimate mobile emissions in the AQMA.

Travel Modeling

Traditional travel demand models consist of four main steps: *Trip Generation* (i.e. how many person trips and for what reason), *Trip Distribution* (i.e. where do the trips go), *Mode Choice* (i.e. car, bus, bike), and *Trip Assignment* (i.e. which roads



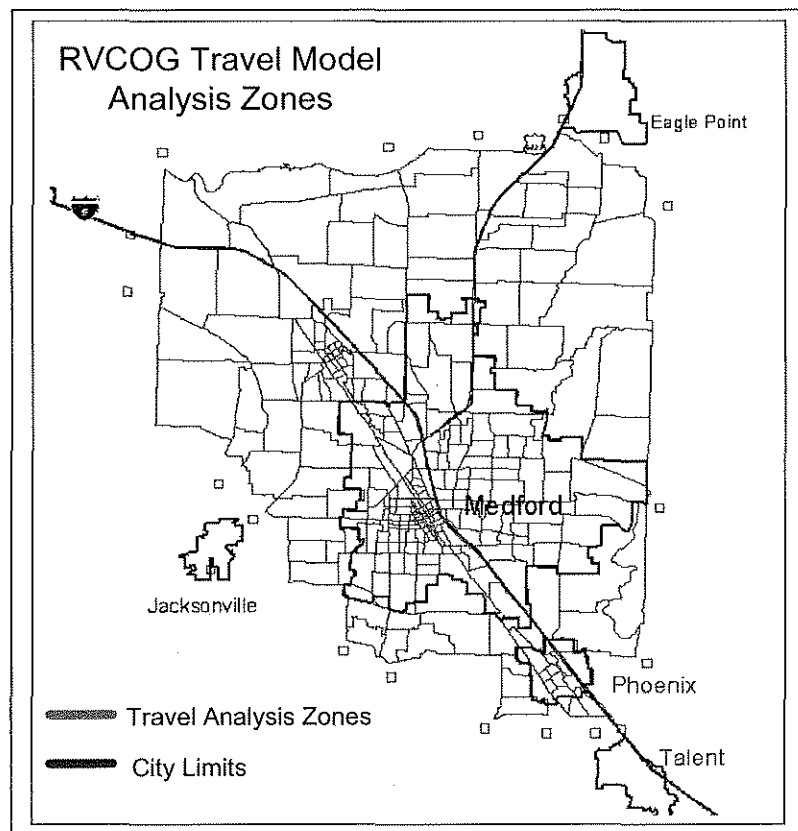
are used). Trip and travel characteristics are developed from household survey and employment information such as income, household size, number of available vehicles, and availability of employment. This trip information is then used to model travel patterns in the community. Travel model results are compared to field measurements (vehicle ground counts) to evaluate whether the model is reasonably reproducing actual travel in the area. Once model performance has been validated, it is used to test future mobility needs reflecting population and employment growth as well as new road or other projects proposed in the Regional Transportation Plan. Ultimately, travel model data is used by DEQ to estimate current and future year motor vehicle emissions.

Travel Demand Model

The Oregon Department of Transportation (ODOT) and the Rogue Valley Council of Governments-RVCOG (the Metropolitan Planning Organization for the Rogue Valley) have developed an improved travel model for use in the greater Medford area. The model has been used to support the Rogue Valley Regional Transportation Plan (RTP). The travel model analysis area encompasses the greater Medford area and several adjacent communities including Central Point and White City. The RVCOG and ODOT have used local Highway Performance Monitoring System (HPMS) data, as well as other local information to estimate motor vehicle travel in the non-MPO area of the AQMA (i.e. areas outside the travel model analysis boundary).

Land use forecasts were prepared for the travel model based on current land use regulations and comprehensive plan updates. Travel forecasts are based on predicted population and employment growth and expected land use changes that influence mobility needs in Rogue Valley communities.

Population, housing and employment densities are allocated to individual transportation analysis zones (TAZs) established within the travel model. TAZ characteristics influence travel demand and motor vehicle use within the zones. DEQ



uses this information to estimate mobile emissions. The same population, housing and employment densities are also used by DEQ to estimate and allocate emissions for the Area and Non-Road Mobile emission source categories.

No travel demand model, no matter how sophisticated, can reproduce motor vehicle travel at all locations and at all times with 100 percent accuracy. Typically, travel demand models will over predict travel in some areas while under predicting travel in others. Validation checks are made at each step in the process of model development. The validation of RVCOG's travel demand model has been reviewed by ODOT's Transportation Planning Analysis Unit (TPAU), the Federal Highway Administration (FHWA), and the Oregon Travel Model Steering Committee. Model performance for each roadway type is within acceptable limits.

Commercial Truck Travel

Currently, it is not possible to develop a specific travel model for local and interstate commercial truck travel in the AQMA. RVCOG and ODOT have made the best effort currently possible to describe commercial vehicle travel in the AQMA. By default, roads with high traffic volumes such as Interstate-5, or major and minor arterial roads will include a proportionally higher share of commercial travel than less traveled roads. The ability to model commercial travel should improve over time as ODOT and RVCOG develop future model upgrades.

Seasonal and Temporal VMT Adjustment

Several adjustments were made to model predicted VMT to estimate annual average and worst-case daily mobile emissions. Annual average emission estimates use VMT information that reflect average daily travel (ADT, Monday-Sunday). Worst-case daily emissions are based on adjusted VMT estimates that reflect somewhat higher traffic volumes during the work week (average weekday travel, Monday-Friday). Average Daily VMT to Weekday VMT adjustments were based on local traffic count information.

There are also seasonal differences in vehicle travel. VMT during peak summer travel months is typically higher than the yearly average, and winter travel is typically lower than average. The travel model produces VMT estimates as an average of yearly travel. This yearly average was used to estimate annual average mobile emissions. For worst-case winter day emission estimates, modeled VMT was adjusted to reflect a slightly lower amount of travel during the winter months (but increased to reflect average weekday commuter travel).

EPA Emission Factor Model

To estimate motor vehicle emissions, VMT data from the travel model must be combined with an estimate of emissions generated by a motor vehicle, typically pounds of emissions per mile driven (i.e. lbs PM₁₀/mile). The Department used EPA's particulate emission factor model (PART5) to develop the emission rates for the Medford-Ashland

motor vehicle fleet. The PART5 model estimates both exhaust (tail pipe) and road dust PM₁₀ emissions.

The AQMA Fleet

Both national default and locally derived data was used in the emission model to describe the characteristics of the AQMA vehicle fleet. Local data includes Department of Motor Vehicle (DMV) registrations for passenger and light duty diesel vehicles, which provides the age distribution of the AQMA passenger vehicle fleet (i.e. percent of fleet that are model years from 1 to 25+ years old). EPA's model also requires the average "mix" of vehicle miles traveled by vehicle type (i.e. how much VMT is attributable to passenger cars, heavy-duty trucks, buses, etc.). There is very little local data regarding the actual AQMA fleet "mix", or for other fleet characteristics such as local sales trends of diesel vehicles.

Traffic counts from permanent and temporary traffic recorders were evaluated to estimate the motor vehicle fleet mix in key areas of the AQMA. Traffic recorder data provides a "snap-shot" of motor vehicle travel at a specific location and time. Based on available traffic count data, custom fleet mixes were constructed for three key transportation areas in the AQMA. These include the core Medford area (which is also taken to generally represent travel in the rest of the AQMA); the White City area (including the Highway 62 corridor); and Interstate 5 (I-5). Traffic count data from 1994-2000 (all seasons) was evaluated and taken to generally represent the 1998 vehicle fleet.

Light and Heavy Duty Vehicles

Traffic data was used to evaluate the split between light-duty and heavy-duty vehicles. It is interesting to note that with the exception of Interstate-5, traffic count data shows that heavy-duty vehicles (mostly diesel trucks) represent a relatively low percentage of the total vehicle fleet. Traffic count data suggests that heavy-duty vehicles comprise just over 2% of the total vehicle fleet in the Core Medford area. In the White City Area (OR62 corridor), heavy-duty vehicles are estimated to comprise just over 4% of the total fleet. The fraction of heavy-duty vehicles on Interstate-5 is much higher, with heavy-duty vehicles making up just under 14% of total vehicles on the Interstate.

It should be noted that while heavy-duty trucks may represent a low *percentage* of the total fleet, the actual number of trucks is not necessarily low. For example, one traffic recorder close to the intersection of Highway 62 and Biddle Rd. (October 20-21, 27-28, 1997)¹ recorded a total of 522 heavy-duty trucks. However, during the same period, 17,331 light duty vehicles (mostly passenger cars) were recorded. The number of heavy-duty trucks is significant, but relative to the high number of light duty vehicles, heavy-duty vehicles represent a low percentage of the total fleet (~3% in this example). This supports the local perception that there are a significant number of heavy-duty trucks operating in the AQMA.

¹ 24-hour volumes 6 a.m. to 6 a.m. documented over two separate days. 24-hour counts require several staffing shifts (standard ODOT practice).

There is no reliable data regarding future growth of local diesel vehicles in the AQMA. National default values in EPA's mobile model suggest that heavy-duty vehicles will comprise a greater percentage of the total fleet in the future. Based on EPA defaults, we have increased the fraction of heavy-duty diesel vehicles in the future at a rate of one percent per year. This increases the contribution from heavy-duty vehicles in 2015.

Table 5: Growth in Heavy-Duty Vehicle Fraction of the Fleet

Key Area	1998 Percent Heavy-Duty Vehicles	2015 Percent Heavy-Duty Vehicles
Core Medford/Rest of AQMA	2.2%	2.6%
White City Area	4.3%	5.4%
Interstate-5	13.6%	15.9%

Paved Road Dust

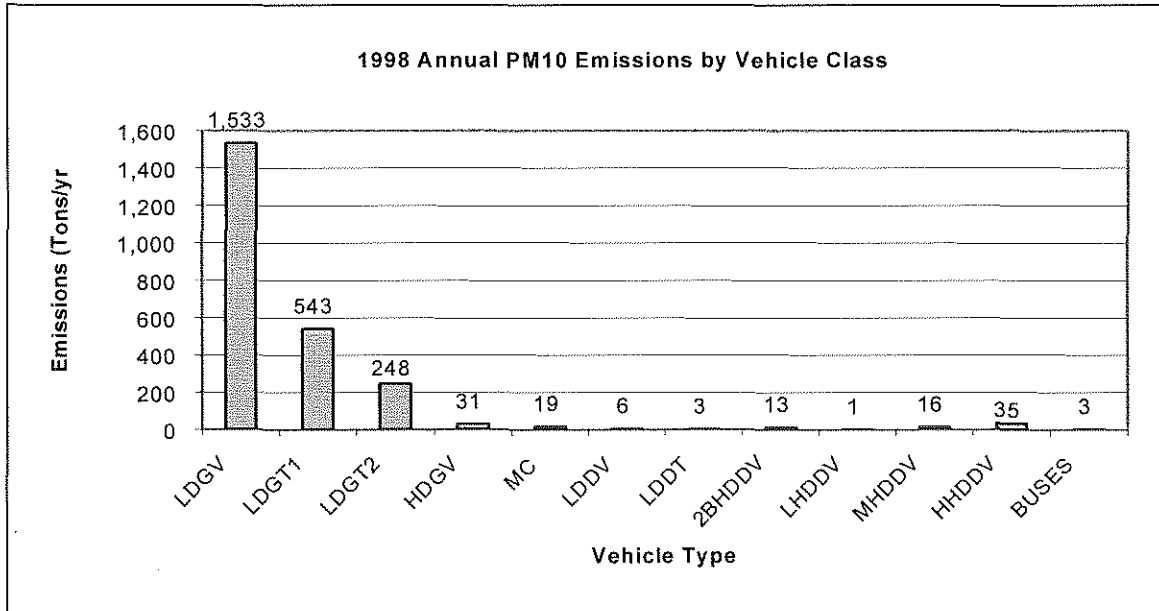
Mobile emissions include both exhaust emissions (tailpipe) and emissions from road dust generated by vehicle travel. Road dust emissions are influenced greatly by the amount of fine silt on the road surface. In May 1997, Midwest Research Institute was contracted to conduct a field study of silt loading on a representative sample of roadways in key areas of the AQMA. Paved road dust emission estimates are based on these local silt-loading factors. It was found that road silt values are generally higher in the White City area than in Medford. Silt loading is generally lower on roadways with high traffic volumes and/or high speeds (for example, Interstate-5 has the lowest silt loading). Using area specific silt loadings, custom paved road dust emission factors were developed for the Medford area (and the rest of the AQMA), the White City area, and I-5. Custom emission factors were also developed for roads with low and high average daily traffic volumes (ADT).

Table 6: Location Specific Road Silt Loadings

Area	Silt Loading (grams/meter ²)
<u>White City</u>	
High ADT Roads	1.4 g/m ²
Low ADT Roads	3.4 g/m ²
Avg. "G" Industrial Area	11.0 g/m ²
<u>Medford/Rest of AQMA</u>	
High ADT Roads	0.19 g/m ²
Low ADT Roads	0.54 g/m ²
Interstate-5	0.015 g/m ²

Using all the factors discussed above, emission estimates are derived for motor vehicle travel within the AQMA. Figure 42 shows an example of the mobile emissions distribution by vehicle type (tailpipe + road dust) in 1998. Additional information on the development of the mobile emissions inventory can be found in the Emissions Inventory Document (Appendix A2).

Figure 42: Distribution of Annual On-road Mobile PM₁₀ Emissions by Vehicle Type, 1998



Vehicle Key		FHA Class	GVW (lbs)	Average
LDGV	Light Duty Gasoline Vehicle		<6,000	3,000
LDGT1	Light Duty Gasoline Truck-1	1	<6,000	3,500
LDGT2	Light Duty Gasoline Truck-2	2A	6,001-8,500	7,250
HDGV	Heavy Duty Gasoline Vehicle	2B-8B	> 8,500	8,500
MC	Motorcycle			500
LDDV	Light Duty Diesel Vehicle	1	<6,000	3,000
LDDT	Light Duty Diesel Truck	2A	6,001-8,500	3,500
2BHDDV	Class 2B Heavy duty diesel vehicle	2B	8,501-10,000	9,250
LHDDV	Light, Heavy duty diesel vehicle	3,4,5	10,001-19,500	14,750
MHDDV	Medium, Heavy duty diesel vehicle	6,7,8A	19,501-33,000	26,251
HHDDV	Heavy, Heavy duty diesel vehicle	8B	33,000+	33,000
BUSES	Buses: Estimates = to LHDDV		10,001-19,500	14,750

STATIONARY AREA SOURCES

Area sources include emissions from activities from residential, commercial, or light industrial activity, such commercial space heating, open burning, and woodstove use. The area source categories also includes stationary point sources emitting less than 5 tons per year for PM₁₀.

Area source emissions are developed using reports of commercial activity as well as population, housing and employment information. Emission factors were taken from various EPA reference documents as well as local studies conducted by DEQ or others. Emissions are assigned geographically to the modeling grid based on land use information,

such as housing and employment densities. The emissions forecast for area sources relies on expected growth in population, employment, and other factors.

Wood burning is an important residential space-heating practice in Oregon, and a significant part of the Area Source category. Woodstove and fireplace emissions are significantly greater than other forms of space-heating, such as fuel oil and natural gas. Historically, residential wood burning has been a key contributor to wintertime exceedances of PM₁₀ standards. While residential wood smoke has significantly declined over the years, woodstove and fireplace use can still contribute to elevated PM₁₀ levels in the winter.

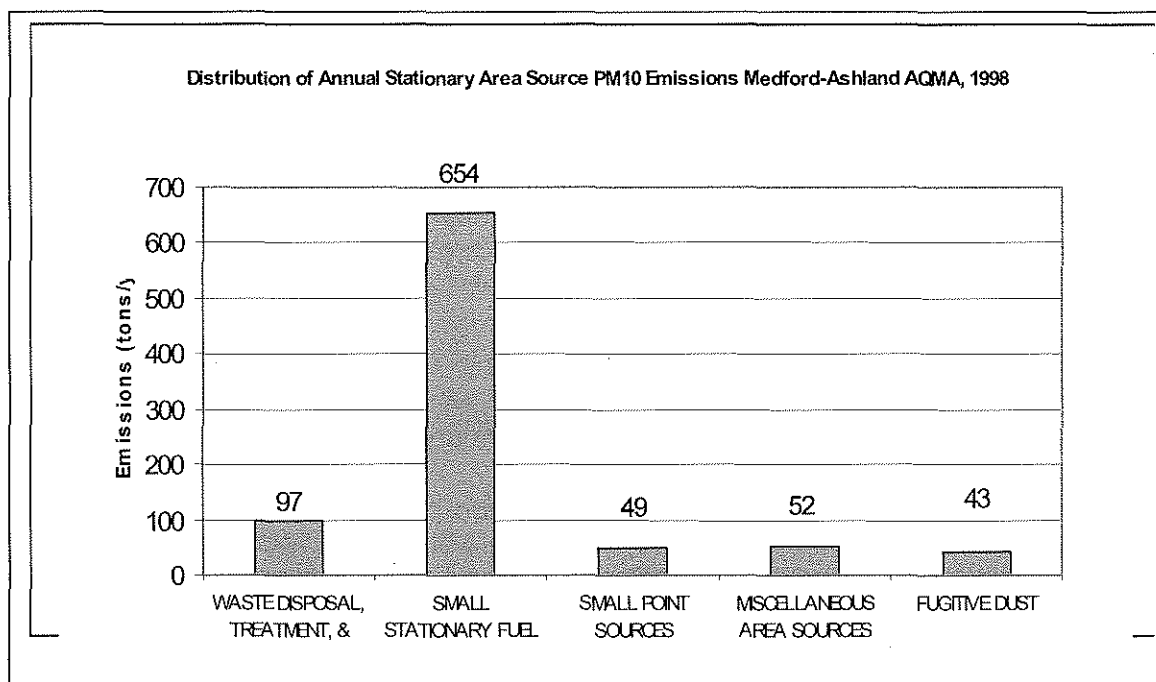
Residential Woodburning: AQMA homes were surveyed just after the 1996/97 woodheating season to develop a residential wood heating profile for the Medford-Ashland area, and to develop trends information for the growth and decline of various woodheating devices. The survey suggests a significant decrease in woodstove use in the AQMA over the past ten years (from an average 60% of AQMA homes burning wood in 1985-86 to an AQMA average of approximately 30% wood burning homes in 1996). Wood use profiles were developed for different areas in the AQMA (the City of Medford for example) using home survey responses by zip code. The survey gathered information on woodheating device type (older noncertified stove, certified catalytic, certified non-catalytic, pellet stove, etc.), as well as important fuel consumption information.

Survey information shows that over time there has been a significant decrease in noncertified woodstoves in favor of certified stoves, pelletstoves and natural gas heating appliances. Heating device trends were evaluated separately for different stove technologies. Woodheating emission trends were estimated from the net affect of growth in cleaner, "certified" woodstoves and a decline in older noncertified stoves. Woodheating trends were estimated separately for older housing stock and new construction. Heating device trends in older homes reflect the ongoing changeover of older stoves to newer woodheating technology or the replacement of wood heat with non-wood alternatives. Survey data suggests a very low rate of woodheating in new construction. Increasing trends in woodheating were estimated using a linear growth approach. Decreasing trends were conservatively estimated using a compound rate of decrease so that the removal of noncertified woodstoves from the AQMA would not be overstated.

Residential space heating emissions were allocated to the modeling grid using household density information provided by RVCOG. As part of the modeling analysis, woodheating emissions were varied by daily temperature and home heat demand. More information on estimating emissions from residential wood combustion can be found in the Emissions Inventory Document (Appendix A2)

Emission estimates (1998) for the major classifications within the Area Source Category are illustrated below in Figure 43.

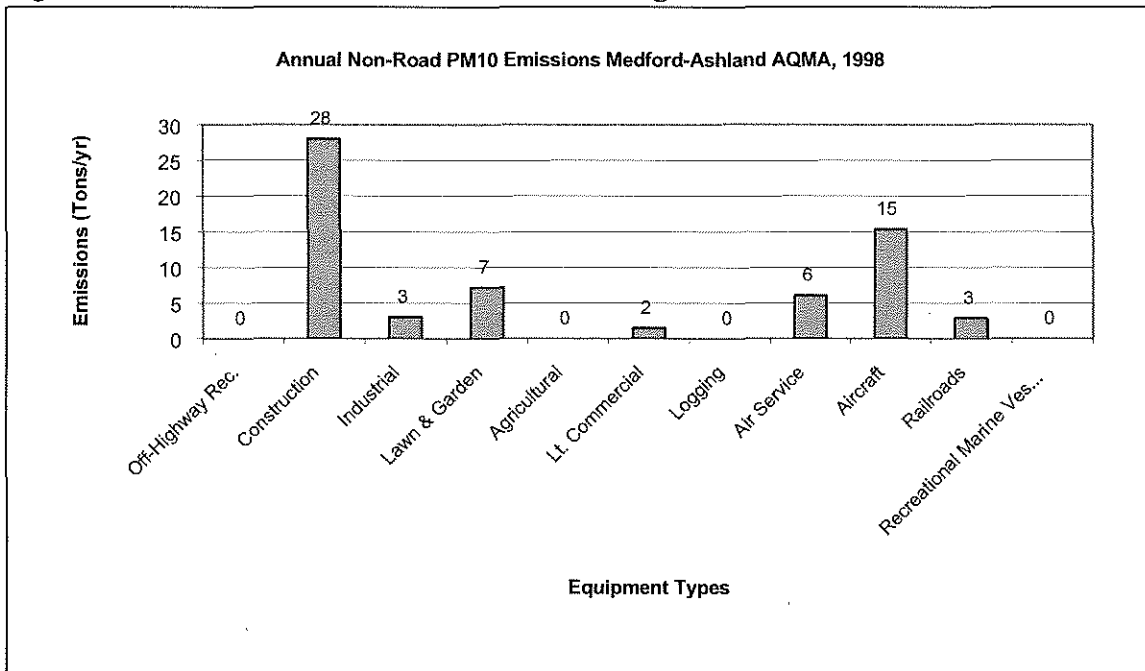
Figure 43: Distribution of Area Sources



NON-ROAD MOBILE SOURCES

The Non-Road Mobile emission source category includes sources such as gasoline and diesel-powered construction vehicles and equipment, aircraft, and railroads. The category is divided into nine sub-categories including: (1) Lawn and Garden Equipment, (2) Airport Services, (3) Recreational Equipment, (4) Light Commercial Equipment, (5) Industrial Equipment, (6) Construction Equipment, (7) Farm Equipment, (8) Agricultural Equipment, and (9) Logging Equipment. Vehicle categories are grouped into three equipment types: two-cycle gasoline engines, four-cycle gasoline engines, and diesel engines. Figure 44 shows emission estimates for the Non-Road category for 1998. More information about Non-Road Mobile emissions can be found in the Emission Inventory Document (Appendix A2).

Figure 44: Distribution of Non-Road Sources Categories



4.14.4.0: Transportation Conformity

Transportation conformity is the regulatory program that links transportation and air quality planning processes together so that emissions from motor vehicles (both now and in the future) do not jeopardize air quality standards. The transportation conformity program will continue to apply to the Medford-Ashland AQMA after it is redesignated to attainment and becomes a state PM₁₀ maintenance area. Under conformity, emissions resulting from a transportation plan² can not exceed the allowable emissions level established for transportation in the air quality plan. The conformity rules also assure that transportation related air quality strategies are funded and implemented during the transportation planning process.

When an attainment and maintenance plan is developed for an area, conformity rules require that a “budget” be established for motor vehicle emissions. Emissions from future transportation plans, programs, and projects must stay within the allowed budget. A transportation emissions budget is established as part of a technical analysis demonstrating attainment and maintenance with air quality standards. In other words, a budget for motor vehicle emissions growth can not be established without also considering emissions growth from all other sources, and a demonstration that total future emissions growth will not lead to a violation of standards.

² Transportation plans describe current and future mobility needs for a community and include projects and programs to meet those needs. Mobile source emissions are directly related to the amount of motor vehicle travel that will result from the road network and programs described in the transportation plan.

Failure to show conformity can seriously delay or jeopardize funding for important transportation projects. The emissions budget established through this PM₁₀ attainment and maintenance plan will govern the conformity analysis of each update to the Rogue Valley Regional Transportation Plan for the next eight to ten years.

Until a budget is formally established, conformity determinations must rely on a comparison of the build (or action) scenario in the regional transportation plan to the no-build scenario. The “build” scenario reflects the anticipated future roadway network and project list for which funding has been secured. The “no-build” scenario reflects emissions from the current road network. In order to demonstrate conformity the build scenario must result in fewer emissions than the no-build scenario. The PM₁₀ emissions budget for the AQMA will be formally established and take effect when EPA makes an initial finding that the plan submittal is adequate, and publishes that determination in the federal register. All conformity determinations thereafter must meet the emissions budget test. EPA’s adequacy determination of the motor vehicle emissions budget would typically occur separately from plan approval.

Establishing the Budget

The transportation emissions budget typically reflects the motor vehicle emissions forecast used in the air quality plan. Since the emissions forecast is derived from estimates of future travel needs, the budget should be adequate to accommodate future conformity determinations. However, unanticipated growth or other factors may increase future mobility needs (and motor vehicle emissions) above levels anticipated in the air quality plan. This could result in a failure to show conformity (i.e. conformity lapse).

In addition to planning for unforeseen emission increases, there is a specific problem known as “planning cycle mismatch” that must be addressed to avoid conformity difficulties in the near future. The timing cycles for updating transportation plans (every 3-5 years) and air quality plans (every 8-10 years) are not in sync. Transportation plans are continually extending their forecasting horizon beyond the last year (and emission budget) established in the air quality plan. Planning cycle mismatch is a common conformity problem nationally.

EPA approval of the PM₁₀ attainment and maintenance plan will trigger a conformity analysis for the Rogue Valley Regional Transportation Plan (RTP). The Rogue Valley Council of Governments (RVCOG) has recently updated the RTP, projecting regional mobility needs out to the year 2023. The PM₁₀ plan establishes the last year of the emissions budget in 2015. To show conformity, emissions from the 2023 travel network (new RTP horizon year), as well as subsequent horizon year updates, will have to meet the 2015 budget.

There is an additional issue to consider. RVCOG will soon be expanding their metropolitan planning organization (MPO) boundary, adding several new AQMA communities to the local transportation planning area. The area covered by RVCOG’s

travel demand model will also be expanded to the new MPO areas. This means that future VMT and mobile emissions estimates for those areas currently outside the MPO boundary could be somewhat different than the estimates currently used in the PM₁₀ maintenance plan. This creates uncertainty about the sufficiency the emissions budget for future conformity determinations.

At the request of RVCOG, an emissions buffer of approximately 1,700 lbs/day (~300 tons/year equivalent) has been added to the mobile source emissions budget to help offset the planning cycle mismatch between the 2015 and 2023 planning horizon years, and the uncertainty of adding new areas (Ashland, Jacksonville, Eagle Point) to the travel demand modeling area. Mobile emissions with the additional safety buffer were used in the maintenance modeling analysis. The analysis shows that the conformity buffer can easily be accommodated without jeopardizing compliance with PM₁₀ standards.

The emissions inventory includes emission estimates for both annual and daily motor vehicle emissions. The Department estimates that annual emissions are the more constraining (more protective of air quality), and has established the 2015 motor vehicle emissions budget in terms of annual average emissions (tons/year). The Department expects VMT growth to be generally linear from 1998 to 2015 and has therefore not established interim year budgets between 1998 and 2015. Table 7 shows the PM₁₀ emission budget established for the AQMA.

Table 7: Motor Vehicle Emissions Budget (PM₁₀) Through 2015
Annual PM₁₀ (tons/year)

Year	2015
Motor Vehicle Emissions Budget*	3,754*

* Includes 307 tpy safety buffer

Emission factors, road dust silt loadings, and other relevant information for estimating mobile PM₁₀ emissions can be found in the Emission Inventory Document (Appendix A2). Table 8 below lists the emission factors (combined road dust and exhaust) used for the 1998 and 2015 mobile emission estimates.

Table 8: Motor Vehicle Emission Factors (1998 and 2015)

Emission Factor Application	1998 Emission Factors	2015 Emission Factors
Interstate -5	0.29 grams/mile	0.33 grams/mile
Medford Area High ADT Roads	0.83 grams/mile	0.87 grams/mile
Medford Area Low ADT Roads	1.65 grams/mile	1.72 grams/mile
White City High ADT Roads	3.43 grams/mile	3.70 grams/mile
White City Low ADT Roads	6.25 grams/mile	6.74 grams/mile
White City Industrial Roads	13.41 grams/mile	14.46 grams/mile
Unpaved Roads	1.15 lbs/mile	1.15 lbs/mile

Table 9 shows the estimated annual VMT equivalent to the emissions budget.

Table 9: Estimated Annual Motor Vehicle Travel in 2015 (Miles/Year)

Year	2015
Annual Motor Vehicle Miles Traveled	1,599,355,788 [†]

[†] Includes additional VMT to account for 1,799 lbs/day safety buffer.

Transportation Control Measures (TCM's)

PM₁₀ emission reduction strategies for the AQMA include the street cleaning programs for the City of Medford, White City, and the connecting transportation corridor (Highway 62). Jackson County recently used funding from the Congestion Mitigation & Air Quality (CMAQ) program to purchase a high efficiency street cleaner for use in the Medford-White City area. This street cleaning program is considered by the Department to be a Transportation Control Measure (TCM) for reducing particulate pollution. At a minimum, the cleaning program must continue to use a high efficiency, vacuum street sweeper(s) (or equivalent), provide geographic coverage that includes the cities of Medford, White City, and significant intervening travel corridors, and provide cleaning frequency no less than twice per month.

EPA criteria for Motor Vehicle Emission Budget Adequacy

The motor vehicle emissions budget contained in this plan satisfies EPA adequacy criteria established under 40 CFR 93.118(e)(4). Specifically:

EPA Criteria	Response
40 CFR 93.118 (e)(4)(i)	The plan will be submitted to EPA by DEQ Director Stephanie Hallock as the Governor's designee. Public hearings were held on December 16, 2003 and January 21, 2004.
40 CFR 93.118(e)(4)(ii)	The Medford-Ashland Air Quality Advisory Committee, which included representation from local, state, and federal transportation officials, advised the Department on transportation issues in the plan including the motor vehicle emissions budget. The draft PM ₁₀ plan was reviewed by the Federal Highways Administration and Environmental Protection Agency. Both FHWA and EPA provided comments, which have been responded to by the Department.
40 CFR 93.118(e)(4)(iii)	The motor vehicle emissions budget is summarized in the maintenance plan document and plan appendix.
40 CFR 93.118(e)(4)(iv)	The motor vehicle emissions budget was included in the emission estimates used to demonstrate continued compliance with standards.
40 CFR 93.118(e)(4)(v)	The emissions budget is directly related to the emissions inventory and reflects strategies relied on in the plan.
40 CFR 93.118(e)(4)(vi)	The initial 1991 PM ₁₀ attainment plan for the AQMA was not formally approved by EPA. This 2004 PM ₁₀ attainment and maintenance plan establishes the first formal PM ₁₀ emissions budget for the AQMA.

AIR QUALITY DISPERSION MODELING

4.14.5.0: Background

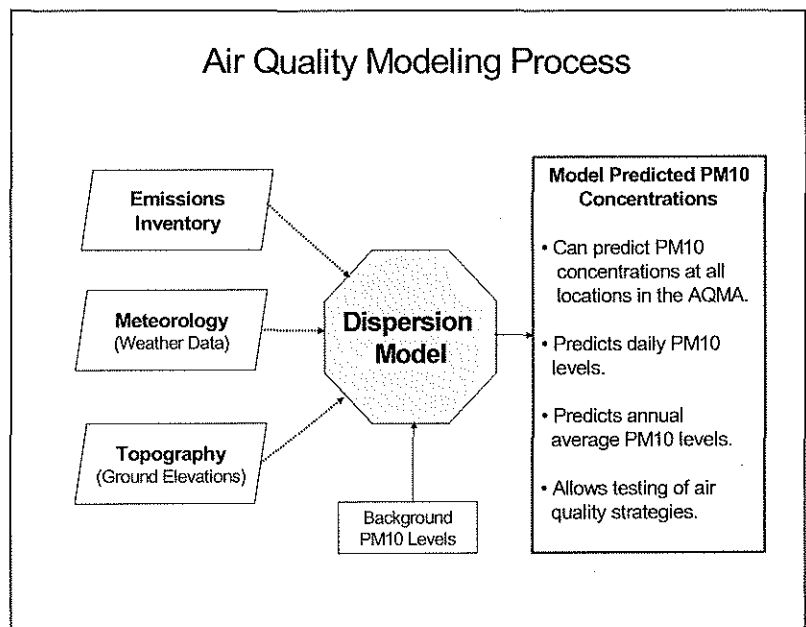
A *dispersion model* is a computer simulation that uses mathematical equations to predict air pollution concentrations based on *weather, topography, and emissions data*. In 2000, the Department and Medford-Ashland Advisory Committee agreed that new dispersion modeling technology would be developed for use in the PM₁₀ attainment and maintenance plan. The Department evaluated several of the latest air dispersion models, looking for a modeling system that would: 1) better represent air movement within the Rogue Valley and reflect the effect of air stagnation conditions on particulate concentrations; and 2) better mimic the dispersion and deposition of road dust.

The Department selected the CalPuff dispersion model as the best tool for predicting PM₁₀ concentrations in the AQMA. The modeling system also includes the CalMet wind field model to provide meteorological information for the modeling analysis. The adjacent Figure illustrates the three main information sources used by the model to estimate PM₁₀ concentrations: 1) emissions information (gridded EI for area, mobile, non-road, and major industry), 2) weather data (wind speed, temperature inversion characteristics), and topographic information (land elevations and local terrain).

Model Receptor Network

The CalPuff model can estimate ambient PM₁₀ concentrations at any location in the AQMA. The modeling analysis begins by establishing a network of points throughout the AQMA (called receptors). The model then uses emissions and weather information to estimate ambient PM₁₀ concentrations at each receptor location. Model receptors are typically placed near ground level to reflect the public's exposure to ambient PM₁₀ concentrations.

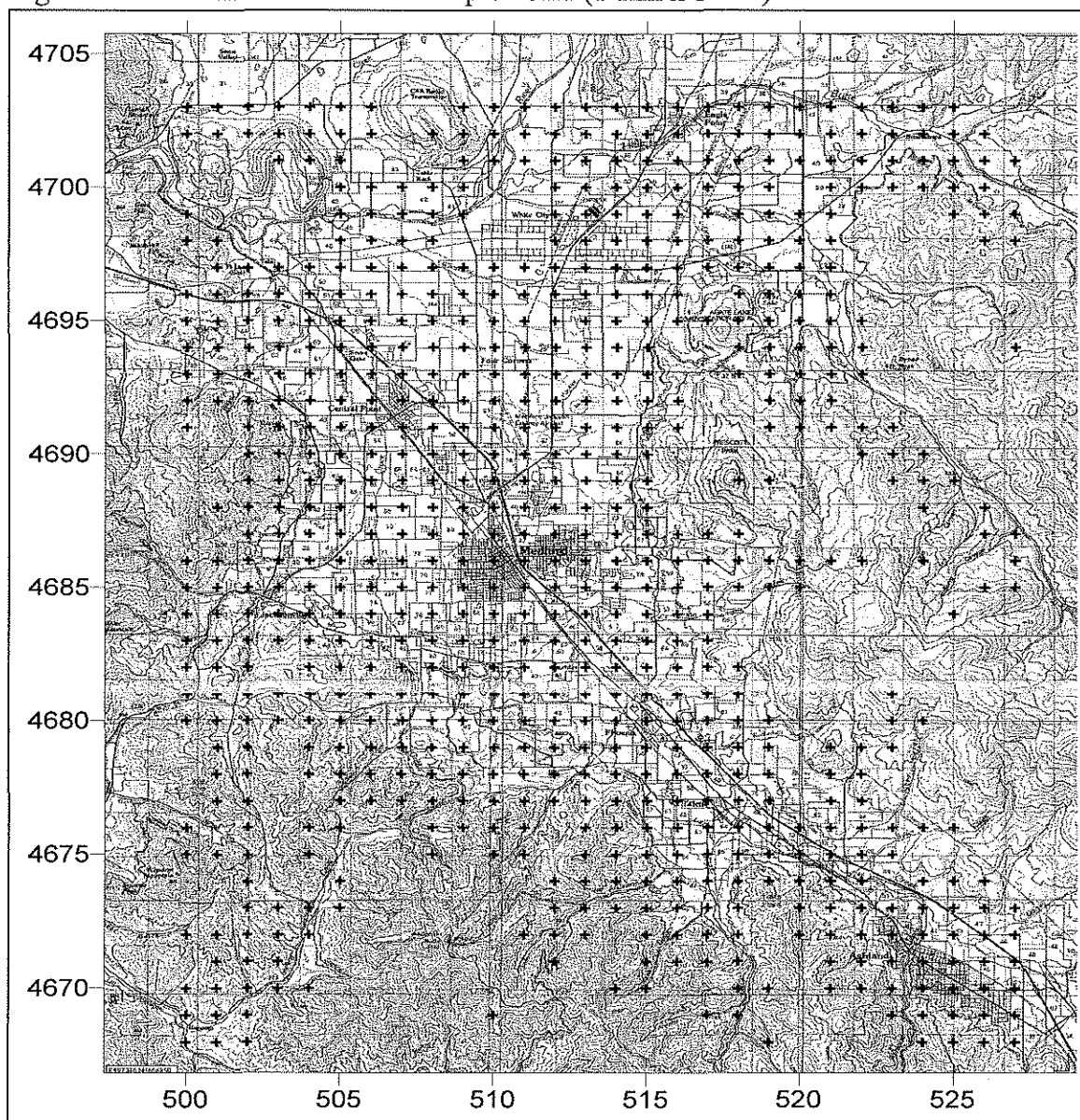
The general modeling receptor network for the AQMA includes over 700 receptor locations, spaced 1-kilometer (0.62 miles) apart. It also includes a more closely spaced network of over 500 additional receptors in key areas of concern (Medford and White City). This higher resolution analysis is required under EPA modeling guidelines. The entire modeling receptor network estimates PM₁₀ concentrations at over 1,200 locations throughout the AQMA.



Figures 45 and 46 show the receptor network used in the modeling analysis. Both the meteorological and dispersion modeling domains¹ are larger than the AQMA to account for the movement of air pollution in and out of the Valley. The meteorological domain covers an area of 100 x 110 km at a 1-km x 1-km mesh size. The meteorological domain extends from just west of Grants Pass to approximately 12 km east of Mt. McLoughlin, and from Crater Lake to about 10 kilometers into California.

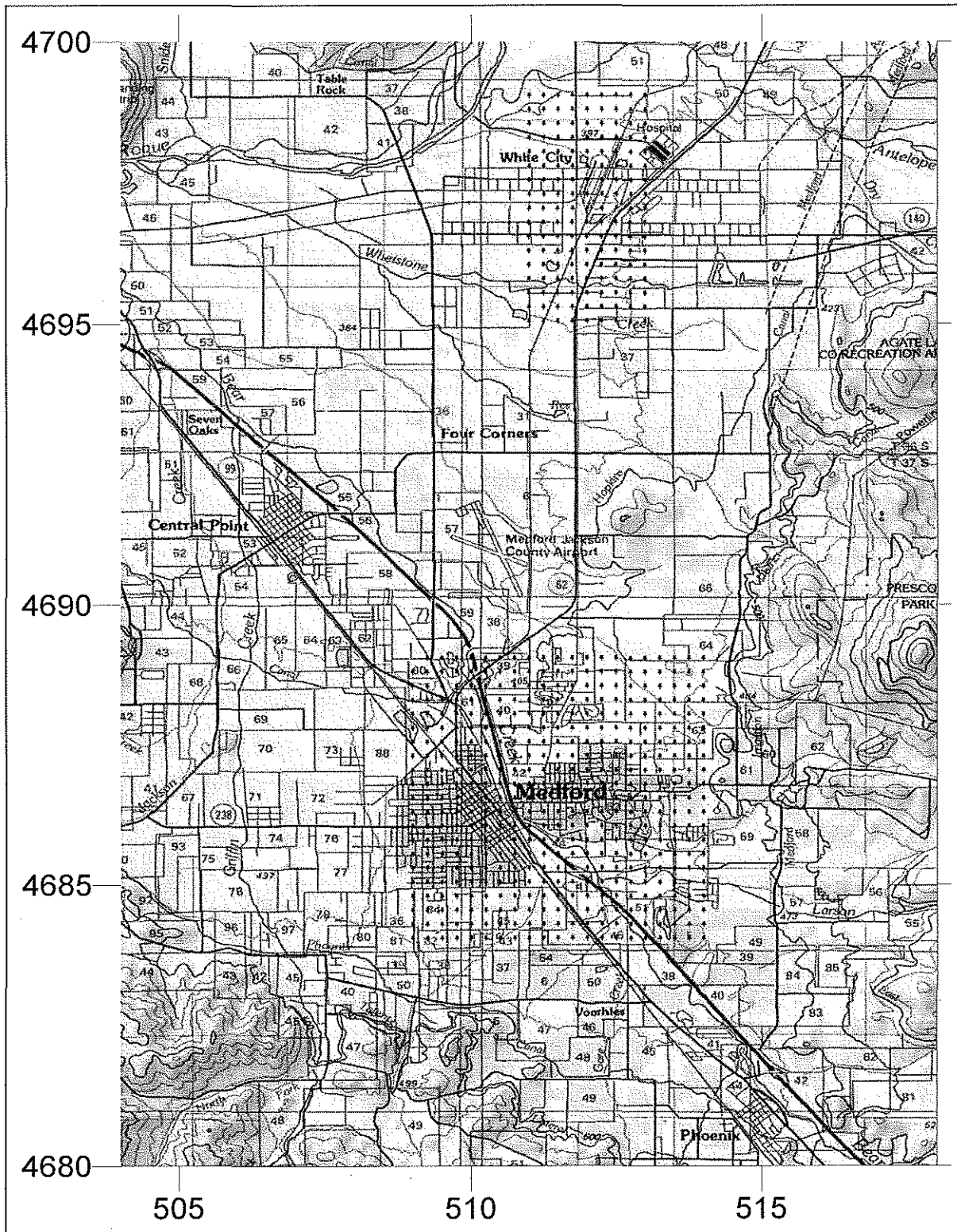
The model accounts for air movement vertically as well as horizontally. There are nine vertical levels used in the model to simulate three-dimensional air movement in the AQMA.

Figure 45: General-Scale Model Receptor Grid (1-Km x 1-Km)



¹ The model “domain” is the geographic area covered by the modeling analysis.

Figure 46: Refined Scale Model Receptor Grid (spaced every 250 meters)



4.14.5.1: Model Performance Testing

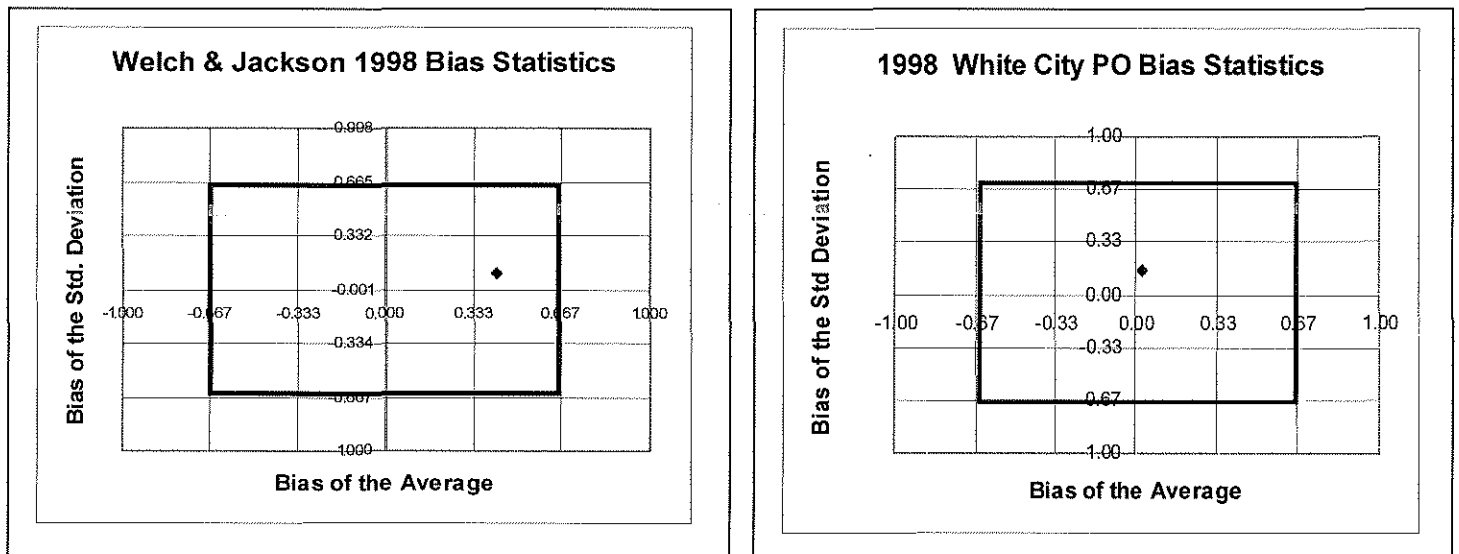
Model performance testing involves comparing model predicted PM_{10} concentrations to actual measured PM_{10} values, to see how well the model can reproduce measured PM_{10} . The emissions inventory for 1998 (actual emission levels) and measured 1998 meteorology was used in the model to predict ambient PM_{10} concentrations that would occur at the Welch & Jackson and White City PM_{10} monitoring locations. Model predicted values were compared to actual measured PM_{10} levels at the Welch & Jackson and White City monitoring sites. A total of 181 daily PM_{10} measurements were available at each of the monitoring locations during 1998. This includes every-day sampling during the periods of January 1, 1998 - March 31, 1998 and November 15, 1998 - December 31, 1998. This is a far more complete data set than was available for previous model evaluation studies for the AQMA.

No model functions with 100% accuracy, however the performance of the CalPuff modeling system is well within EPA acceptability specifications. Figure 47 shows a statistical evaluation of the model's performance. The highlighted "target box" represents the statistical bounds of acceptable model performance. The closer the performance measures are to the center of the target (bias 0,0) the better the model performance. Figure 47 shows that the Calpuff predictions are well within EPA's criteria for acceptable performance at both monitoring locations. These statistics are based on the highest 25 predicted and highest 25 measured 24-hour PM_{10} concentrations.

Figure 47: Model Performance Statistics

(a) Welch & Jackson

(b) White City



After reviewing the results of the model performance analysis, the Advisory Committee approved the use of the CalPuff modeling system as the tool for developing the Medford-Ashland PM_{10} attainment and maintenance plan.

4.14.5.2: Worst-Case Meteorology in the AQMA

One important aspect of the attainment and maintenance analysis is to evaluate the PM₁₀ impacts that could occur under the air stagnation conditions that routinely occur in the Rogue Valley. Previous modeling efforts in the early 1990's used meteorology from December 1985 to estimate worst-case PM₁₀ concentrations. At that time, December 1985 meteorology reflected the best data record available of surface wind measurements for a prolonged and severe air stagnation event. The data record was however, very limited.

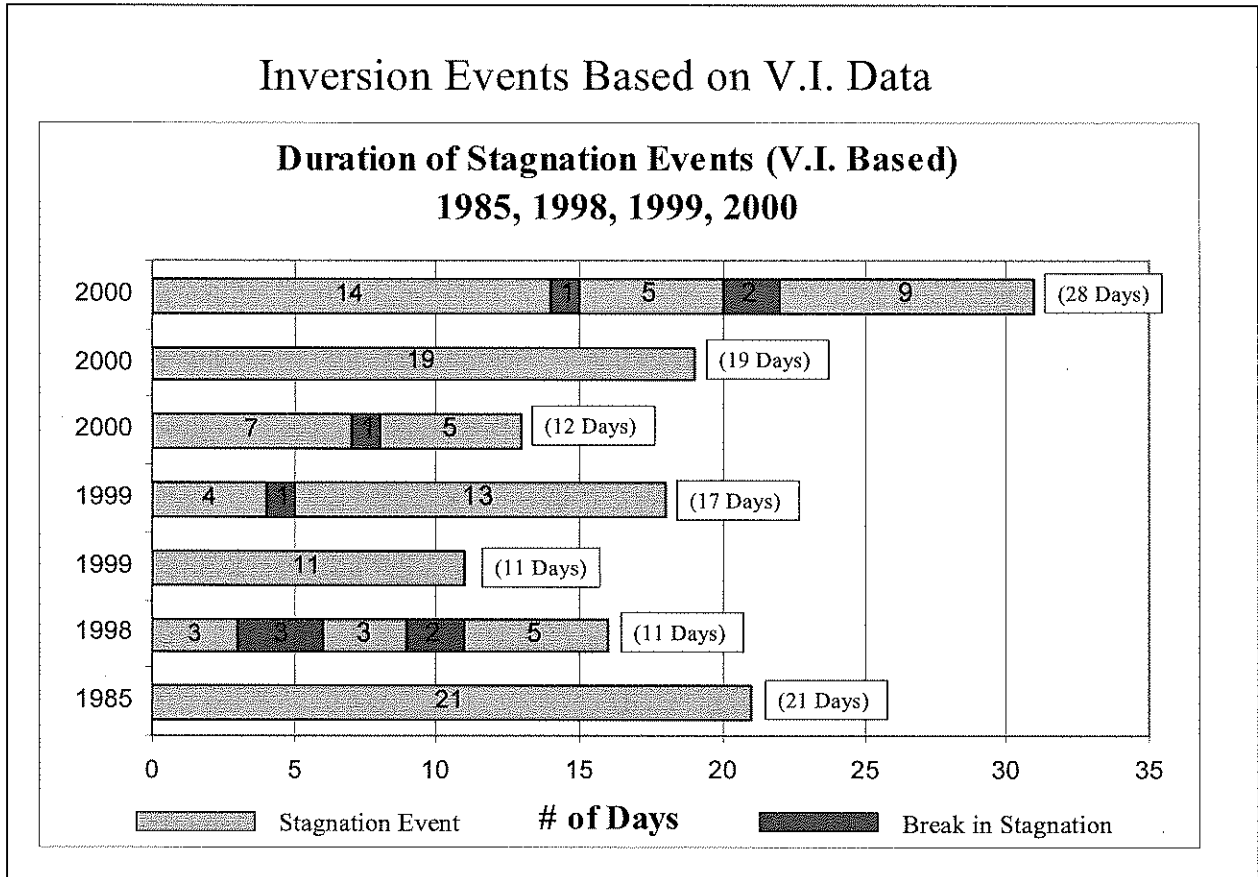
In 2001, the Department evaluated more recent meteorology, and selected calendar year 1998, and the winters of 1999 and 2000 to use in the attainment and maintenance analysis. The newer meteorology included several prolonged air stagnation periods. The newer meteorology has other benefits as well:

- The meteorological data record is much more complete for the 1998-2000 period than it is for December 1985.
- Meteorology from 1998-2000 can be used in conjunction with more current background PM₁₀ data from the Dodge Rd. site, and reflects more contemporary regional PM₁₀ influences on the AQMA. The Dodge Rd. PM₁₀ data record is much more complete for the 1998-2000 period than it is for December 1985.
- Worst-case stagnation meteorology from 1998, 1999, and 2000 reflects a consecutive three-year period, and allows a better comparison with the daily PM₁₀ standard than does the December 1985 period.
- The severity of the 1985 and (1998-2000) stagnation events are comparable.

There are several ways to compare the stagnation potential for the 1985 and (1998-2000) periods, including wind speeds, thermal inversion characteristics, duration of consecutive stagnation events, and precipitation (pollution washout effects). The Department compared all these parameters and found that while not identical, the stagnation intensity for the 1985 and (1998-2000) periods were comparable.

Figure 48. shows the duration of stagnation events for the time periods evaluated, using Ventilation Index as a basis for comparison. The Ventilation Index combines wind speed and inversion strength data. The lower the index, the more severe the stagnation event. Ventilation Index values below 200 reflect an air stagnation event.

Figure 48: Stagnation Events 1985, 1998, 1999, 2000

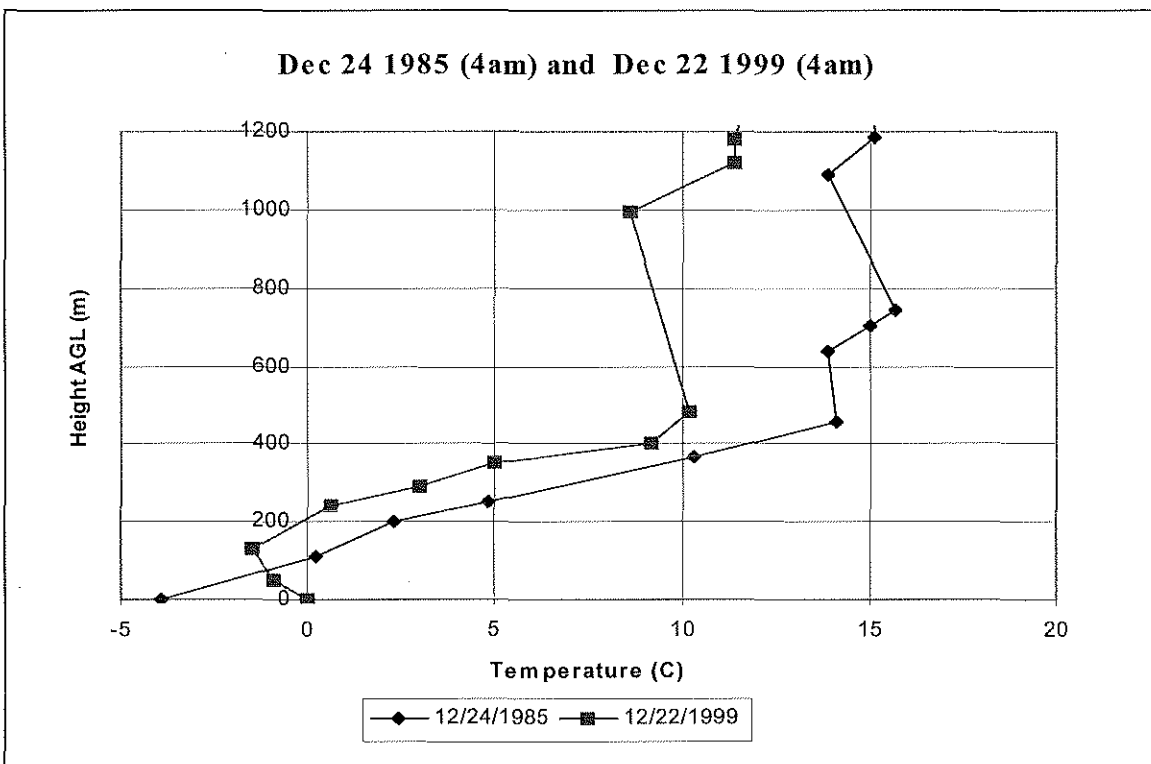


The frequency and duration of stagnation events in 1998-2000 are similar in many respects to those of 1985, and provide the potential for high PM₁₀ concentrations to occur as air pollution levels build-up over several days. Often, PM₁₀ concentrations will reach near peak levels within the first 3-4 days of a prolonged stagnation event.

Temperature inversions are also important considerations in air pollution build-up. In a normal atmosphere, temperatures should decrease with height above the ground. However, when there is an inversion, temperatures will increase rather than decrease with height. This reversal of the normal temperature profile restricts the upward movement of air, decreases ventilation, and can trap air pollution near the ground.

Figure 49 presents an example where two inversion events from 1985 and 2000 are compared. The temperature soundings show the change in air temperature as elevation above the ground increases. An inversion occurs when temperatures increase with height. While these inversion events are not identical, they both have comparable intensities and potential for the build-up of air pollution. The Department evaluated many such events in considering the use of 1998-2000 meteorology.

Figure 49: Temperature Inversion Profile Comparison.



After careful review, the Department concluded that more contemporary meteorology (1998-2000) offered comparable stagnation conditions to those of 1985, and would therefore provide an adequate worst-case test for the attainment and maintenance analysis. More recent meteorology would also reflect a more complete data record of weather information, and allow the use of up-to-date background data from the Dodge Road PM₁₀ monitoring site. In 2001, the Air Quality Committee approved the use of 1998-2000 meteorology in the PM₁₀ attainment and maintenance analysis.

AIR QUALITY MODELING ANALYSAIS ATTAINMENT AND MAINTENANCNE DEMONSTRATION

4.14.6.0: Background

The Department's dispersion modeling analysis evaluated PM₁₀ concentrations throughout the Medford-Ashland AQMA, both for the 1998 attainment analysis year and the maintenance forecast year of 2015. The analysis must evaluate compliance for both the daily (24-hr average) PM₁₀ standard of 150 *micrograms PM₁₀ per cubic meter* (ug/m³), and the annual average PM₁₀ standard of 50 ug/m³. The analysis must show compliance with both standards at all locations throughout the AQMA. The modeling analysis evaluates two scenarios:

Attainment Analysis ("Current" Worst-Case Potential): The Attainment Analysis must evaluate the current potential for PM₁₀ impacts under "worst-case" conditions. The Attainment Analysis uses the 1998 emissions inventory, which is our most accurate for the AQMA. Modeled emissions include legally allowable emissions from major industry (not actual emissions in 1998), and 1998, 1999, 2000 local meteorology (including stagnation events). This worst-case planning approach is an EPA requirement.

Maintenance Analysis (Future Worst-Case Potential): The Maintenance Analysis is based on our emissions forecast to the year 2015. The forecast reflects anticipated emissions growth in the AQMA from all source types (cars, woodstoves, commercial activity, etc.). Major industrial sources are again modeled at their legally allowable levels. The 2015 analysis also uses meteorology from 1998, 1999, and 2000 (including air stagnation events).

Determining Compliance with PM₁₀ Standards

There is an important difference between an exceedance of the daily (24-hr) standard and a violation. The form of the daily PM₁₀ standard (i.e. the method used to determine legal compliance), allows an average of one exceedance of the standard per year at any given location (averaged over a consecutive three-year period). The daily PM₁₀ standard is 150 ug/m³. Three exceedances of the standard at one location in a three year period would not be a violation. Four or more exceedances of the standard at the same location in a three year period would be a violation of the standard. It is therefore the 4th highest PM₁₀ value at any given location that is used to determine compliance with the standard.

For the annual average PM₁₀ standard, model predicted annual average PM₁₀ values must be below the annual avg. PM₁₀ standard of 50 ug/m³ in order to show compliance.

The Department's compliance analysis shows that the AQMA will continue to be in compliance with both the daily and annual average PM₁₀ standards through at least the year 2015.

4.14.6.1 Attainment Analysis (1998 Worst-Case Conditions)

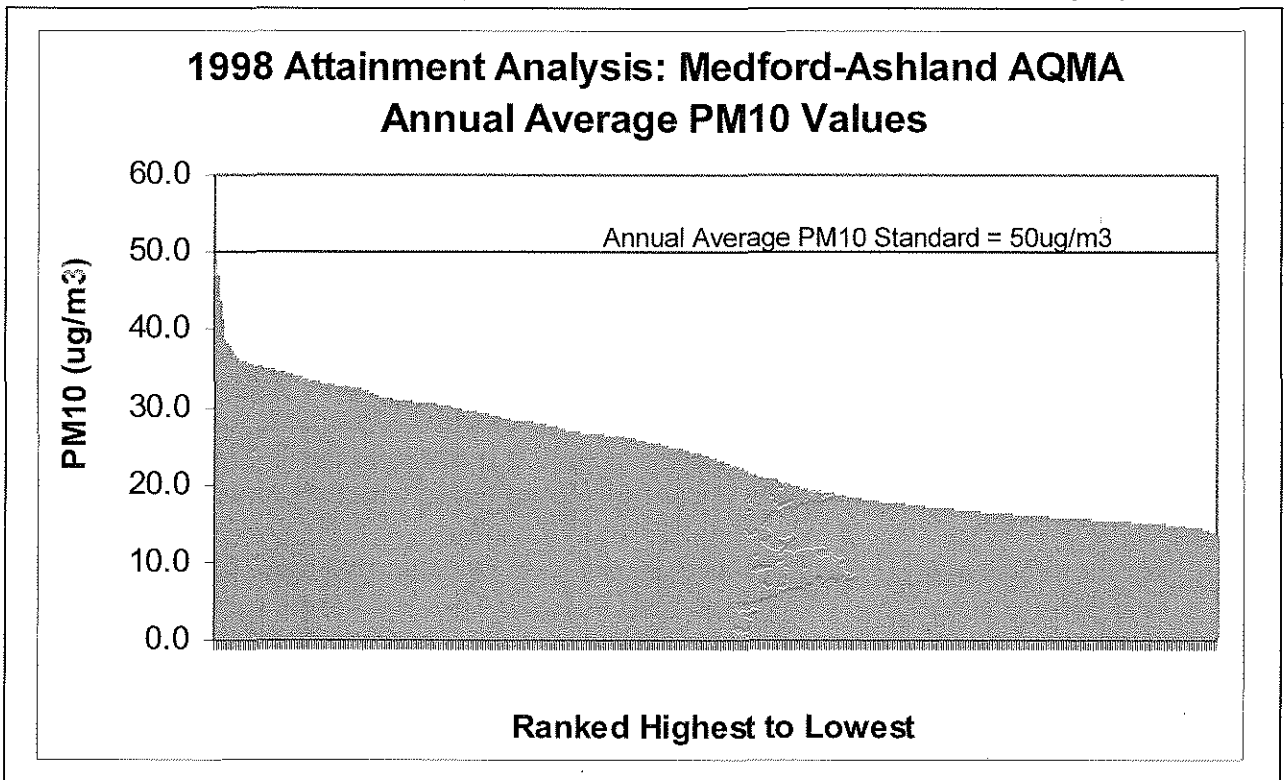
Annual Average Compliance

Table 10 shows the top 1% percent of model predicted annual average values for the 1998 (worst-case) attainment scenario (data set of 1244 receptors: initial 1-km spaced receptors plus the hot-spot modeling 0.25km spaced receptors). There are no violations predicted of the annual average PM₁₀ standard. Figure 50 shows all predicted 1998 (attainment) annual average values ranked from highest to lowest.

Table 10: Top 1% of model Predicted Annual Average PM₁₀ values (1998 Attainment Analysis)

Model Coordinate X	Model Coordinate Y	Predicted Annual Avg. PM ₁₀ (ug/m ³)	Model Coordinate X	Model Coordinate Y	Predicted Annual Avg. PM ₁₀ (ug/m ³)
512.00	4697.00	49.2	509.25	4687.00	43.2
512.00	4698.00	47.5	509.50	4687.25	43.2
512.00	4698.25	47.1	509.75	4686.75	41.4
512.00	4697.50	46.2	512.00	4697.25	39.7
509.25	4687.25	45.1	509.75	4687.25	39.0
509.75	4687.00	43.5	509.75	4686.50	38.8

Figure 50: Predicted Annual Average PM₁₀ Concentrations (1998 Attainment Analysis)



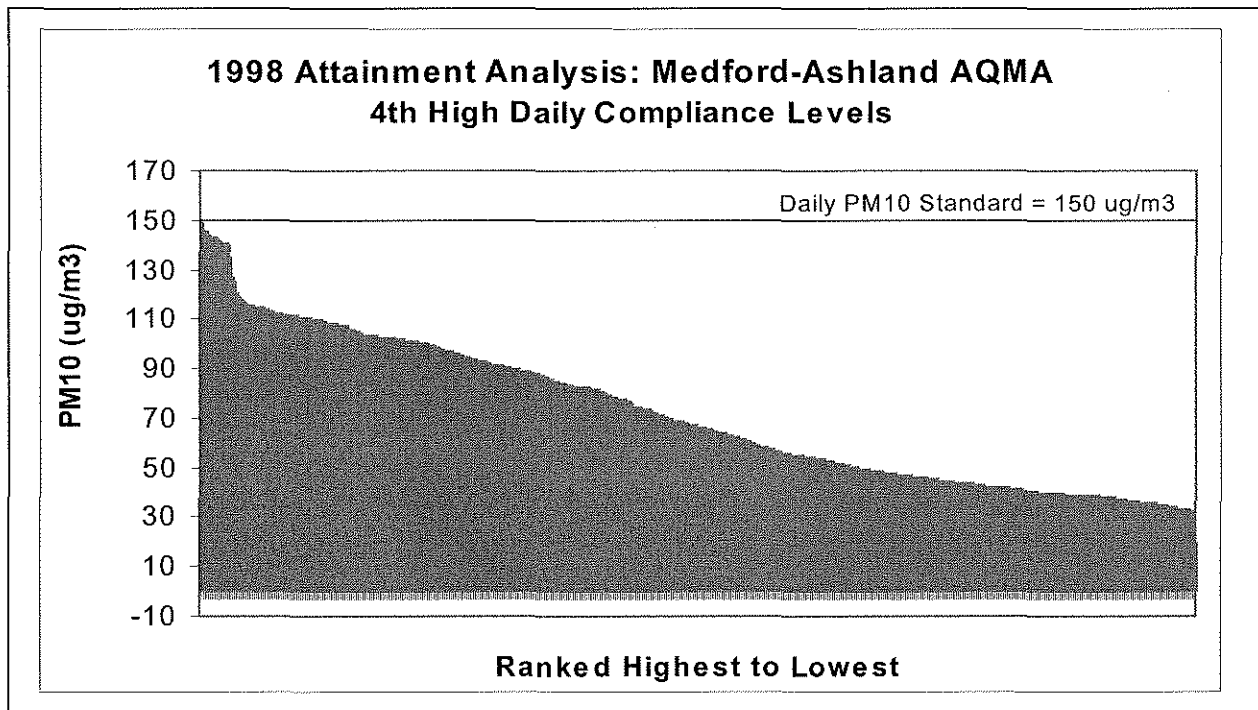
Daily (24-hr Avg.) Compliance

The modeling analysis shows that all predicted 4th highest daily PM₁₀ values in the AQMA would be below the daily PM₁₀ standard under worst-case conditions. Table 11 shows the top 1% of predicted 4th high daily values for the 1998 attainment scenario. Figure 51 shows all predicted 4th high daily values ranked from highest to lowest.

Table 11: Top 1% of predicted 4th Highest Daily (24-hr Avg.) PM₁₀ values (1998 Attainment)

Model Receptor Coordinate X	Model Receptor Coordinate Y	Predicted 4 th High Daily PM ₁₀ (ug/m ³)	Model Receptor Coordinate X	Model Receptor Coordinate Y	Predicted 4 th High Daily PM ₁₀ (ug/m ³)
512.00	4697.25	149.4	512.75	4687.00	145.8
512.00	4697.75	148.7	513.00	4686.75	145.7
513.00	4687.00	148.6	513.50	4686.25	145.5
512.75	4686.75	146.3	513.50	4686.75	145.0
513.50	4686.50	146.1	513.25	4686.50	144.5
513.25	4686.75	145.9	513.25	4687.00	143.9

Figure 51: Predicted 4th High Daily PM₁₀ Compliance Values

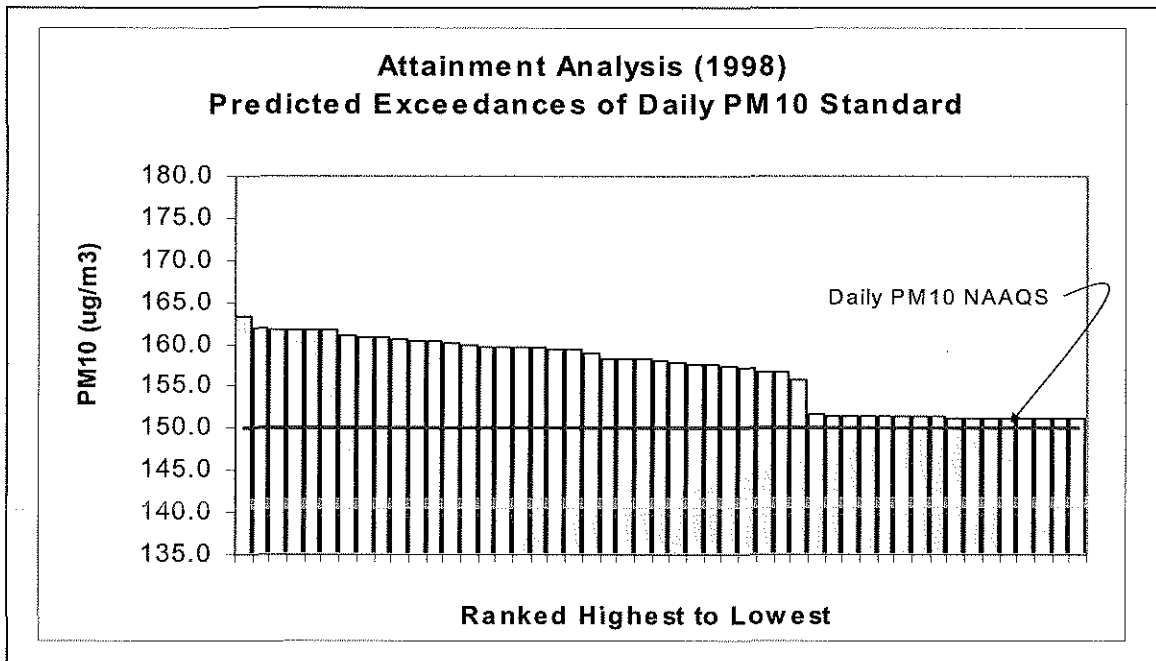


Exceedances of the Daily Standard

The attainment analysis predicts that exceedances of the daily PM₁₀ standard could occur at multiple locations in the east Medford area during winter air stagnation conditions. The exceedances are predicted to occur on two winter days, in two different years (i.e. during the meteorological conditions that occurred on December 25th, 1998 and December 8th, 2000). Predicted exceedances range from approximately 151 ug/m³ to 163 ug/m³, and are primarily due to residential wood combustion. When woodstove curtailment is applied during these events, PM₁₀ levels decrease substantially and the predicted exceedances are eliminated.

The attainment analysis also shows that one additional exceedance (156 ug/m³) could occur under worst-case conditions in the central White City industrial area. Figure 51-1 shows the model predicted (worst-case) exceedances of the daily PM₁₀ NAAQS (without the emission reduction effect of woodstove curtailment). Again, these predicted (potential) exceedances are not a violation of the PM₁₀ standard.

Figure 51-1: Worst-Case exceedances of Daily PM₁₀ Standard



PM₁₀ levels in the AQMA: Air Quality Maps

The attached air quality maps (Figures 52-55) show predicted annual average and daily (24-hr avg.) PM₁₀ levels for the attainment compliance analysis. These "isopleth" maps use contour lines to show different PM₁₀ concentrations. In the maps showing daily PM₁₀ values, each isopleth line changes by 10 ug/m³. For the maps showing annual average PM₁₀ concentrations, each isopleth line changes by 2 ug/m³.

Figure 52: Annual Average PM₁₀ (AQMA)

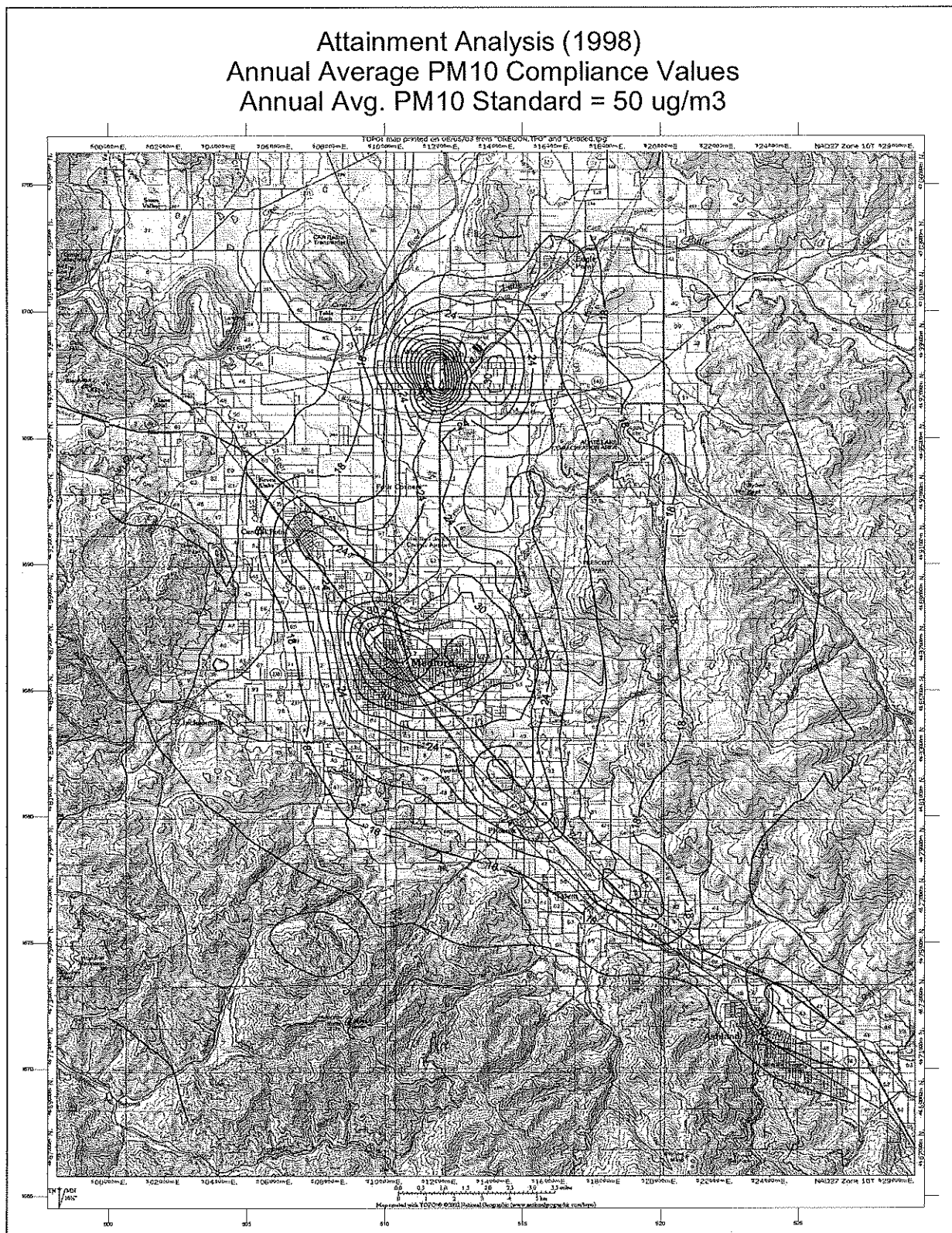


Figure 53: Daily PM₁₀ (AQMA)

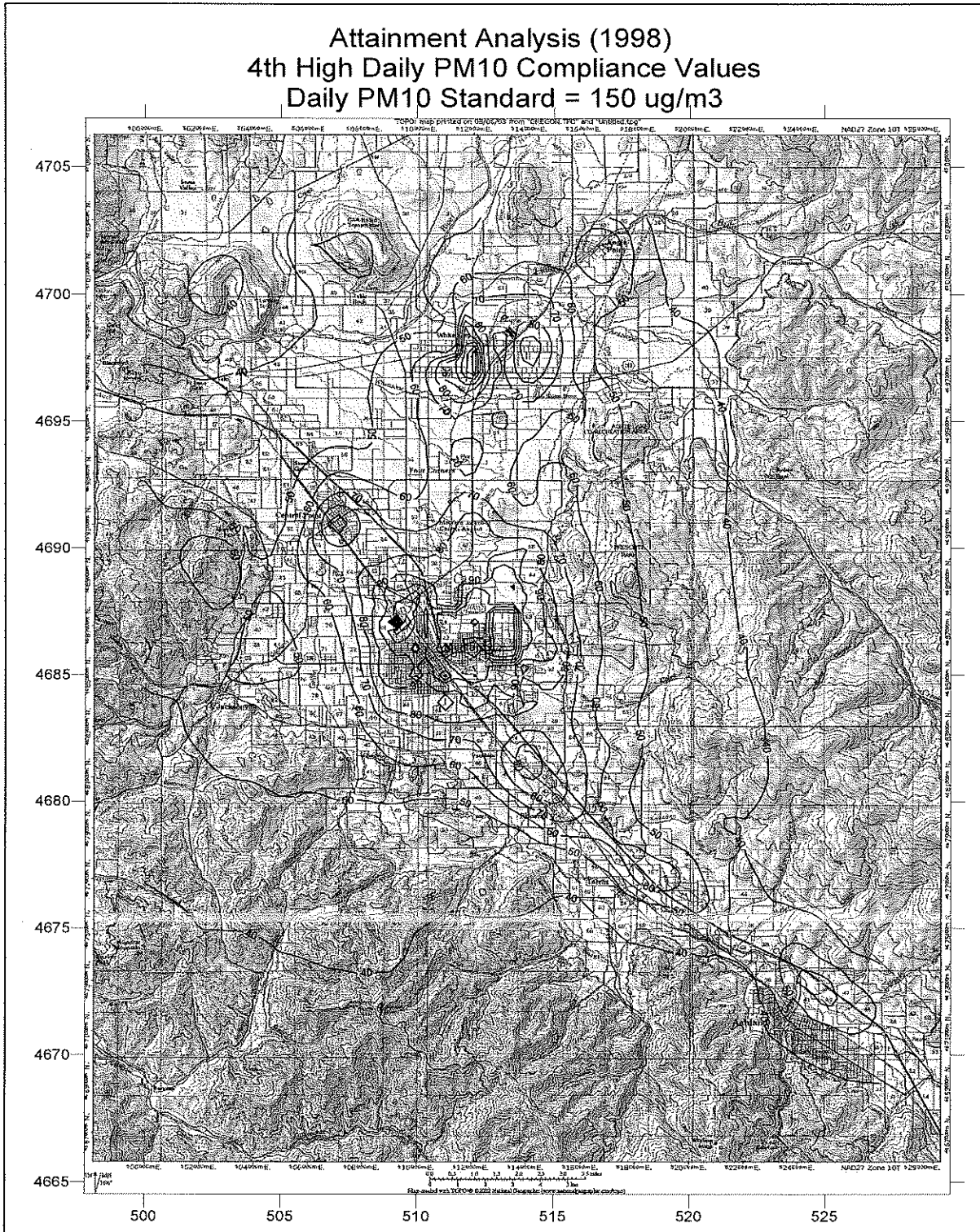


Figure 54: Annual Average PM₁₀ (Medford-White City Area)

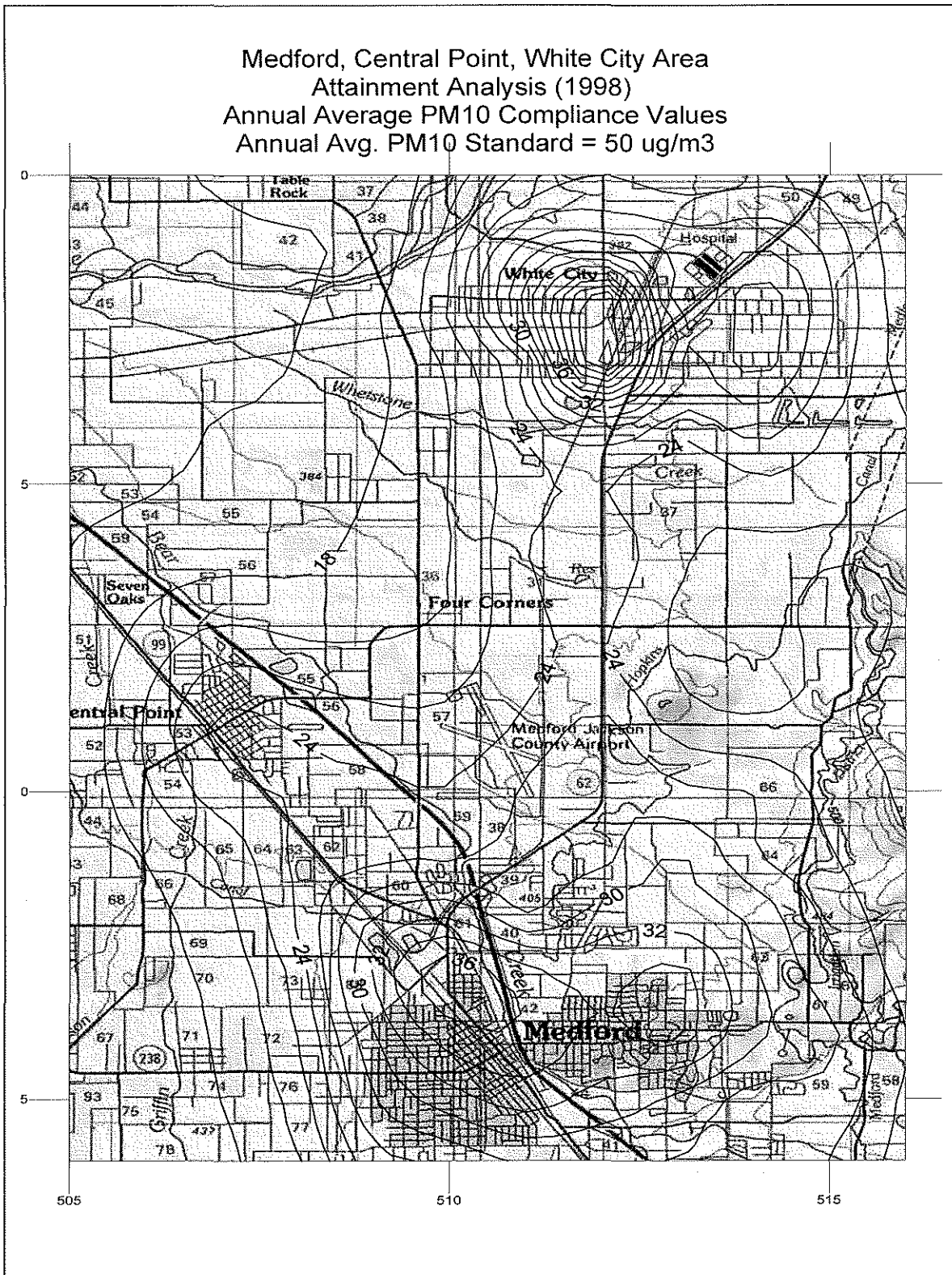
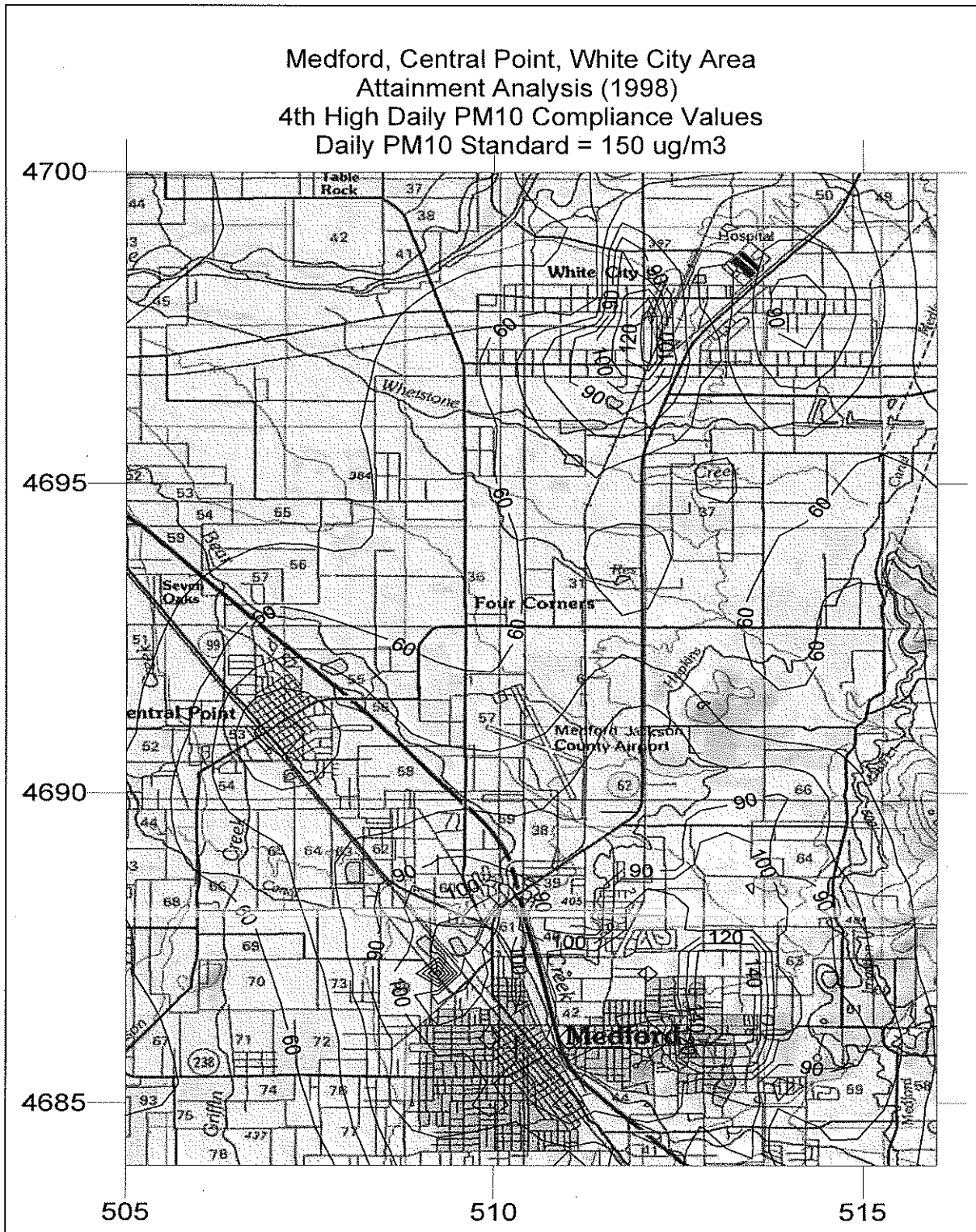


Figure 55: Daily PM₁₀ (Medford-White City Area)



4.14.6.2: 2015 Maintenance Analysis

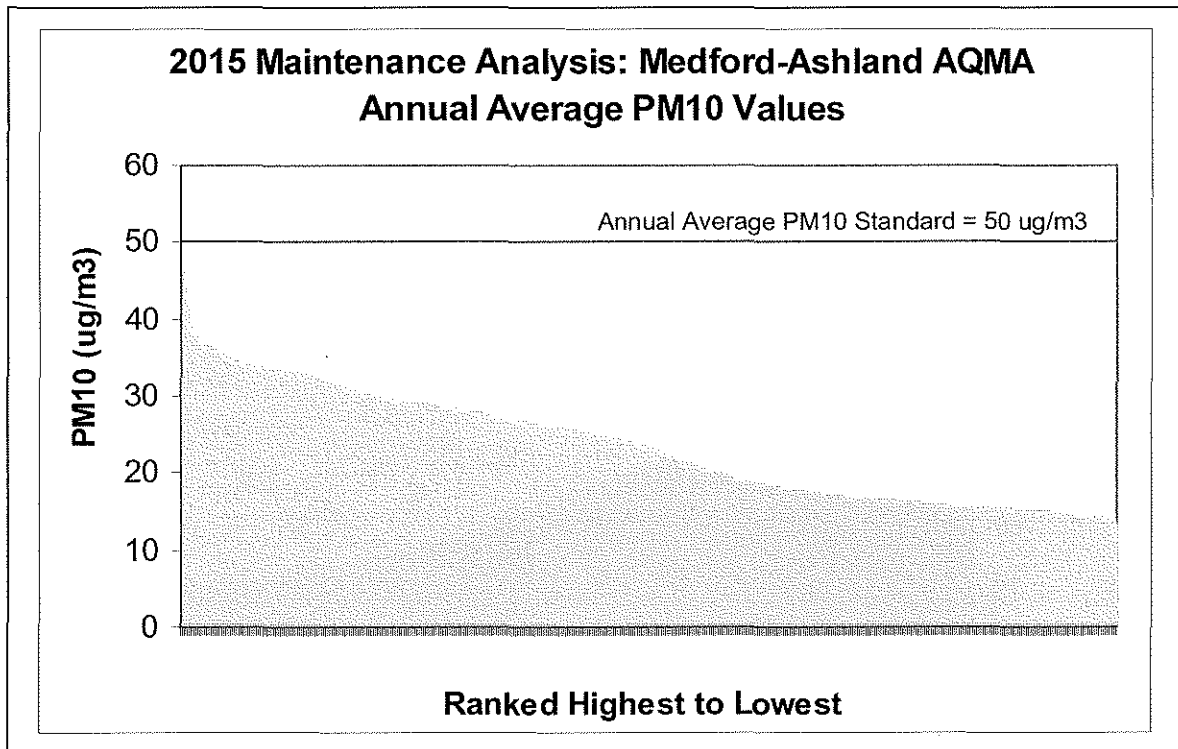
Annual Average Compliance:

Table 12 shows the top one percent of model predicted annual average values for the 2015 analysis (data set of 1244 receptors: initial 1-km spaced receptors plus the hot-spot modeling 0.25km spaced receptors). The annual average PM₁₀ standard is 50 ug/m³. There are no violations predicted of the annual average PM₁₀ standard. Figure 56 shows all 2015 annual average values ranked from highest to lowest.

Table 12: Top 1% of model Predicted Annual Avg. PM₁₀ values (2015 Maintenance Analysis)

Model Coordinate X	Model Coordinate Y	Predicted Annual Avg. PM ₁₀ (ug/m ³)	Model Coordinate X	Model Coordinate Y	Predicted Annual Avg. PM ₁₀ (ug/m ³)
512.00	4697.00	49.3	509.50	4687.25	43.1
512.00	4698.25	46.9	509.75	4686.75	42.2
512.00	4697.50	46.8	512.00	4697.25	40.3
509.25	4687.25	45.0	509.75	4687.25	39.8
509.75	4687.00	44.3	509.75	4686.50	39.2
509.25	4687.00	43.2	510.00	4686.75	39.1

Figure 56: Predicted Annual Average PM₁₀ Concentrations in 2015



Daily Compliance: 2015

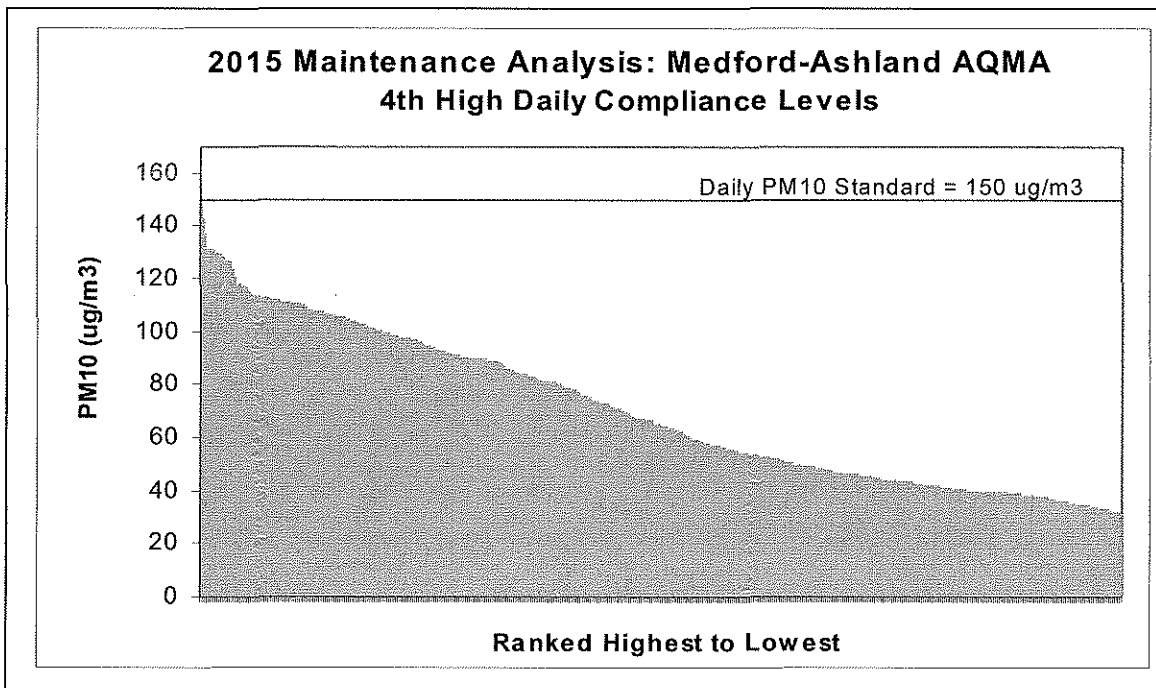
The maintenance analysis shows that all predicted 4th highest daily PM₁₀ values in the AQMA will be below the daily PM₁₀ standard through at least the year 2015. Table 13 shows the top 1% of predicted 4th high daily values in the 2015 analysis. Figure 57 shows all predicted 4th high daily values ranked from highest to lowest.

The modeling analysis predicts that one exceedance of the daily standard could occur in 2015 (154 ug/m³) under worst-case conditions (i.e. all major point sources operating at maximum allowable permitted levels). The exceedance is predicted to occur at receptor location (512.00 x 4697.00). This is in the heart of the White City industrial complex. There are no exceedances predicted from residential woodheating in 2015 due to the expected continued decrease of non-certified woodstoves in the AQMA.

Table 13: Top 1% of Model Predicted 4th High Daily PM₁₀ Values (2015)

Model Coordinate X	Model Coordinate Y	Predicted 4 th High Daily PM ₁₀ (ug/m ³)	Model Coordinate X	Model Coordinate Y	Predicted 4 th High Daily PM ₁₀ (ug/m ³)
512.00	4697.75	147.8	509.50	4687.25	134.4
512.00	4697.50	144.0	513.00	4687.00	132.4
512.00	4697.00	143.2	511.00	4685.00	131.9
512.00	4698.00	138.8	513.50	4686.50	131.8
511.00	4686.00	138.6	512.75	4686.25	131.7
509.50	4687.00	137.4	513.50	4686.25	131.6

Figure 57: Predicted 4th High Daily PM₁₀ Compliance Values in 2015



Predicted PM₁₀ values in Table 13 that range from 147.8 ug/m³ to 138.8 ug/m³ are predicted to occur in the core White City industrial area. The remaining PM₁₀ values in Table 15 are predicted to occur in east Medford, primarily due to woodsmoke. These values do not show the effect of the woodstove curtailment program, which would reduce these peak values substantially.

PM₁₀ levels in the AQMA: Air Quality Maps

The air quality maps in Figures 58-59 show predicted annual average and daily (24-hr avg.) PM₁₀ levels for the maintenance compliance analysis. These “isopleth” maps use contour lines to show different PM₁₀ concentrations. For the annual average isopleth maps, PM₁₀ concentrations increase in intervals of 2 ug/m³. For the daily isopleth maps, PM₁₀ concentrations increase in intervals of 10 ug/m³.

The air quality maps in Figures 60 through 61 show maintenance analysis results for the core urban areas of Medford, Central Point, and White City.

Figure 58: Air Quality Map. Predicted (Worst-Case) Annual Avg. PM₁₀ Levels in 2015

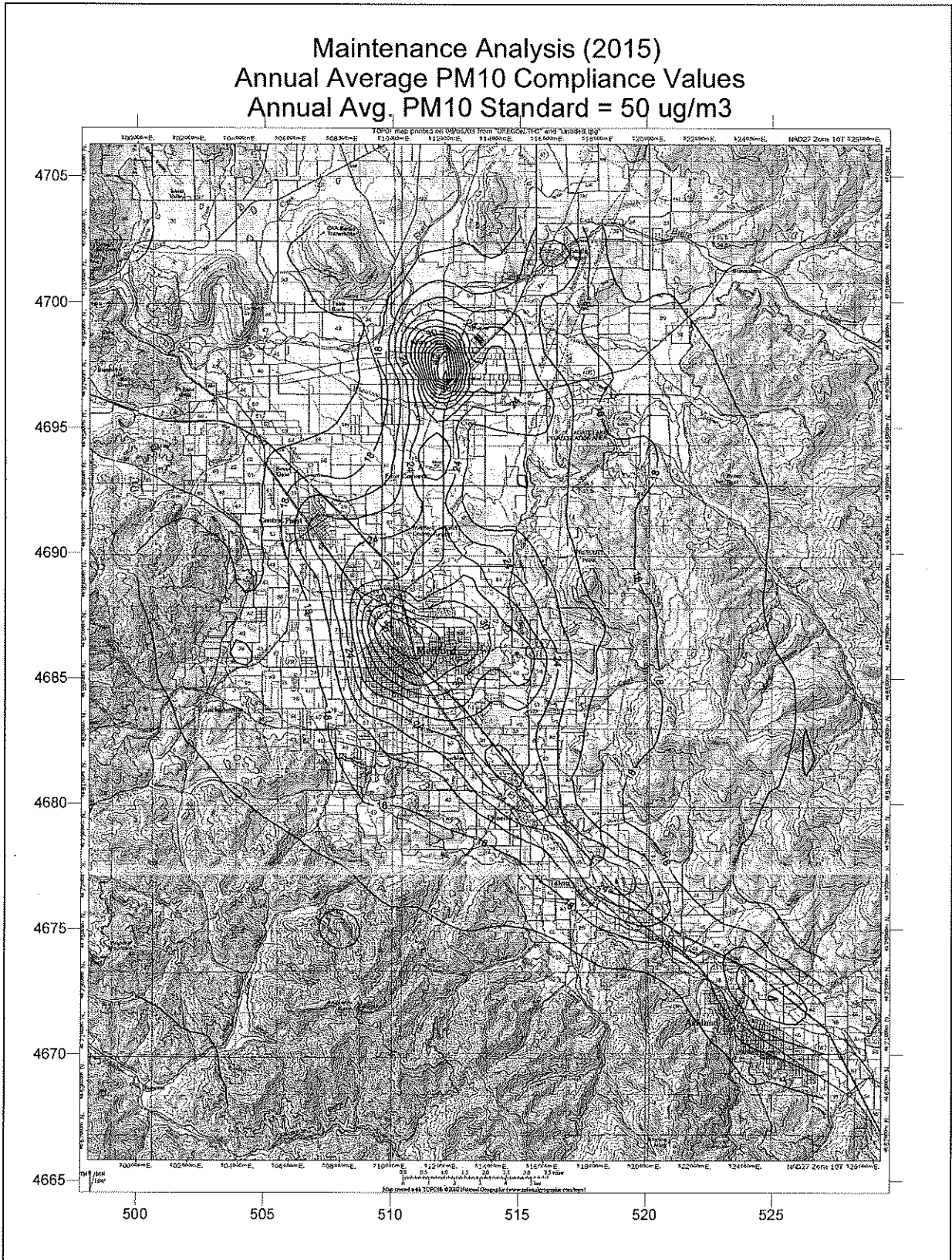


Figure 59: Air Quality Map. Predicted (Worst-Case) Daily PM₁₀ Levels in 2015

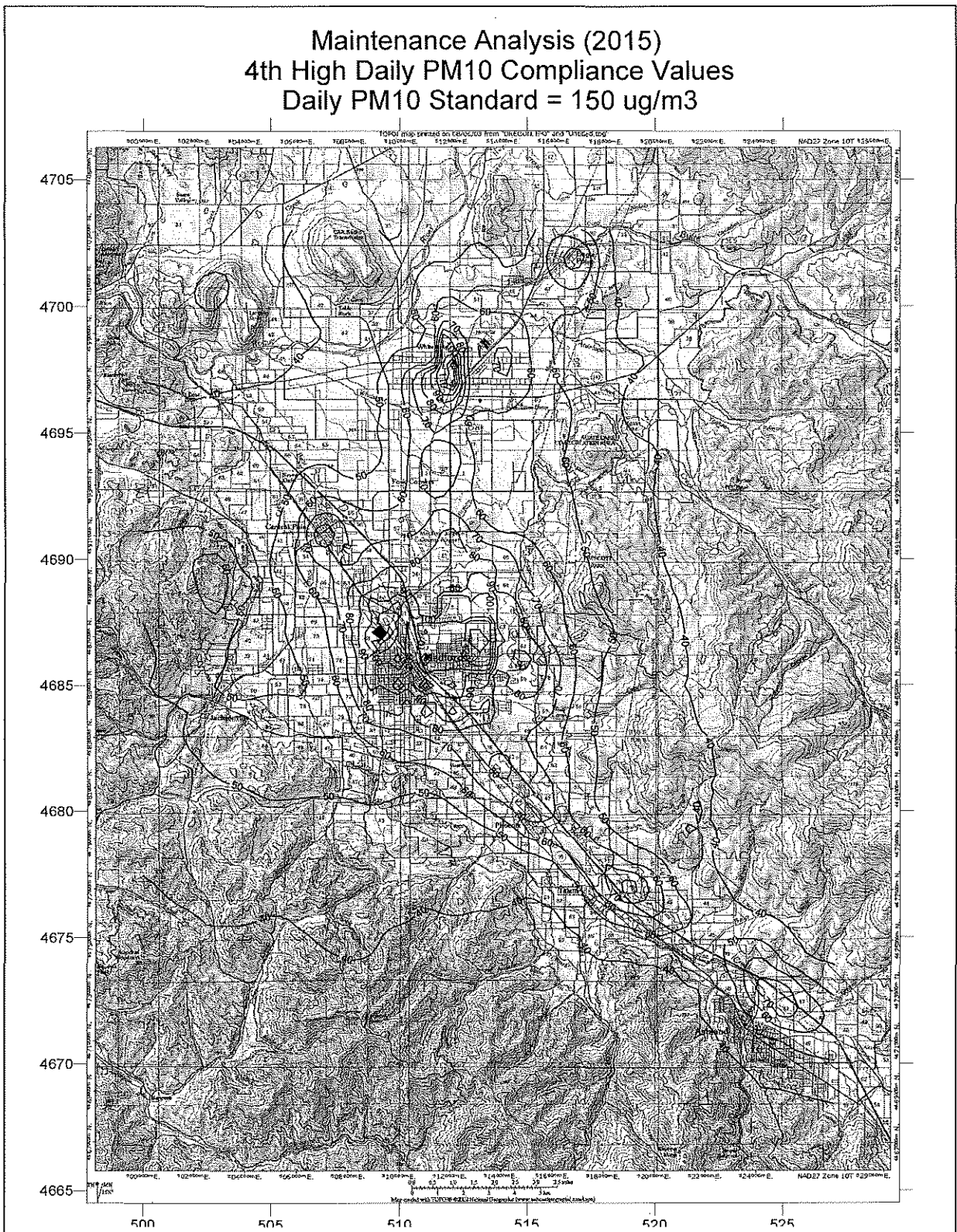


Figure 60: Medford-White City Area. Predicted (Worst-Case) Annual PM₁₀ in 2015

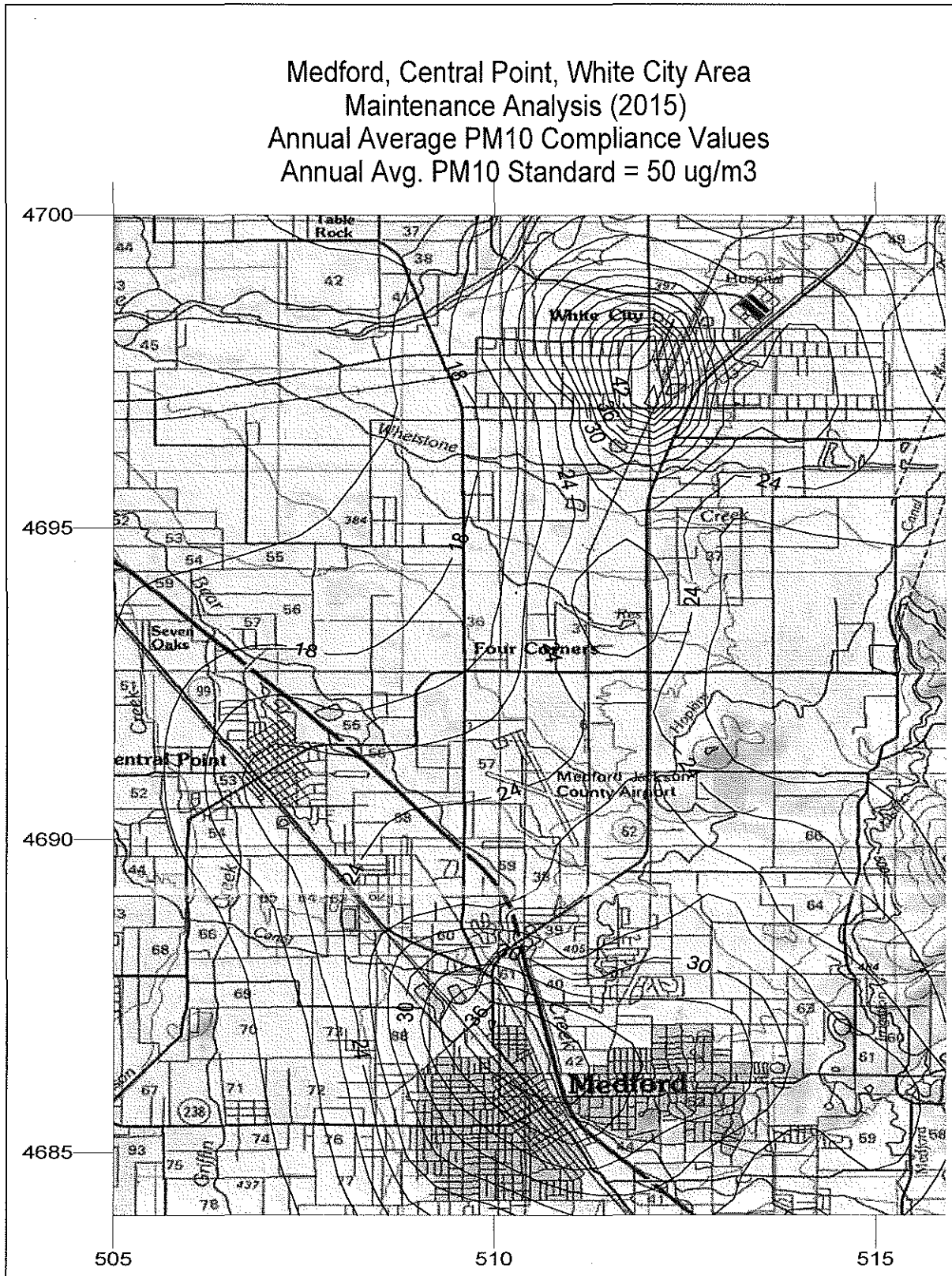
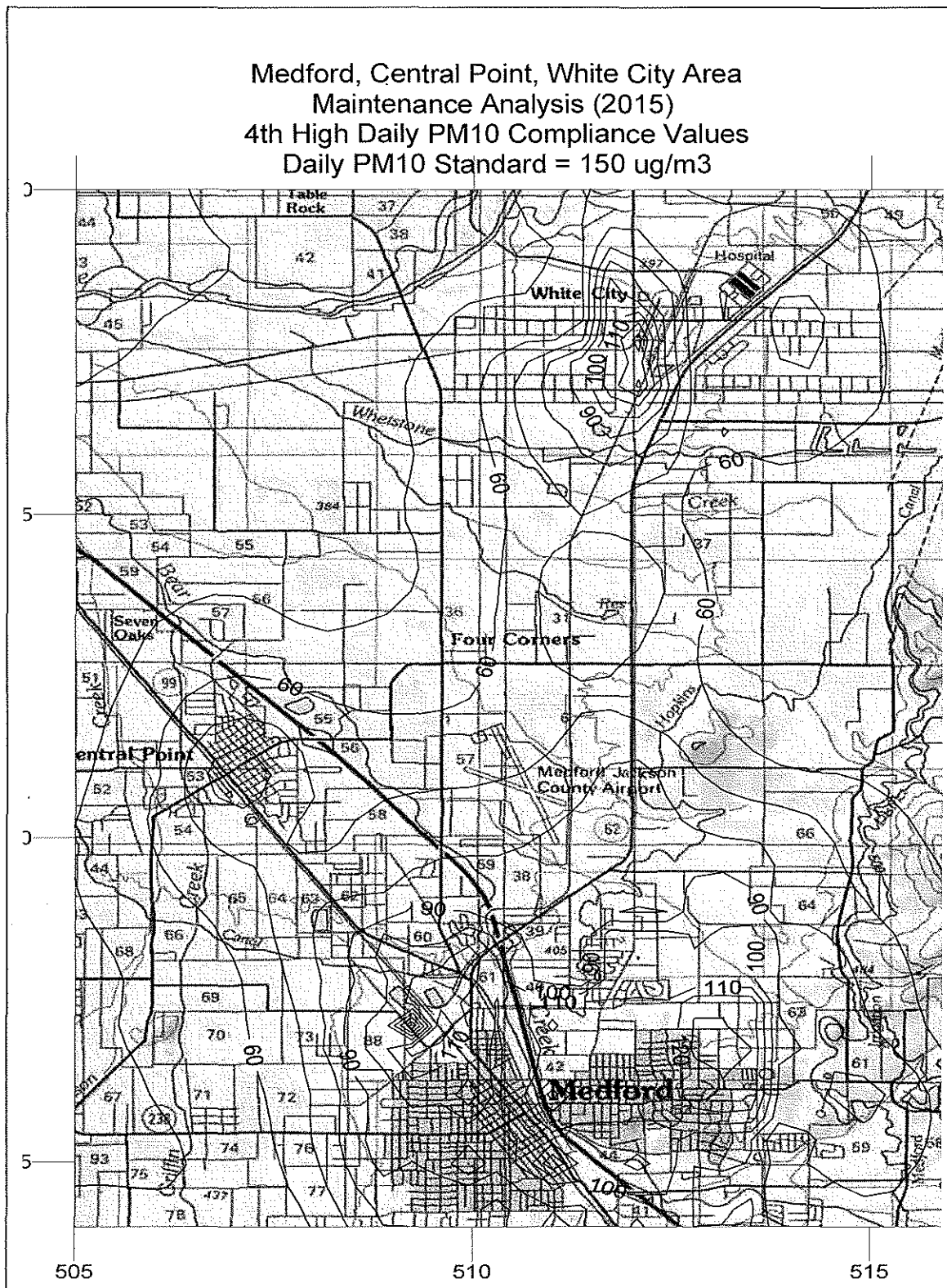


Figure 61: Medford-White City Area. Predicted (Worst-Case) Daily PM₁₀ Levels in 2015



4.14.6.3: White City Industrial Area Analysis

The highest potential PM₁₀ impacts for both the attainment and maintenance analysis are predicted to occur within the White City industrial complex. This is an area of concern, especially given its proximity to commercial and residential areas of White City. The Medford industrial area is also of interest, however model predicted PM₁₀ impacts in and near the Medford industrial area are well below PM₁₀ standards.

Predicted high PM₁₀ levels in the White City industrial area are partly the result of the worst-case analysis approach which assumes that all major industrial facilities are simultaneously emitting PM₁₀ at their maximum allowable emission level. The attainment and maintenance analysis show the potential for PM₁₀ impacts in the White City area under worst-case conditions. However, there is a relatively low likelihood that all White City industrial sources will simultaneously operate at their maximum allowable (permitted) emission level.

Table 14 shows predicted peak Annual Avg. and 4th-high Daily PM₁₀ concentrations for the White City industrial area for the attainment analysis. Table 15 shows predicted peak Annual Avg. and 4th-high Daily PM₁₀ concentrations for the White City area for the maintenance analysis. Peak PM₁₀ impacts for the White City industrial are similar for the attainment and maintenance analysis because maximum allowable (permitted) industrial emission levels were used in both cases.

Table 14: Highest Predicted PM₁₀, White City Industrial Area (1998 Worst-Case)

Model Coordinate X	Model Coordinate Y	Annual Avg. Predicted PM ₁₀ (ug/m ³)	Model Coordinate X	Model Coordinate Y	4 th High Daily Predicted PM ₁₀ (ug/m ³)
512.00	4697.00	49.2	512.00	4697.25	149.4
512.00	4698.00	47.5	512.00	4697.75	148.7
512.00	4698.25	47.1	512.00	4697.50	143.8
512.00	4697.50	46.2	512.00	4697.00	143.2

Table 15: Highest Predicted PM₁₀, White City Industrial Area (2015 Worst-Case)

Model Coordinate X	Model Coordinate Y	Annual Avg. Predicted PM ₁₀ (ug/m ³)	Model Coordinate X	Model Coordinate Y	4 th High Daily Predicted PM ₁₀ (ug/m ³)
512.00	4697.00	49.3	512.00	4697.75	147.8
512.00	4698.00	46.9	512.00	4697.50	144.0
512.00	4697.50	46.8	512.00	4697.00	143.2
512.00	4698.00	46.7	512.00	4698.00	138.8

PM₁₀ levels in the White City Area: Air Quality Maps

The air quality maps in Figures 62 through 65 show predicted annual average and daily (24-hr avg.) PM₁₀ levels for the attainment and maintenance compliance analysis in the

White City industrial area. Major industrial facilities are identified, and predicted PM₁₀ levels reflect worst-case conditions (i.e. all industrial facilities emitting at their maximum allowable permitted levels).

Figure 62: Annual Avg. PM₁₀ (1998 Worst-Case) White City

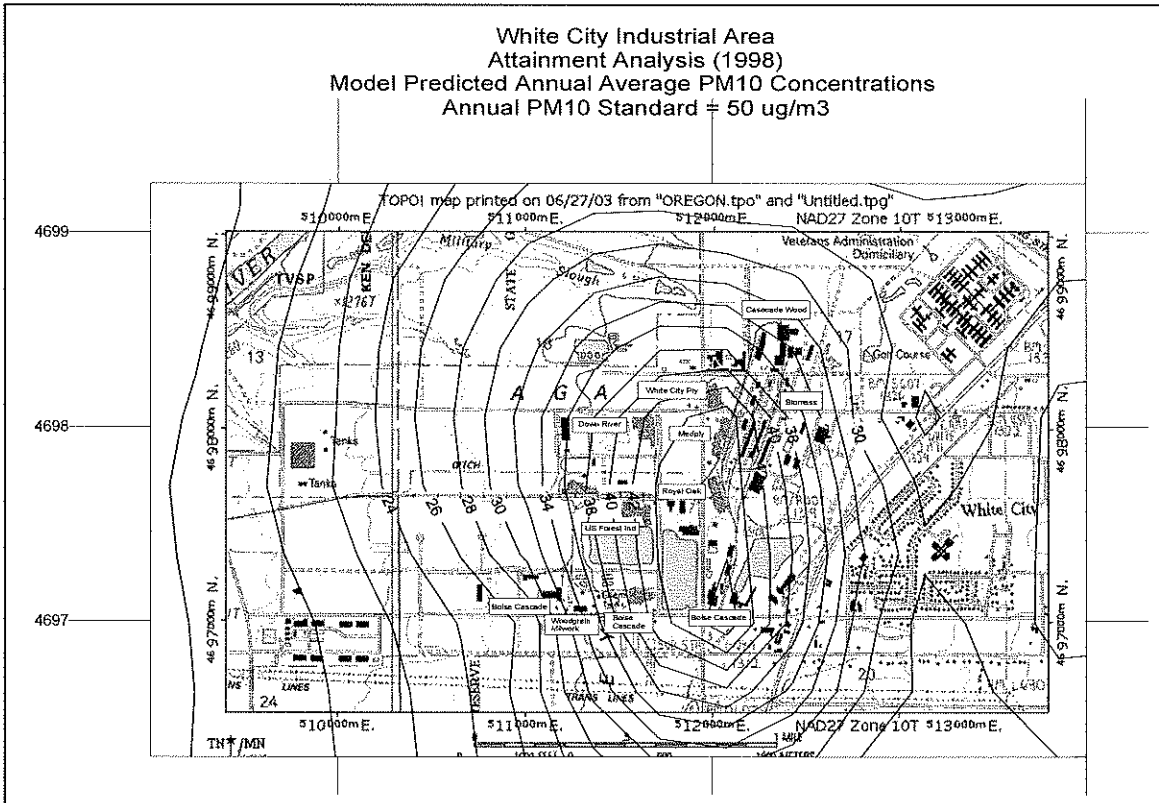


Figure 63: Daily PM₁₀ (1998 Worst-Case) White City

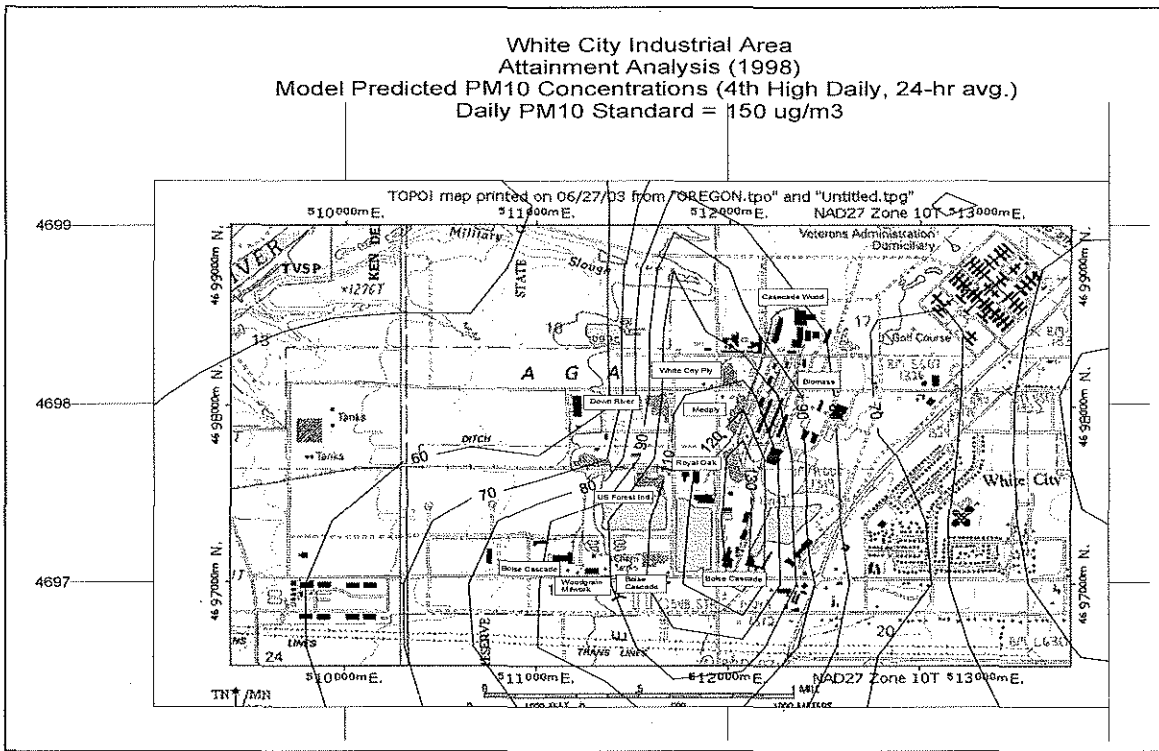


Figure 64: Annual Average PM₁₀ (2015 Worst-Case) White City

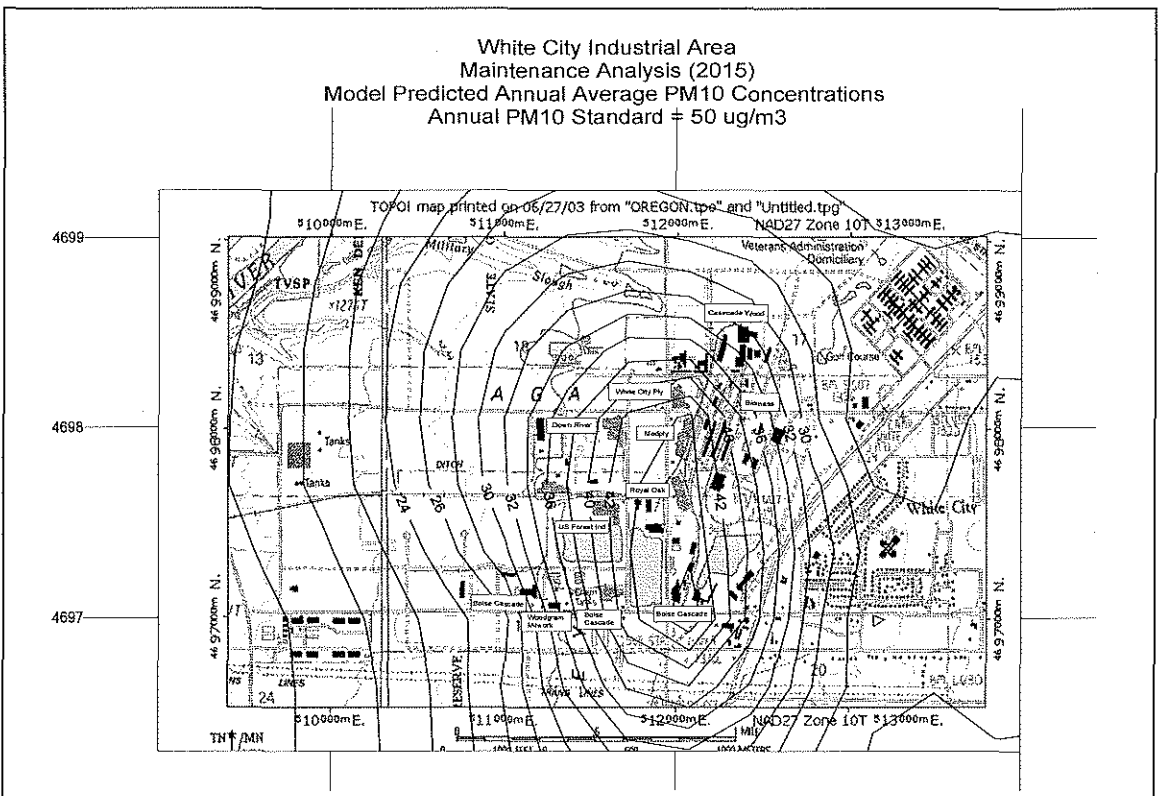
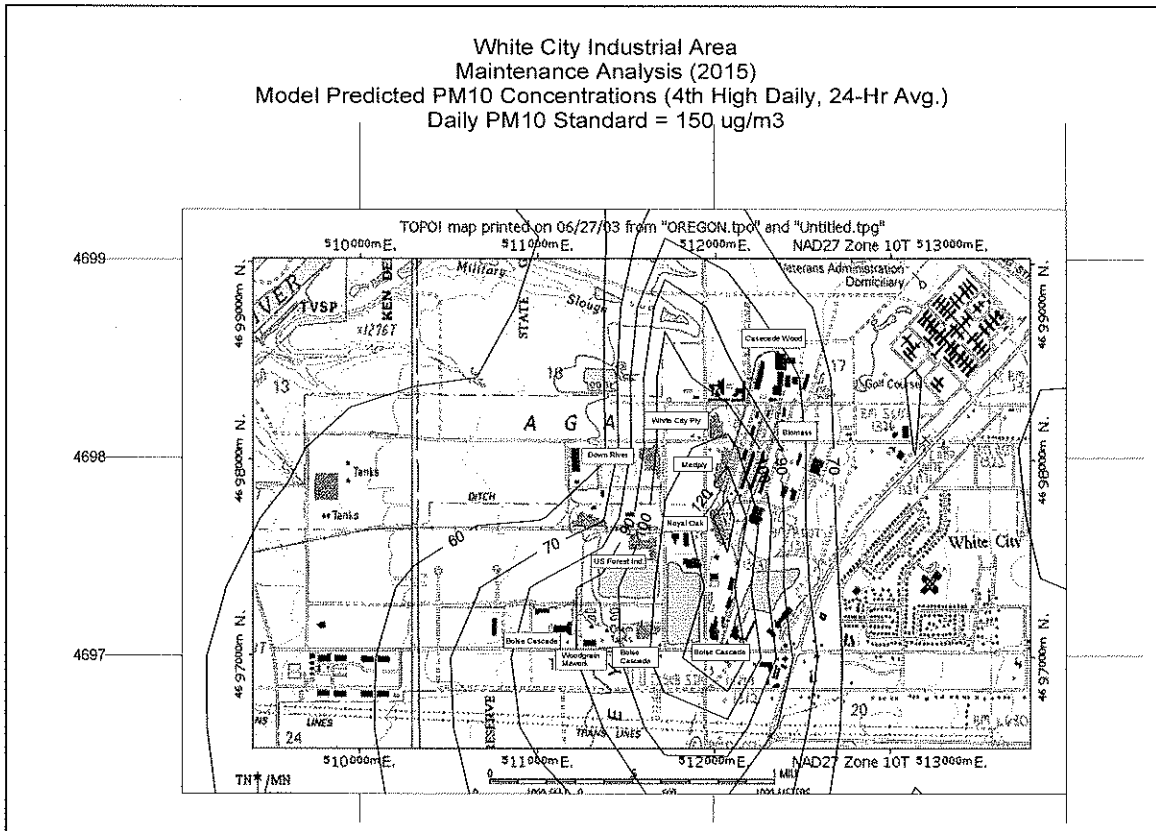


Figure 65: Daily PM₁₀ (2015 Worst-Case) White City



Compliance Summary: Attainment and Maintenance Demonstration

- There are no predicted violations of the daily or annual average PM₁₀ standards in either the 1998 or 2015 compliance analysis. The Attainment and Maintenance analysis show that the AQMA is currently in compliance with PM₁₀ standards and will continue to be in compliance through at least the year 2015.
- Attainment Analysis: The attainment analysis predicts potential exceedances of the daily standard (but no violation) on two winter days in the east Medford area. With woodstove curtailment, these exceedances would be eliminated. One exceedance is also predicted to occur under worst-case conditions in the White City industrial area.
- Maintenance Analysis: One potential exceedance of the daily standard (154 ug/m³) is predicted in the 2015 maintenance analysis in the White City industrial area.
- The predicted exceedances of the daily standard, together with the number of predicted PM₁₀ levels within 20% or so of the standard, supports the need to continue the PM₁₀ strategies (i.e. woodstove curtailment, opening burning program, road sweeping, industrial rules), that have successfully brought the

AQMA into compliance. These strategies also help prevent violations of the fine particulate standards (PM_{2.5}).

4.14.7.0

Emissions Reduction Measures

PM₁₀ emissions in the AQMA have been substantially reduced through a suit of emission reduction measures developed and implemented over approximately 25 years (to address both TSP and PM₁₀). These strategies include emission limits on select industrial processes, the residential woodstove curtailment program, restrictions on residential open burning, street cleaning, replacement of noncertified woodstoves in low income homes, a ban on installation of non-certified woodstoves, and public education. The following sections provide a summary of these emission reduction programs.

4.14.7.1

Residential Wood Combustion Strategies

Beginning with the work of the Jackson County Woodburning Task Force 1987, the Department, Advisory Committee, and local AQMA jurisdictions have developed and implemented strategies to reduce emissions from residential wood burning. Section 189(a)(1)(C) of the Clean Air Act requires states with moderate PM₁₀ nonattainment areas to assure that reasonably available control measures are implement by no later than December 10, 1993. The residential woodburning strategies were developed over several years and fully implemented with the adoption of a mandatory woodstove curtailment program in 1989.

The woodburning strategies focus on three basic approaches: (1) The improved performance and lower emissions of newer certified woodstoves; (2) attrition of older, high emission woodstoves over time; and (3) episodic emission reduction by prohibiting the use of woodstoves and fireplaces during predicted air stagnation events.

The woodburning strategy also includes a public information program that ensures awareness of the regulations, and stresses energy conservation as well as wood burning practices (such as firewood seasoning) that result in better combustion and better energy efficiency. Both of these practices result in lower emissions. No direct emission credit is taken for the public information program but it is a vital part of the woodburning strategy.

Woodburning Curtailment: A voluntary woodburning curtailment program (with daily advisories from November through February) began on November 19, 1985. Jackson County curtailment surveys during 1985-88 indicated an average compliance rate of about 25% under the voluntary program. The City of Medford adopted a mandatory woodburning curtailment program on November 2, 1989. Curtailment surveys within the City of Medford during 1989-90 indicated over 80% compliance. The City of Central Point adopted a mandatory woodburning curtailment program on December 21, 1989. A mandatory curtailment program was subsequently adopted for Jackson County.

Curtailment participation surveys conducted during the last exceedance period (1990-1991) showed compliance rates averaging 90% in the critical Medford area, and 88% in the core Medford-Central Point area. Curtailment compliance averaged approximately 66% in other parts of the curtailment control area. The combination of curtailment and public education

strategies, as well as an overall trend away from woodheating has significantly reduced woodstove emissions in the AQMA from historic levels.

Woodsmoke Program Up-date

In 1998, the Air Quality Advisory Committee recommended improvements to the existing mandatory residential woodsmoke strategy as a step to reduce the risk of future violations of the new (PM_{2.5}) particulate standards. Improving the current strategy involved adopting a model ordinance for woodstove curtailment that applies consistent requirements throughout the AQMA. A model unified ordinance was developed by the Committee and is patterned closely after the existing ordinance in Jackson County. The main points of the ordinance include:

- Burning in noncertified woodstoves is prohibited on yellow and red advisory days.
- Burning in certified stoves would be allowed on yellow and red advisory days but owners would be held to a “no visible emissions” standard.
- A 50% opacity limit would help reduce smoke year round.

Aligning the existing Medford and Central Point woodstove curtailment ordinances to a unified approach required minor changes to incorporate the no visible emissions approach. On balance the Department and EPA believe that the unified approach (minor modification to existing ordinances, adding new areas to the curtailment program) will strengthen the overall woodstove strategy in the AQMA.

The unified ordinance applies in Jackson County, as well as the cities of Ashland¹, Central Point, Jacksonville, Medford, Phoenix, and Talent. The City of Eagle Point will continue to be encouraged to adopt the unified woodburning ordinance. Copies of local ordinances can be found in Appendix A-4.

The residential woodburning advisory (Red, Yellow, or Green) is calculated daily by assessing particulate concentrations and trends measured by the local nephelometer (located at Grant Ave. & Belmont Streets, Medford). Nephelometer data is used in combination with the local ventilation index and weather forecast to derive a predicted PM₁₀ value for the next 24-hrs. General thresholds for the woodburning advisory are as follows:

- Green Day: Predicted PM₁₀ level less than 90 ug/m³.
- Yellow Day: Predicted PM₁₀ level between 90 ug/m³ and 129 ug/m³.
- Red Day: Predicted PM₁₀ levels 130 ug/m³ or more.

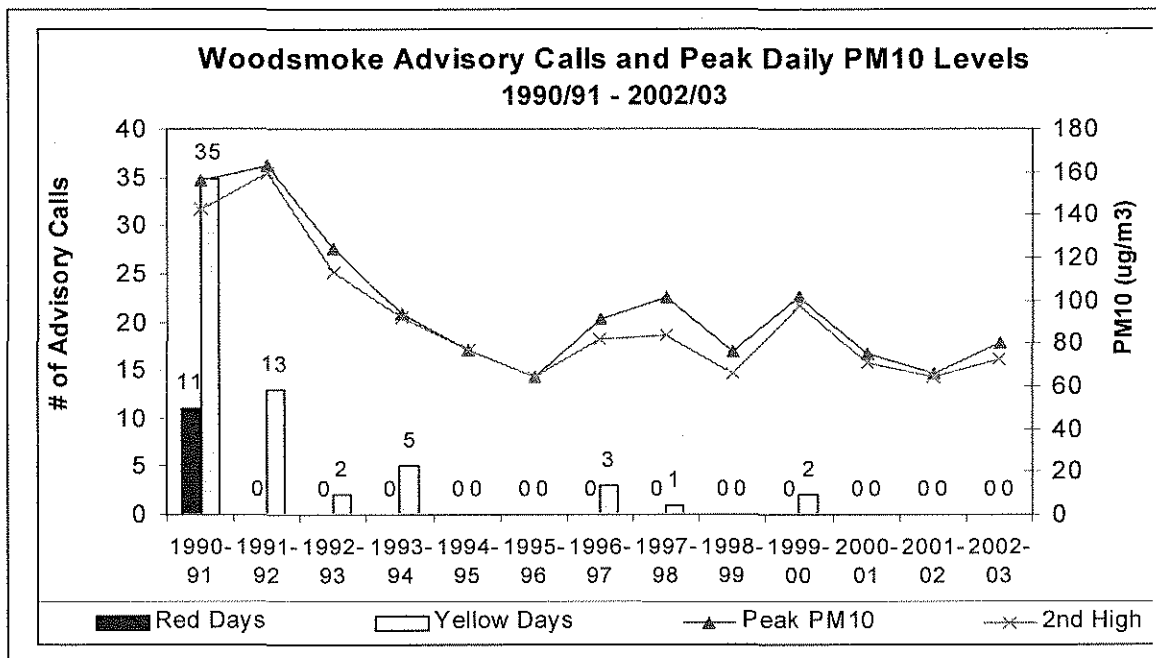
The daily advisory is made by Jackson County air program staff, and is based on both the predictive formula and on local knowledge and experience of air quality and weather patterns. The advisory is provided to the public every day during the woodheating season by 5:30 a.m. The county also maintains a phone number the public can call to hear the

¹ The City of Ashland’s woodsmoke ordinance limits opacity to no more than 40%.

daily advisory. During the 2002/2003 woodheating season, the county received 18,614 calls.

Woodstove use and emissions have significantly decreased in the AQMA since the early 1990's. It has not been necessary to call a Red Day advisory since the 1990/91 woodburning season. Occasional Yellow Day advisories are necessary, and reflect the continuing potential for elevated PM₁₀ levels during stagnation events. The lack of Red Day advisories is consistent with recent PM₁₀ trends and the significant decrease in peak PM₁₀ levels measured at Welch & Jackson and White City since 1991. Figure 66 shows the trend in Red and Yellow Day woodsmoke advisories.

Figure 66: Trend in Woodstove Curtailment Advisories and Peak PM₁₀ Levels



The attainment modeling analysis shows the potential for occasional high PM₁₀ levels in the east Medford area. During the winter of 2003/2004, the Department conducted a special particulate study to evaluate wintertime PM_{2.5} levels in different areas of the AQMA. The study included new locations in Medford (including the area of model predicted PM₁₀ exceedances), Central Point, White City, and other. The study allowed the Department to assess whether the curtailment program Nephelometer (located at Grant & Belmont) is located in the most appropriate area to capture residential woodheating patterns in the AQMA. The Department is currently reviewing results with the County. Early indications are that the Grant & Belmont is the best location for the curtailment program nephelometer. Refinements to the woodstove curtailment program could be made as needed based on the study results.

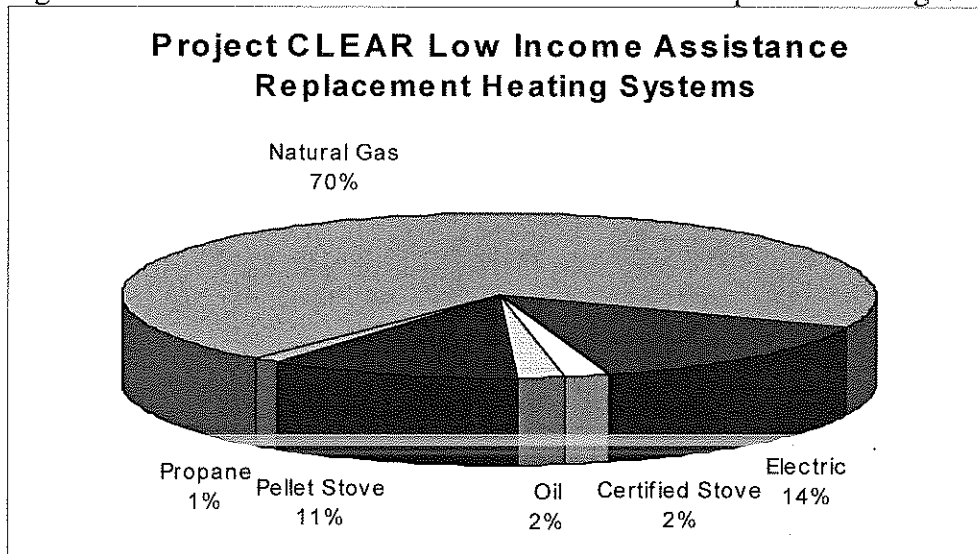
Woodstove Replacements: The Housing Authority of Jackson County began Project CLEAR (Cooperative Local Effort for Air Resources) in 1988 to replace woodstoves with cleaner burning units and provide cost-effective weatherization in low-income homes. Low

income, woodburning homeowners are most likely to use older (high emitting stoves), have the highest fuel consumption (because of low stove efficiency), and can receive a hardship exemption from the woodstove curtailment regulations. Assisting this population to reduce emissions is a key part of the woodsmoke strategy.

About \$1.8 million in funding from various sources has been obtained to date for the CLEAR project. The City of Ashland also implemented the SOLVE program (Save Our Livability, View and Environment) in July 1990. The SOLVE program also provides financial incentives (zero-interest or low-interest loans or rebates) for weatherization and the replacement of existing woodstoves.

To date, the Jackson County Housing Authority has replaced approximately 580 noncertified woodstoves in low income homes with cleaner burning alternatives, primarily natural gas. Figure 67 shows the distribution of heating device types selected to replace noncertified stoves removed under the CLEAR program. In addition to the replacement program, the Housing Authority requires that any woodstove be removed as a condition of the housing rehabilitation contract. This means that woodburning will continue to decline over time within the low income housing population.

Figure 67: Devices Distribution for Noncertified Stove Replacement Program



Home Weatherization: Home weatherization incentives (free energy audits, low-interest loans, and rebates) have been available for several years to all homeowners regardless of heat source. ACCESS (the local Community Action Program) has provided free cost-effective weatherization to low-income households. Weatherization of homes prior to installation of a new woodstove has been required by local ordinances of the City of Medford (No. 4732) and Jackson County (No. 82-6) since 1982.

Weatherization programs, combined with programs assisting the replacement of existing woodstoves with cleaner burning units, were expected to reduce woodburning emissions by about 5% by 1992. Other weatherization financial assistance programs, based on current

participation rates, were expected to reduce woodburning emissions by about 3% by 1992. In 1995 WP Natural Gas (now AVista Corp.) completed 132 weatherization upgrades in low income homes, and in 1996, 79 out of 298 upgrades were for low income homes.

Woodstove Certification/Local Code Restrictions: The Oregon Woodstove Certification Program became effective on July 1, 1986. New stoves sold in Oregon since then must meet specified emission standards. Oregon's woodstove emission standards became more restrictive on July 1, 1988, and the EPA woodstove certification program also increased the stringency of woodstove emission performance standards. Changes to local and state building codes has also accelerated the attrition of older stoves. Jackson County adopted a ban on the installation of non-certified woodstoves (to prevent used non-certified stoves from being re-installed) on December 22, 1989. In 1992, the Oregon state building code was revised to prohibit the installation of noncertified woodstoves statewide.

4.14.7.2 Major Industry

The Oregon Environmental Quality Commission adopted specific industrial rules for the wood products industries in the Medford-Ashland AQMA in 1978, 1983 and 1989. The 1978 and 1983 rules included: (1) tighter pollution control requirements for particle dryers, fiber dryers, veneer dryers, large wood-fired boilers, charcoal furnaces, and air conveying systems for sanderdust and sawdust; (2) additional source testing requirements; (3) operation and maintenance plans to prevent or minimize excess emissions; and (4) site-specific fugitive dust control plans. These industrial requirements resulted in a 70% reduction in industrial particulate emissions between 1978 and 1986.

The 1991 PM₁₀ strategy for major industry required: (1) tighter emission limits and better pollution control equipment on veneer dryers and large wood-fired boilers; (2) more extensive source testing and continuous emission monitoring in order to maximize performance of pollution control equipment; and (3) more restrictive emission offset requirements for new or expanding industries. These new requirements were projected to reduce industrial PM₁₀ emissions by over 20% by the end of 1994, with most of this reduction occurring by 1992.

In 1998, the Advisory Committee recommended two additional interim actions to help address the uncertainty of future PM₁₀ impacts from industrial sources.

The first relates to the expected reduction in particulate emissions that will likely occur as a side-benefit of the Maximum Achievable Control Technology (MACT) requirements for hazardous air pollutants. EPA has adopted rules (MACT) to reduce certain hazardous air emissions (air toxics) from particleboard and hardboard manufacturing. It is expected that several major facilities in the AQMA will need to reduce emissions in order to comply with MACT requirements, including the Timber Products, Sierra Pine, and Boise Cascade facilities. MACT applications are due in 2004, with compliance required by 2007.

In 1998, and in anticipation of MACT, the Timber Products facility committed to reduce PM₁₀ emissions from their hardboard press vents by at least 90 percent by no later than November, 2003. Timber Products has completed the installation of emission control technology on their press-vents and particle dryers. This equipment is expected to provide a reduction in PM₁₀ emissions of over 90%.

The attainment and maintenance modeling analysis show that these emission reductions are not needed to demonstrate compliance with PM₁₀ standards. The voluntary reductions at Timber Products will not reduce the facility's allowable PM₁₀ emissions. However, the reduction will provide a substantial air quality and public health benefit in the Medford area.

The second action involved an agreement between the Department and the Timber Products facility to temporarily restrict ("embargo") the use of 79 tons/year in allowable PM₁₀ emissions until the press vent emissions at that facility were controlled. As noted above, press-vent controls have been installed and are operational. This satisfies the 1998 agreement and repeals the embargo on allowable emissions at Timber Products.

Particulate reductions related to MACT are also possible at the Sierra Pine (Medite) facility and several Boise Cascade facilities. MACT applications from these facilities have been received by the Department and are being reviewed. It is likely that some particulate reduction will result at these facilities as they comply with MACT standards. Any reduction in actual particulate emissions as a result of MACT pre-control will not reduce allowable permitted particulate levels for these facilities. It will however provide a substantial air quality and public health benefit.

Section 189(a)(1)(C) of the Clean Air Act requires states with moderate PM₁₀ nonattainment areas to assure that reasonably available control measures are implemented by no later than December 10, 1993. Rules for reducing PM₁₀ emissions from major industrial sources were adopted in 1978, 1983, and 1989, and reflect reasonably available control measures (RACM) or better.

Table 16 lists the major PM₁₀ facilities in the AQMA, with their main production processes and the current level of emission control technology. Table 17 lists the emission limit rules for major particulate industries in the AQMA. Compliance measurement methods include source testing and continuous emissions monitoring (CEM). Source testing is explicitly required for wood-fired boilers, veneer dryers, wood particle dryers, and charcoal plants. CEM's are required for wood-waste fired boilers, veneer dryers, fiber dryers, and particle dryers. Title V sources are also required to verify applicable emission factors for other processes such as cyclones and baghouses. Source testing, CEM, and emission factor verification requirements are specified in each facility's operating permit. Compliance measurement may also be required by the Department as needed to ensure that sources and air pollution control equipment are operated at their full efficiency and effectiveness.

Table 16: Major PM₁₀ Producing Industrial Facilities

SOURCE NAME	EMISSION UNIT	EMISSION CONTROL EQUIPMENT	LAER/BACT
Boise RV Plywood	Boilers	Wet ESP	LAER
	Veneer Dryers		Lowest Achievable Emission Rate Technology
	Plywood Presses		
Murphy – White City	Veneer Dryer	Ceilcote ionizing wet scrubber	BACT
	Cyclones		Best Available Control Technology
White City Plywood	Veneer Dryers	Electronic Filter Bed	BACT
	Material Handling	Baghouse	LAER
Royal Oak	Briquette Dryer-NG	No controls. Source meets charcoal facility emission limit rule.	BACT
	Briquette Packaging	Baghouse	LAER
Timber Products (N. Medford plant)	Material Transfer	Baghouse	LAER
	Press Vents	Baghouse (Oct. install.)	BACT
	Plywood Dryers	Electronic Filter Bed	BACT
	Particle Dryer	Wet ESP	LAER
Sierra Pine (N. Medford)	Press Vents	None. Source meets press vent emission limit rule.	MACT (will apply for HAPs)
	Boiler – Sander Dust Particle Dryers Material Handling	Wet ESP Wet Scrubber Baghouses	LAER BACT LAER
Medply	Two Boilers – NG	None. Meets Medford boiler rule.	LAER
	Material Handling	Cyclones (2) Baghouse	BACT
	Veneer Dryers	None. Source meets Medford veneer dryer rule.	BACT
Cascade Wood Products	Material Handling	Cyclones (11) 2 to baghouse	BACT
Boise Cascade (N. Medford plant)	3 hog fuel boilers	Dry ESP	LAER
	Veneer Dryers (3)	RCO (regenerative cat. ox)	LAER
	Veneer Dryers (3)	Wet ESP	LAER
	Plywood Presses (4)	None. Source meets Medford veneer dryer rule.	MACT (will apply for HAPs)
	Material Handling	Baghouses (4)	LAER

Table 17: Rule Summary: Industrial PM₁₀ Sources

Type of Process	Rule Requirement
<p>Wood Waste Boilers OAR 340-240-0110</p>	<p>Rule adopted in 1989 to reduce emissions from existing large wood-fired boilers. Rule established an immediate requirement to meet 0.050 grains/dscf. It also established a compliance schedule to meet LAER level control (determined to be 0.015 grains/dscf at that time).</p> <p>The rule required compliance with LAER by no later than December 31, 1994; or upon powerhouse modernization or expansion, whichever occurred first. To lower permitted baseline emission levels and to provide some operational flexibility, facilities on the compliance schedule were allowed to set Plant Site Emission Limits using 0.030 gr/dscf (BACT level control), but actual boiler emissions had to meet LAER (0.015gr/dscf). All sources successfully met the compliance schedule.</p> <p>Powerhouse modernization projects that can be accomplished within the facility's existing permitted emission level are subject to the Medford rule.</p> <p>Proposed new and expanding power-house projects that trigger NSR are subject to both NSR emission control requirements in Division 224 (LAER), and the Medford rule. The facility would be subject to the more stringent requirement. LAER at that time may be the same or more stringent than the Medford rule established for existing boilers.</p> <p>The Medford rule also includes a 5%-10% opacity limit.</p>
<p>Veneer Dryers (Division 240-0120)</p>	<p>Specifies emission limits for various types of veneer drying processes. The Medford rules were adopted in 1991 to address veneer dryer emissions at existing facilities.</p> <p>Proposed new and expanding veneer dryer projects that trigger NSR are subject to both NSR emission control requirements (Division 224) and the Medford rule. The facility would be subject to the more stringent of LAER as it is determined at that time through NSR, or the emission limits set in the Medford rule. LAER at that time may be the same or more stringent than the Medford rule established for veneer dryers.</p>
<p>Air Conveying Systems (Division 240-0130)</p>	<p>Applies to air conveying systems emitting greater than 10 tons/yr PM. The rule requires installation of control systems that provide at least a 98.5% reduction in emissions.</p> <p>This rule was established to address existing facilities. Future new or expanding facilities are subject to NSR.</p>
<p>Wood Particle Dryers at Wood Particleboard Plants (Division 240-0140)</p>	<p>Wood Particle Dryers can not exceed an emission limit of 0.40 lbs/1,000 square feet of particleboard produced (3/4" basis). Rule also sets a 10%-20% opacity limit.</p> <p>This rule was established to address existing facilities. Future new or expanding facilities are subject to NSR.</p>

Type of Process	Rule Requirement
Hardboard Manufacturing Plants (Division 240-0150)	<p>Establishes emission limits for hardboard plants and associated press/cooling vents. Sets total plant emission limit (excluding press-vents at 0.25 lbs/1,000 sq-ft (1/8" basis); and plant limit (including press vents) of 0.55 lbs/1,000 sq-ft (1/8" basis). Therefore, sets a press/cooling vent limit of 0.30 lbs/1,000 sq-ft (1/8" basis).</p> <p>Proposed new and expanding hard board projects that trigger NSR are subject to both NSR emission control requirements (Division 224) and the Medford rule. The facility would be subject to the more stringent of LAER as it is determined at that time through NSR, or the emission limits set in the Medford rule. LAER at that time may be the same or more stringent than the Medford rule established for existing hardboard production.</p>
Wigwam Waste Burners (Division 240-0160)	Rule prohibits the operation of a wigwam burner.
Charcoal Producing Plants (Division 240-0170)	Rule establishes emission limits for charcoal producing plants. Establishes total allowable emission limit for plant at 10 lbs of PM per ton of char produced.
Fugitive Emissions (Division 240-0180)	<p>Requires many facility types to prepare and implement plans for controlling fugitive dust within their facility.</p> <p>For new and expanding sources subject to NSR, this rule would be considered part of LAER level control for the facility.</p>
Requirement for Operation & Maintenance Plans (Division 240-0190)	Requires facilities to develop and implement an operation and maintenance plan to ensure the most efficient operation of the facility, and reduce and quickly correct any unintentional emission upsets. Required for Title V sources. Rules language establishes applicability.
Continuous Emissions Monitoring (Division 240-0210)	<p>Requires instrumentation for measuring and recording emissions and/or process parameters that affect emissions, to ensure that air pollution control equipment is operated at full efficiency and effectiveness. Rule applies to wood-waste boilers, veneer dryers, fiber dryers, and particle dryers. CEM for these sources was required by no later than July 1, 1992 (w/one year extension possible).</p> <p>Rule was developed to address existing sources. CEM would be required as needed for new and expanding sources going through NSR.</p>
Source Testing (Division 240-0220)	<p>Rule requires periodic testing of emissions compliance: covers wood-waste boilers, veneer dryers, wood particle dryers, and charcoal plants.</p> <p>These rules apply to existing sources. Source test requirements for new and expanding facilities will be established by the Department case-by-case.</p>
New Sources (Division 240-0230)	Requires new sources to comply with applicable Medford rules in addition to any NSR requirements. The more stringent requirement will

Type of Process	Rule Requirement
	apply.
Open Burning (Division 240-0250)	No open burning of domestic waste is allowed on any day or any time when the DEQ advises the general public that open burning is banned.

Note: In addition to Oregon NSR and maintenance plan requirements, federal major sources are also subject to requirements of the Prevention of Significant Deterioration (PSD) program.

4.14.7.3 Open Burning Strategies

Local ordinances throughout the AQMA restrict the practice of residential open burning. Below is a summary of local open burning restrictions².

Open burning is prohibited:

- Throughout Jackson County when the Ventilation Index (VI) is forecast below 400.
- Within the AQMA during November³, December, January and February.
- At all times within the city limits of Medford and Jacksonville.
- During fire season as declared by the Oregon Department of Forestry.

Jackson County's air program staff and the Department's regional staff monitor and enforce open burning regulations as necessary. The open burning program also includes a significant effort for public outreach and education. Staff routinely make field visits to homeowners to provide educational materials, warnings, and citations as needed. A summary of local open burning ordinances can be found in Appendix A-4.

Alternatives to Burning: The public information program encourages alternatives to open burning, including composting and the transport of material to a local biomass energy production company (BioMass One). In addition, the State of Oregon offers a 35% tax credit toward the purchase of a wood chipper. This program seeks to help homeowners afford an alternative to open burning, especially in the urban/rural/forest interface areas where land clearing is conducted for fire safety.

4.14.7.4 Road Dust Strategies

PM₁₀ emissions generated by motor vehicle traffic (road dust) have been reduced over the years through efforts to pave unpaved roads, curb and gutter shoulders on paved roads, minimize the use of sanding material, and to control mud and dirt trackout from industrial, construction and agricultural operations. Paving and other dust abatement projects are identified in the Regional Transportation Plan.

In addition, street cleaning programs are in place for the City of Medford, White City,

² Summary taken from Jackson County Air Quality Annual Report 2003, Jackson Bauers-Environmental Health.

³ Jackson County may allow open burning up to November 15th, as long as air ventilation criteria are met.

and the connecting transportation corridor (Highway 62). Jackson County recently used CMAQ⁴ funding to purchase a high efficiency street sweeper for use in the Medford-White City area. This street cleaning program is considered by the Department to be a Transportation Control Measure (TCM) for reducing particulate pollution. At a minimum, the cleaning program must continue to use a high efficiency, vacuum street sweeper(s) (or equivalent), provide geographic coverage that includes the cities of Medford, White City, and significant intervening travel corridors, and provide cleaning frequency no less than twice per month. (see Appendix A-6).

4.14.7.5

Other Strategies

Prescribed Forestry Burning

The Oregon Smoke Management Plan established an emission reduction goal for prescribed burning in Western Oregon with steadily decreasing emission targets between the 1976-79 baseline and the year 2000. Prescribed burning levels in recent years have been well below the emissions goal. In the future, prescribed burning is expected to increase over current levels to address forest health and fire safety issues. In the short term, burning levels may stay below the emission reduction goal established in the Smoke Management Plan (SMP). However, the Department is concerned about proposed future increases in prescribed burning. The state Smoke Management Plan is currently undergoing review and will be updated in 2005. The Department is participating on the SMP advisory committee and will ensure the continued protection of sensitive areas such as the Medford-Ashland AQMA.

Agricultural Trackout

The Jackson County Fruit Growers League has developed a policy to help reduce particulate emissions from roadway trackout. The trackout policy has been distributed to members of the Fruit Growers League and hobby agriculturists. Agriculturists will continue their voluntary efforts to reduce PM emissions by chipping and grinding their prunings and orchard removals. They will continue to use wind-machines and irrigation-related frost protection as a means to reduce reliance on orchard heaters. A copy of the Fruit Growers League policy is included as Appendix A-5.

4.14.7.6 Implementation of the Control Strategy

The initial PM₁₀ attainment strategy for the AQMA was adopted by the Environmental Quality Commission and local jurisdictions in 1991. Compliance by major industry has been monitored by the Department. Implementation of the woodsmoke strategies has been accomplished through intergovernmental agreements between the Department and Jackson County. County air quality program staff operate the public information program, provide daily curtailment forecasting, and perform woodstove and open burning monitoring and enforcement. County staff also facilitate on-going partnerships between air quality program staff from all jurisdictions in the AQMA.

⁴ Congestion Mitigation and Air Quality

4.14.7.7 Schedule for Implementation: On-Going Process

The original control strategies adopted in 1991 will be maintained. The woodstove curtailment program will be evaluated in light of new PM survey information (available spring 2004). The curtailment program may be modified as needed based on survey results. Road paving and other dust reduction projects will continue to be identified in the Regional Transportation Plan. While not required, PM₁₀ emission reductions related to the MACT requirements for major industries are expected by 2007.

The Department will also continue work to address significant air quality issues affecting the AQMA. Of special interest is the impact of diesel trucks in the AQMA, air toxics, the planned increase in prescribed burning, and changes to the particulate strategy that may be needed in response to EPA's review and update of particulate standards (PM₁₀ and PM_{2.5}).

4.14.8.0 Major New Source Review

New Source Review (NSR) is the program that governs emission increases from new and expanding major industry. The most restrictive NSR requirements apply in nonattainment areas, and these have been in effect in the AQMA for many years. Once an area is redesignated to attainment, the Clean Air Act provides an opportunity to design a more flexible NSR Program.

The NSR program includes three major elements:

- Significant Emission Rate (trigger level for the NSR process).
- Emission Control Technology Requirements.
- Air Quality Analysis and Emissions Growth Restrictions (airshed management).

While the Clean Air Act offers the opportunity to ease some New Source Review requirements in attainment areas, Rogue Valley communities have expressed a desire to retain the more stringent nonattainment area requirements for new and expanding major industry to better protect future air quality and public health in the Valley. These include:

- Significant Emission Rate: Based on the recommendation of the Medford-Ashland Air Quality Committee, the Significant Emission Rate (SER) for PM₁₀ in the AQMA will continue to be 5 tons/year and 50 lbs/day. This will allow future industrial emission increases to be closely tracked and managed.
- Emission Control Technology: New and expanding major sources must install state-of-the-art emission control technology known as Lowest Achievable Emission Rate (LAER). The Medford-Ashland Air Quality Committee has recognized that while LAER is generally the more costly emission control approach, it is also the cleanest and most protective of public health. Continuing to require new and expanding industry to install LAER technology also provides

equity for older existing facilities that have already invested significantly in state-of-the-art emission controls.

- Emission Offsets: New and expanding sources must obtain emission offsets at a ratio of 1:1.2 and produce a net air quality benefit. Citizens of the Rogue Valley have expressed their desire to retain this rigorous airshed management approach to better protect public health.

Once redesignated to attainment for PM₁₀, the Medford-Ashland AQMA will be both an Oregon PM₁₀ Maintenance Area and a federal PM₁₀ attainment area. In addition to Oregon requirements for New Source Review, federal requirements for the Prevention of Significant Deterioration (PSD) must also apply to federal major sources. Federal major sources are those facilities with emissions⁵ of 250 ton/year or more, or specific industry types (listed in OAR 340-200-0020(25)) with emissions of 100 tons/year or more.

The PSD program includes emission control technology requirements for new and expanding industrial facilities; as well as two different air quality analysis requirements designed prevent a violation of federal PM₁₀ standards, and limit the amount of air quality degradation that can occur from industrial emission increases. Any new or expanding federal major source will have to meet the more stringent of the Oregon NSR or federal PSD requirements. It is expected that the Oregon NSR requirements will be the more stringent.

4.14.9.0 PM₁₀ Contingency Plan

A process must be established in the maintenance plan to quickly prevent or correct any measured violation of PM₁₀ standards. This process of investigation and (if needed) corrective action is called the “contingency plan”. Contingency plans typically have several stages of action depending on the severity of PM₁₀ levels. Ambient PM₁₀ thresholds are established in the contingency plan as early-warning action levels (one for the daily standard, another for the annual average standard). If monitored PM₁₀ levels exceed these action levels, the contingency provisions are triggered.

If early-warning thresholds are exceeded, the first action will be an evaluation of relevant air quality data to determine why the triggering event occurred (i.e. was it a one time event or uncontrollable event such as a forest fire, or does it indicate a more serious and on-going problem). If circumstances warrant, the local advisory committee could be reconvened to assist the Department in reviewing air quality data, as well as the initial growth assumptions in the air quality plan to determine if any significant changes have occurred since plan adoption. The committee and Department could take corrective action as needed.

⁵ Criteria pollutants such as PM₁₀, CO, VOC

The Medford-Ashland PM₁₀ contingency plan would be triggered if measured PM₁₀ levels at either of the two PM₁₀ monitoring sites (Medford or White City) exceed the early-warning thresholds below, or if a violation of PM₁₀ standards occurs.

Phase 1: Risk of Exceedance

If monitored PM₁₀ levels exceed 120 ug/m³ (24-hr avg.) or 40 ug/m³ (annual average), DEQ will assess the probable emissions and meteorological events contributing to elevated PM₁₀ levels. At the Department's discretion, the Medford-Ashland Air Quality Advisory Committee may be convened to assist the Department in their review. The Department and Committee could recommend that no action be taken if it is determined that: (a) elevated PM₁₀ levels were caused by an event that is unlikely to occur again within the maintenance planning timeframe, or (b) high PM₁₀ levels were caused by an uncontrollable event such as a forest fire. If it is determined that the event was caused by conditions that could occur again, the Department and Committee will evaluate options for appropriate action, including the option for additional emission reduction strategies to prevent future exceedances or a violation of PM₁₀ standards.

Phase 2: Measured Violation

If a violation of PM₁₀ standards occurs, the Department and Committee will determine the probable emissions and meteorological events contributing to the violation, and will implement additional emission reduction strategies as needed to return the AQMA to compliance. The Clean Air Act also requires that all nonattainment area strategies be reinstated until the violation can be resolved and the maintenance plan revised. This 2004 maintenance plan already continues all previous nonattainment strategies. Therefore, should a violation occur, the Department will work to identify the new strategies necessary to ensure compliance.

4.14.10.0

Rules, Regulations and Commitments

The following rules and commitments have been adopted to assure the enforceability of the control strategies.

State of Oregon Rules

The Oregon Revised Statutes (ORS) 468.020, 468.295 and 468.305 authorize the Oregon Environmental Quality Commission to adopt programs necessary to meet and maintain state and federal standards. The mechanisms for implementing these programs are the Oregon Administrative Rules (OAR).

Specific air pollution rules applicable to the Medford-Ashland AQMA (OAR 340-240-0010 to 0070) are included in Section 3.1 of the Oregon State Implementation Plan.

<u>OAR</u>	<u>Subject</u>
340-240-0010	Purposes and Application (General)
340-240-0030	Definitions
340-240-0100	Application (Medford-Ashland AQMA)
340-240-0110	Wood Waste Boilers
340-240-0120	Veneer Dryer Emission Limitations
340-240-0130	Air Conveying Systems
340-240-0140	Wood Particle Dryers at Particleboard Plants
340-240-0150	Hardboard Manufacturing
340-240-0160	Wigwam Burners
340-240-0170	Charcoal Producing Plants
340-240-0180	Control of Fugitive Emissions
340-240-0190	Operation and Maintenance Plans
340-240-0210	Continuous Monitoring
340-240-0220	Source Testing
340-240-0230	New Sources
340-240-0250	Open Burning

Additional rules applicable statewide include, but are not limited to:

<u>OAR</u>	<u>Subject</u>
340-222-0010 to 0090	Plant Site Emission Limits
340-224-0010 to 0100	New Source Review
340-225-0010 to 0090	Air Quality Analysis Requirements
340-218-0010 to 0250	Oregon Title V Operating Permits
340-262-0010 to 0330	Residential Woodheating

Jackson County Ordinances and Orders

Codified Ordinance of Jackson County: Chapter 1810 (Air Pollution)

City of Medford Ordinances and Resolutions

City of Medford Municipal Code: 5.550 (Outside Burning)

City of Medford Municipal Code: 7.222 (Operation of Solid Fuel Burning Device Prohibition).

City of Central Point Ordinances and Resolutions

Title 8: Health and Safety (Open Burning)

Title 8: Health and Safety: (Solid Fuel Burning Devices)

City of Ashland Ordinances

Ashland Municipal Code: 10.30.010 (Open Burning)
Ashland Municipal Code: (Requirement for Solid Fuel Burning Devices)
AMA 9.08.060.J: Trackout restrictions

City of Talent Ordinances

Ordinance #565 (Open Burning)
Ordinance #98-635-0 (Solid Fuel Burning Device)

City of Phoenix Ordinances

City of Phoenix Municipal Code: Chapter 8.16 (Open Burning)
City of Phoenix Municipal Code: Chapter 8.20 (Woodheating Regulations)
Ordinance No. 792: Control of Dust and Trackout

City of Jacksonville Ordinances

Ordinance 375 (Open burning)
City of Jacksonville Municipal Code. Chapter 8.10 (Woodheating)

City of Eagle Point Ordinances

City of Eagle Point Municipal Code, Article IV, 8.08.16 (Open Burning)

Interagency Commitments

Oregon Department of Forestry Smoke Management Plan,
OAR 629-43-043

4.14.11.0

Emergency Action Plan Provisions

OAR 340 Division 206 describes Oregon's Emergency Action Plan. The rule is intended to prevent the excessive accumulation of air contaminants during periods of air stagnation which, if unchecked, could result in concentrations of pollutants which could cause significant harm to public health. The rules establish criteria for identifying and declaring air pollution episodes below the significant harm level and were adopted pursuant to requirements of the Clean Air Act. The action levels found in the Plan were established by the Environmental Protection Agency and subsequently adopted by the Department.

The 24-hour average emergency action levels for PM₁₀ (adopted by the Environmental Quality Commission April 29, 1988) are as follows: significant harm level of 600 mg/m³, emergency level of 500 mg/m³; warning level of 420 mg/m³; and alert level of 350 mg/m³.

These PM₁₀ levels, coupled with meteorological forecasts for continuing air stagnation, trigger the Emergency Action Plan. PM₁₀ concentrations have never been measured at the warning, emergency or significant harm level in the Medford-Ashland AQMA. Alert levels were measured during a severe air stagnation episode in December 1985 and during wildfire impacts in September 1987.

Authority for the Department to regulate air pollution sources during emergency episodes is provided under Oregon Revised Statutes (ORS) Chapter 468, including emissions from woodstoves. When there is an imminent and substantial endangerment to public health, ORS 468.115 authorizes the Department, at the direction of the Governor, to enforce orders requiring any person to cease and desist actions causing the pollution. State and local police are directed to cooperate in the enforcement of such orders.

4.14.12.0 Public Involvement

Development of the initial 1991 Medford-Ashland AQMA PM₁₀ control strategy included several areas of public involvement including a citizen advisory committee, public participation at hearings on proposed industrial source rules, and attendance at hearings conducted by the Jackson County Board of Commissioners and cities within the AQMA. Public involvement in the 1998-2004 plan revisions included a stakeholders advisory committee, public workshops, and public hearings.

4.14.12.1 Citizen Advisory Committees

The Jackson County Board of Commissions appointed members to the Jackson County Woodburning Task Force in May 1987 to assist the County, cities within the AQMA, and the Department in the development of control programs for the Medford-Ashland AQMA. The Task Force considered alternative control strategies and provided recommendations to the Board in December 1987.

In 1996, the Medford-Ashland Air Quality Advisory Committee was convened by the Department to assist in the development of the revised PM₁₀ attainment plan and the PM₁₀ maintenance plan. The Committee's recommendations, together with public comment, have been considered by the Department in drafting this attainment and maintenance plan. A record of materials submitted to the Committee and summary reports of Committee meetings are on file with the Department.

The 1996-2003 Committee membership includes one representative from each of the interests:

Medford-Ashland Air Quality Advisory Committee (2003)

- Local Business
- Jackson Co. Environmental Health Dept.
- City of Ashland
- City of Talent
- City of Medford
- City of Central Point
- City of Jacksonville
- City of Eagle Point
- City of Phoenix
- Jackson County Board of Commissioners
- Private Citizen
- Rouge Valley Transportation District
- Oregon Dept. Of Forestry
- Oregon Dept. of Transportation
- Jackson Co. Home Builders Association
- Jackson Co. Chamber of Commerce
- Jackson Co. Fruit Growers League
- Rouge Valley Council of Governments
- League of Women Voters
- Sierra Club
- Coalition To Improve Air Quality
- Boise Cascade Corporation
- Southern Oregon Timber Industries Association
- Rogue Disposal and Recycling, Inc.

4.14.12.2 Public Notice

Public notice of proposed rule revisions is done through mailing lists maintained by the Department, through notifications published in local newspapers, and through Department press releases.

4.14.12.3 Public Hearings

An informational public workshop was held on December 9, 2003, in Medford to provide the public an opportunity to ask questions of staff and express their air quality concerns. Briefings on the draft attainment and maintenance plan were provided to each city council in the AQMA and the Jackson County Board of Commissioners. A public hearing was held on December 16, 2003 to receive public testimony on the proposed attainment and maintenance plan. Due to intense public interest, the public comment period was extended to January 29, 2004, and second public hearing was held on January 21, 2004.

4.14.12.4 Intergovernmental Review

Public hearing notices regarding adoption of this revision to the State Implementation Plan will be distributed for public and state agency review prior to adoption by the Environmental Quality Commission.

4.14.12.5 State Implementation Plan Requirements

The Medford-Ashland PM₁₀ Attainment and Maintenance plan meets all state implementation plan requirements specified in Section 110 and Part D of the Clean Air Act. In summary, Section 110 requires states to submit a plan that becomes part of the state implementation plan, to provide for the implementation, maintenance, and enforcement of

air quality standards. Part D of the Clean Air Act outlines specific plan requirements for nonattainment areas.

4.14.12.6 Approved State Implementation Plan

The 2004 Medford-Ashland PM₁₀ Attainment and Maintenance Plan contain emission reduction and emission growth management strategies needed to achieve and maintain compliance with PM₁₀ standards. The PM₁₀ Plan has been adopted as a revision to the State of Oregon Clean Air Act Implementation Plan (SIP).

4.14.12.7 1990 Clean Air Act Requirements (Attainment Date)

The Medford-Ashland AQMA has met the requirements for PM₁₀ nonattainment area established in the 1990 Clean Air Act amendments. The area successfully met the applicable Clean Air Act attainment deadline of December 31, 2004.

4.14.12.8 Monitoring Network and Commitments

DEQ is responsible for the operation of the permanent ambient PM₁₀ monitoring network in the Medford-Ashland AQMA. DEQ oversees the quality control and quality assurance program for the monitoring data.

DEQ will continue to comply with the air monitoring requirements of Title III, Section 319, of the Clean Air Act. The monitoring will also continue to be operated in compliance with EPA monitoring guidelines set forth in 40 CFR Part 58, "Ambient Air Quality Surveillance", and Appendices A through G of Part 58. In addition, DEQ will continue to comply with the "Ambient Air Quality Monitoring Program" specified in Volume 2, Section 6 of the Oregon SIP. Further, DEQ will continue to operate and maintain the network of State and Local Air Monitoring Stations and National Air Monitoring Stations in accordance with the terms of the State/EPA agreement.

4.14.12.9 Verification of Continued Compliance

DEQ will analyze PM₁₀ air quality data on a seasonal and annual basis to verify continued compliance with PM₁₀ standards, in accordance with 40 CFR Part 50 and EPA's Redesignation guidance. Monitored PM₁₀ data will provide the information necessary to determine whether the AQMA continues to attain National Ambient Air Quality standards.

The Clean Air Act requires the state to submit a revision and update to the approved maintenance plan eight years after the first maintenance plan is approved by EPA. The updated maintenance plan must ensure continued compliance with PM₁₀ standards for an additional ten years.

For the interim period between EPA approval of the plan and the required plan update, DEQ will rely on ambient monitoring data to track progress of the maintenance plan. The growth assumptions for the AQMA are modest. As long as monitoring data shows no significant

upward trend in PM₁₀ concentrations, a mid-term emission inventory update will not be necessary. If PM₁₀ concentrations significantly increase over current levels, the cause will be investigated and further action take as necessary, consistent with the provisions of the Contingency Plan (Section 4.14.9.0).

4.14.12.10 Other Commitments

DEQ will conduct additional saturation studies as needed to evaluate the PM₁₀ monitoring network, in consultation with EPA.

DEQ will evaluate growth and other planning assumptions as necessary through the provisions of the contingency plan described in Section 4.14.9.0.

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Appendices

Appendix A-1

Ambient Air Quality and Monitoring Methods

Appendix A-1: Ambient Air Quality and Monitoring Methods

Particulate ambient air quality monitoring for Total Suspended Particulate (TSP) began in Medford in 1969 at the Jackson County Courthouse near Oakdale/Main Streets. TSP monitoring in White City near Agate Road began in 1977.

The Medford Aerosol Characterization Study (MACS) was conducted during 1979-81 in order to determine the sources contributing to the TSP and respirable particulate (particles smaller than 2 μm) problems in the Medford and White City areas. MACS included both dispersion modeling (climatological dispersion model, or CDM) and receptor modeling (chemical mass balance, or CMB).

An automated particulate monitor (APM) was installed in 1978 in Medford at the Brophy Building at Central/Main Streets. An integrating nephelometer was added at Central/Main in 1980. The APM and nephelometer provide hourly average data that can be used to estimate particulate concentrations. These instruments have been used to report the daily particulate subindex for the Air Pollution Index since 1978.

PM_{10} monitoring began in Medford and White City in 1983. Based on measured violations of the PM_{10} standards during 1983-86, the Medford - White City area was identified as a Group I PM_{10} area in August 1987. During 1984-86, the PM_{10} concentrations on worst days were over 300 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), or over twice the 24-hour PM_{10} standard of 150 $\mu\text{g}/\text{m}^3$, and the annual average was over 60 $\mu\text{g}/\text{m}^3$, or about 20% above the annual PM_{10} standard of 50 $\mu\text{g}/\text{m}^3$.

A Medford particulate gradient study was conducted from September 1985 to February 1986 in order to characterize the TSP and PM_{10} gradients and determine if additional monitoring sites should be established. This gradient study included the extended air stagnation episode of December 1985 which resulted in the highest PM_{10} levels measured to date in the Medford area. TSP levels were generally higher at the Oak/Taft and Haven/Holly gradient study sites than at the historical monitoring site at Oakdale/Main; but PM_{10} levels were similarly high during December 1985 at the historical monitoring site at Oakdale/Main and the special monitoring sites at Oak/Taft and Haven/Holly. As a result of this study, an additional PM_{10} monitoring site was established at the Oak/Taft site (1985-88) and the Welch/Jackson site (1989 on) in order to insure that the monitoring network included the site of maximum impact.

Air Monitoring Methods

Several sampling methods have been used to measure TSP or PM_{10} concentrations in Medford:

The TSP High-Volume air sampler collects TSP samples on pre-weighed 8" X 10" filters through which air is drawn at 50 cubic feet per minute (CFM) over a 24-hour period. Because these samplers are not equipped with a size selective inlet, the upper limit of particle size captured on the filter may reach 100 μm . Prior to EPA's

adoption of the PM₁₀ NAAQS, this method was the standard reference method for measurement of airborne particulate matter.

The PM₁₀ Medium-Volume (MV) sampler collects PM₁₀ aerosol using a 12 port, 47 mm filter sequencing system that is programmed to collect 24-hour samples. The sampler pulls ambient air at a 4 CFM flow rate through a 10 µm Sierra-Anderson 254 inlet providing a PM₁₀ cut point. A dual-port system capable of simultaneously collecting aerosol on both Teflon and quartz filter substrate is used to allow complete chemical analysis for CMB receptor modeling purposes. EPA has designated the MV sampler as a reference method. Sampling typically occurs every day during the winter months and every sixth day during the remainder of the year.

The PM₁₀ High-Volume Size-Selective-Inlet (HV-SSI) is a sampler equipped with a Sierra-Anderson SA321A, SA321B or SA1200 PM₁₀ cut-point inlet. This method (except for the SA321A) has been designated by EPA as a reference method. Sampling typically occurs every sixth day.

Integrating Nephelometer measurements of light scattering (a surrogate for PM₁₀) have been conducted at Central/Main. This method provides hourly light scattering averages which are highly correlated to PM₁₀ concentrations measured using the MV or HV-SSI reference methods.

Table A-1.1: Data Collection Periods/Methods at Jackson County Courthouse (Oakdale/Main) or Brophy Building (Central/Main).

Measurement Method	Began	Terminated
TSP High-Volume (TSP)	Jan-69	Current
Automated Particulate Monitor (APM)	Apr-78	Aug-88
Integrating Nephelometer	Apr-80	Current
PM ₁₀ Dichotomous Virtual Impactor (VI)	May-83	Sep-87
PM ₁₀ High-Volume (SSI)	May-83	Oct-89
PM ₁₀ Medium-Volume (MV)*	Dec-87	Current

* Both Teflon and quartz filter substrate are used.

PM₁₀ concentrations in a given 24-hour period can vary by about +/-10% depending on the monitoring method used. The differences between methods have decreased over time as the sampler manufacturers have improved the units; as a result, several units have recently been designated as reference methods by EPA. The reference methods include the following units that have been used in Medford: the Medium-Volume PM₁₀ samplers, the High-Volume SSI samplers (Models SA321B and SA1200), and similar but not identical Low-Volume Dichotomous VI samplers.

Because of the differences in monitoring methods, especially in the period prior to designation of reference methods, PM₁₀ data in the following sections is sometimes referred to as PM₁₀MV, PM₁₀SSI, or PM₁₀VI to indicate the monitoring method used to collect the data. EPA guidance¹¹ indicates that: non-reference PM₁₀SSI data prior to August 1988 should be multiplied by a factor of 0.8-1.0 in order to reflect the "grey-zone" around true PM₁₀ concentrations (i.e., the PM₁₀SSI data is biased high relative to the other PM₁₀ monitoring methods); and non-reference PM₁₀VI data prior to August 1988 should be taken at face value, since the VI samplers had excellent performance in the EPA intercomparison studies. DEQ intercomparisons between the SSI, VI and MV samplers indicated that the MV method produced results in between the SSI and VI methods (i.e., lower than the SSI but higher than the VI).

The composite of all available particulate data was used to calculate everyday PM₁₀VI and PM₁₀SSI values for 1984-86.¹² Since most of the recent and future PM₁₀ data will be collected as PM₁₀MV, and in order to properly compare future PM₁₀ levels with the historical PM₁₀ levels, the historical PM₁₀ data has been converted to the PM₁₀MV-equivalent using the following formula based on the Department's intercomparison studies:

$$PM_{10}MV = 1.044 (PM_{10}VI) + 5.38$$

The PM₁₀MV data results in only slightly higher PM₁₀ values than using PM₁₀VI data at face value (about 6% higher at the 24-hour design value). More importantly, the PM₁₀MV agrees quite closely with the dispersion modeling results and provides the measured mass data for the chemical fingerprinting analysis in recent and future years.

PM10 Air Quality in Medford and White City

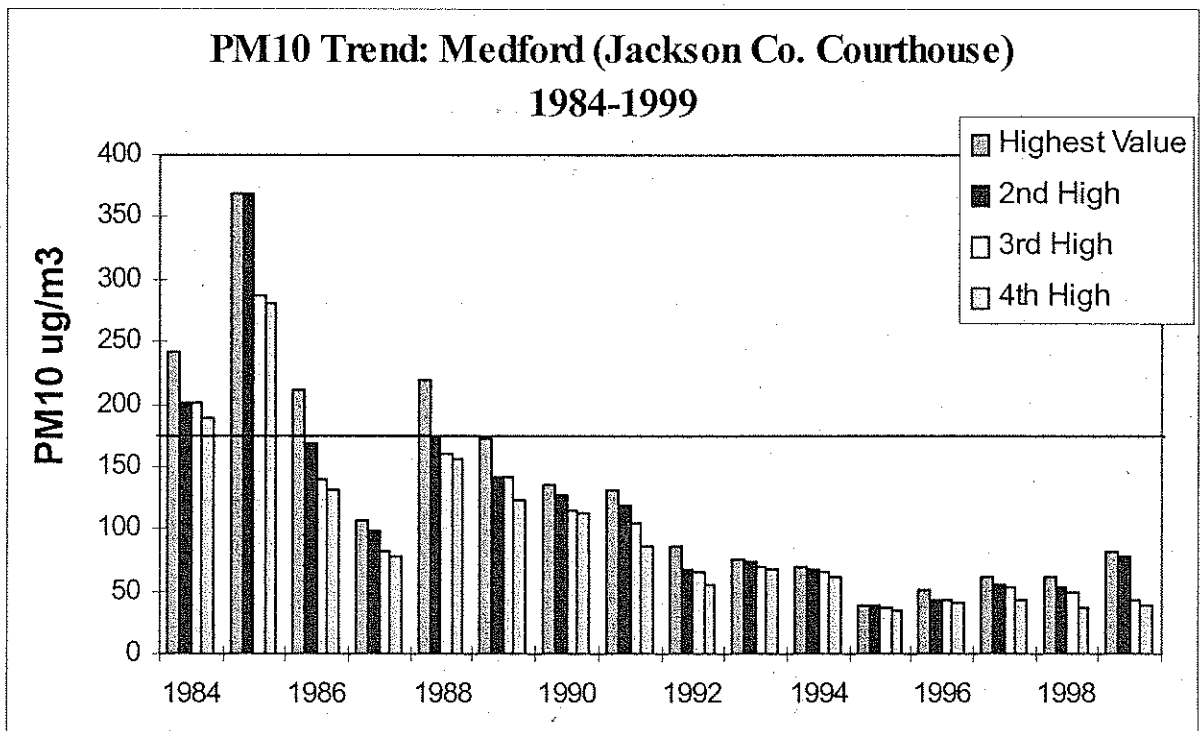
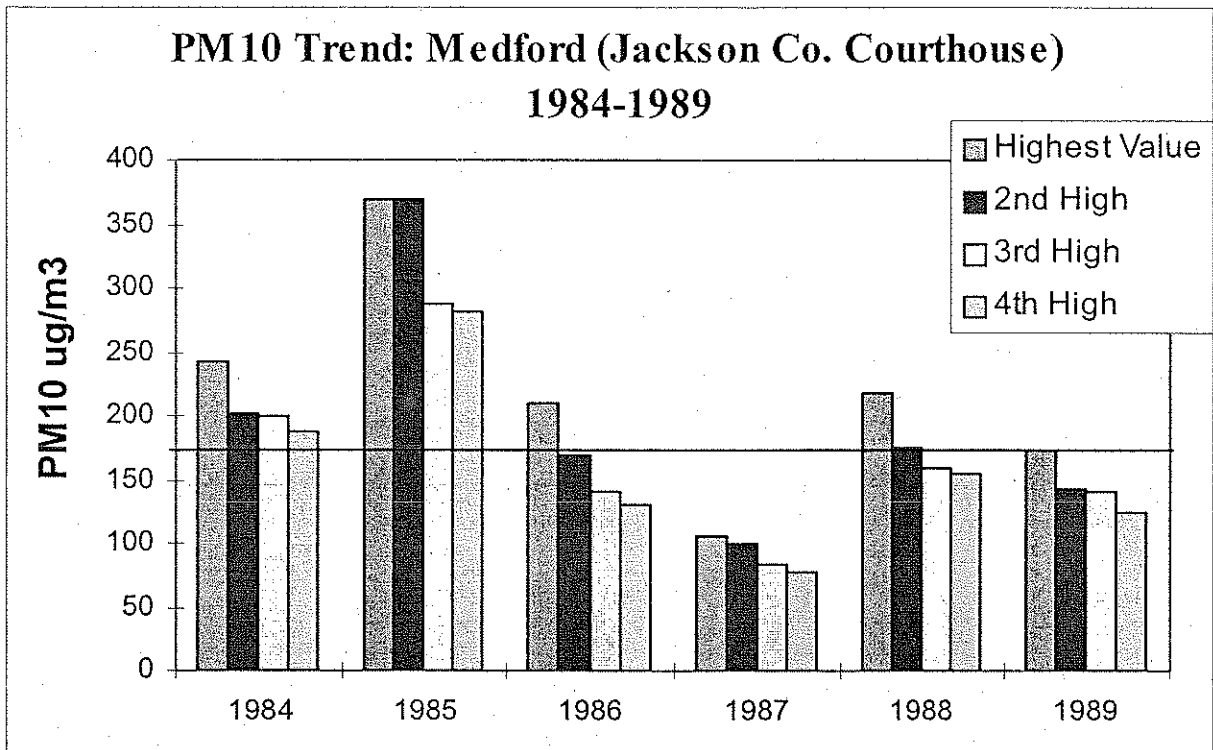
The PM10 MV-equivalent data from the Courthouse and White City Post Office for the 1984-89 period are plotted in figures A1 and A2. Peak PM10 concentrations typically occur during December and January. This is due to poorer ventilation and increased woodheating emissions during these months. The peak PM10 levels measured or calculated during 1984-89, other than the forest fire smoke impacts in September 1987, are summarized in Table A-1.2.

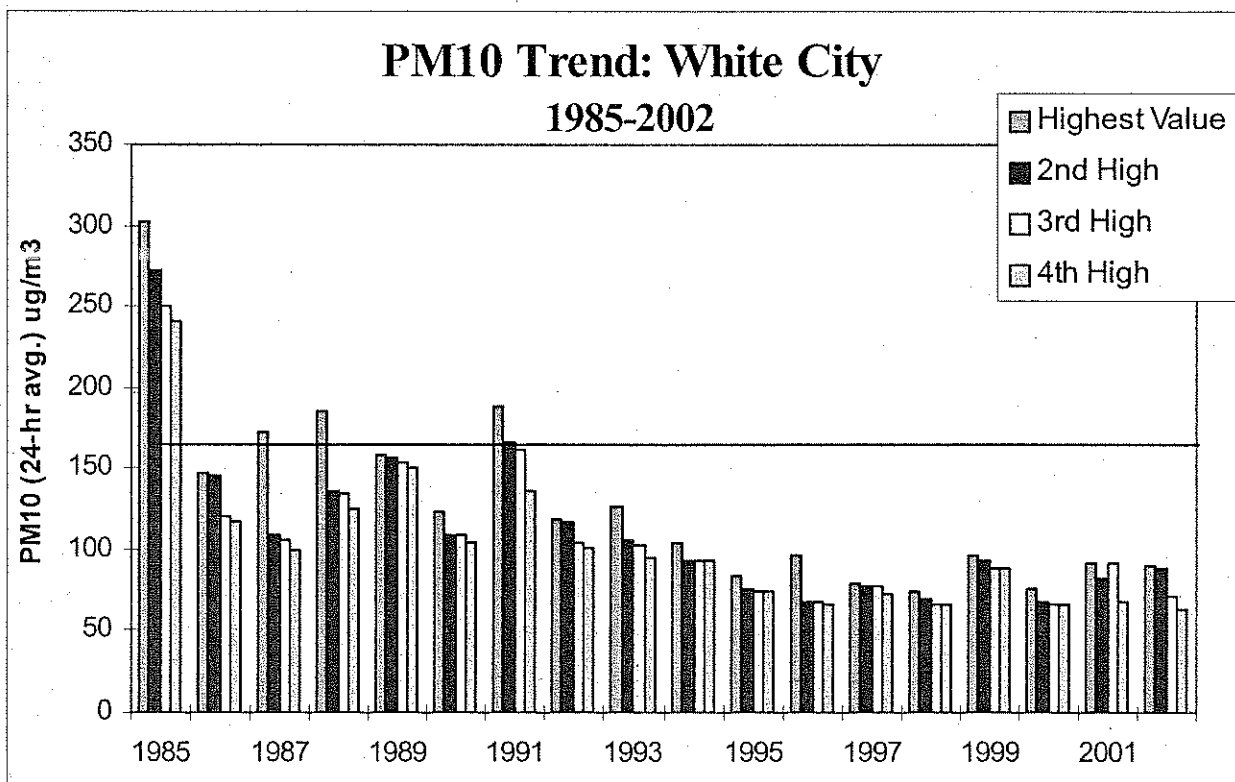
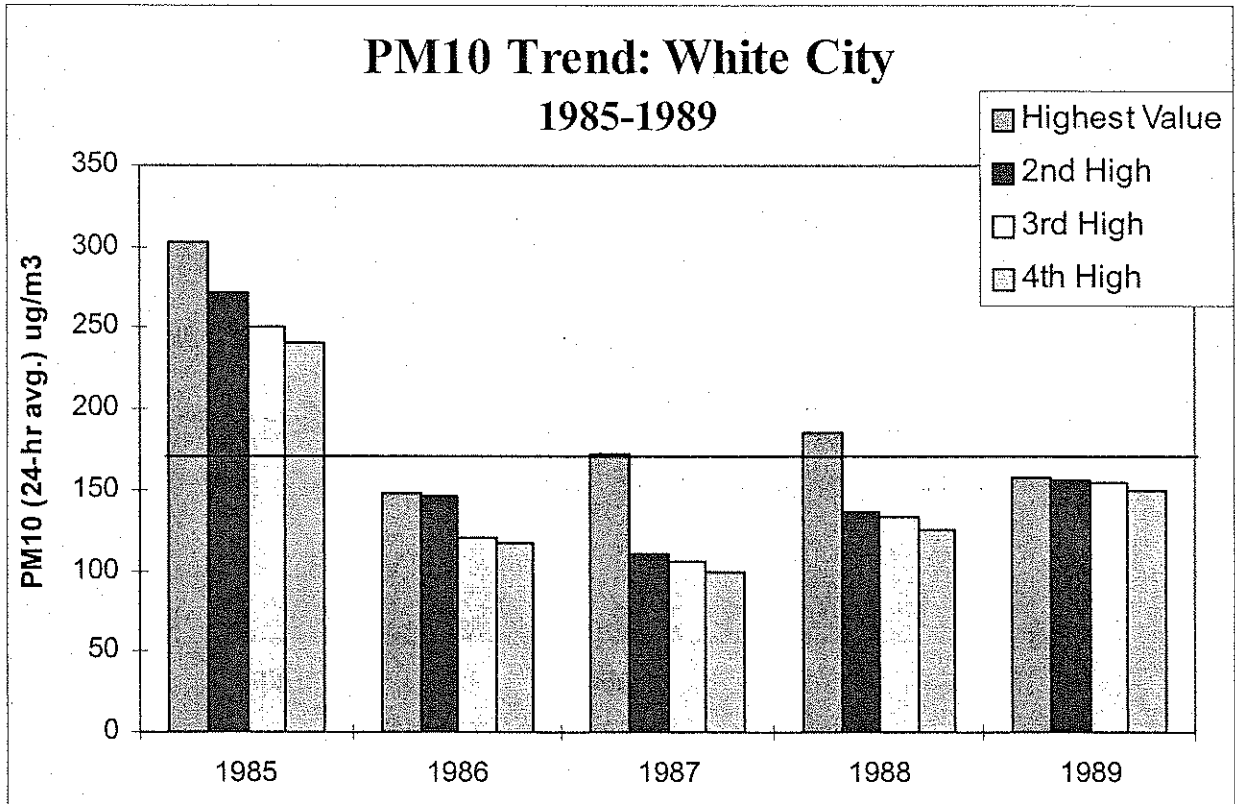
¹¹Revision to Policy on the Use of PM₁₀ Measurement Data, November 21, 1988.

¹²M.L.Hough, Estimation of Everyday PM₁₀ Concentrations Using Non-reference Monitoring Methods, In Transactions, PM₁₀: Implementation of Standards, Edited by C.V.Mathai and D.H. Stonefield, TR-13, APCA, Pittsburgh, PA (1988).

Table A-1.2: Peak PM₁₀MV and PM₁₀VI Levels (µg/m³) During 1984-86 in the Medford-Ashland AQMA.

Rank	PM ₁₀ MV	PM ₁₀ VI	Date	Location
Highest Value	327	308	851217	Courthouse
Second Highest	326	308	851223	Courthouse
Third Highest	295	277	851218	Courthouse
Fourth Highest	283	266	851220	Courthouse
Fifth Highest	269	253	851229	Courthouse
Highest Value	363	NA	851217	Oak & Taft
Second Highest	340	NA	851219	Oak & Taft
Third Highest	330	NA	851223	Oak & Taft
Fourth Highest	297	NA	851220	Oak & Taft
Fifth Highest	295	NA	851218	Oak & Taft





Appendix A-2

Executive Summary PM₁₀ Emission Inventory and Emissions Forecast Medford-Ashland AQMA

Note: The PM₁₀ emissions inventory and emissions forecast document is incorporated here by reference, and is available for review at the following locations:

Department of Environmental Quality
Air Quality Division
811 SW 6th Ave.
Portland, OR 97204

Department of Environmental Quality
Medford Office
201 West Main Street, Suite 2-D
Medford, OR 97501

STATE OF OREGON AIR QUALITY CONTROL PROGRAM,
VOLUME 3: STATE IMPLEMENTATION PLAN APPENDICES

SECTION 4.57: MEDFORD-ASHLAND AQMA

Appendix D8: Medford-Ashland PM-10
D8-4: Emission Inventory and Forecast

State of Oregon
1998 Attainment Year
&
2015 Maintenance Year
SIP Emission Inventory
For Particulate Matter 10 Microns and Smaller
(PM₁₀)

Medford-Ashland AQMA

23 OCTOBER 2003

Oregon Department of Environmental Quality
Air Quality Division
811 SW 6th Avenue
Portland, Oregon 97204

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EXECUTIVE SUMMARY

The Medford-Ashland Air Quality Maintenance Area (AQMA)¹ has met the National Ambient Air Quality Standards (NAAQS) for PM₁₀. In accordance with the 1990 Federal Clean Air Act Amendments (CAAA), the area can now be redesignated from nonattainment to attainment status through a process which involves developing a Redesignation Request and Maintenance Plan. This attainment year emission inventory (1998) and emission forecast (2015) inventory is provided as part of the maintenance plan package to show compliance with published EPA requirements. The principal components for development and documentation have been addressed in this inventory, which includes stationary point sources, stationary area sources, non-road mobile sources, on-road mobile sources, quality assurance implementation, and emissions summaries. The geographic focus for the emissions inventory and forecast is the Medford-Ashland PM₁₀ Nonattainment Area, otherwise known as the Medford-Ashland Air Quality Maintenance Area (AQMA).

In this document the terms “annual emissions” and “worst case season day” emissions are used to categorize the estimated emissions for a particular time period. The annual emissions, in tons per year, are a total amount of emissions for the source category that occurred throughout the year. The worst case season daily emissions, in pounds per day, are based on the definition of the yearly period from November 1st through the end of February as one in which, historically, the daily PM₁₀ standard would most likely be exceeded. Thus, in the preparation of this document, the Oregon Department of Environmental Quality (ODEQ) took extra care to look at the daily emissions from the source categories and adjust them accordingly to represent appropriate seasonal emission values during this four month time period which is then described as a “worst case season day” emission. Not all of the source categories inventoried require adjustment. For example, the 1998 worst case season day emissions for the large Industrial Point Sources are based on the annual emissions value reported to the Department in the annual reports submitted by the sources. Typically, Industrial production and emissions are fairly constant throughout the year thus a seasonal adjustment for a worst case day in 1998 would not be needed.

Many area sources, such as Residential Wood Combustion, that are influenced by factors such as temperature and home heating demand during this season were adjusted to reflect the higher daily emissions that occur. Residential heating is adjusted based on how cold the weather got during this period.

On Road Mobile worst case season day emissions are based on motor vehicle travel during the worst case period of time: Monday through Friday. Still, the highest On Road Mobile emissions would most likely occur during the summer months when tourism traffic picks up. Influence of the summer emissions are captured in the annual emissions estimate.

Complete descriptions of the procedure taken to estimate these “worst case season day” emissions can be found on the individual source calculation pages in Part 2.

¹ For particulate matter smaller than 10 microns (PM₁₀)

During the worst-case 1998 season day, on-road mobile sources contribute 45% of the total PM₁₀ air emissions in the Medford-Ashland AQMA. Gasoline vehicles contribute 97% of the PM₁₀ emissions within the on-road mobile category, whereas diesel vehicles contribute 3% of the on-road mobile category.

Stationary area sources comprise 43% of the total PM₁₀ air emissions in the Medford-Ashland AQMA during a worst case winter PM₁₀ season day. Within the area source category, residential wood combustion accounts for 87% of these worst-case day emissions. Within a subset of wood combustion, fireplaces account for 25% of the total emissions, and wood and pellet stoves account for 75% of the PM₁₀ wood heating emissions.

Non-road mobile sources contribute 2% of the total PM₁₀ on a worst-case winter day. Within this category, diesel engines comprise 46% of the total emissions, and aircraft comprise approximately 38% of the total, worst-case day non-road emissions.

Stationary point sources comprise 10% of the PM₁₀ air emissions in the Medford-Ashland AQMA on a worst-case winter season day. This category includes only those stationary sources with annual PM₁₀ emissions greater than 5 tons per year. There are 15 such large point sources within the Medford-Ashland AQMA.

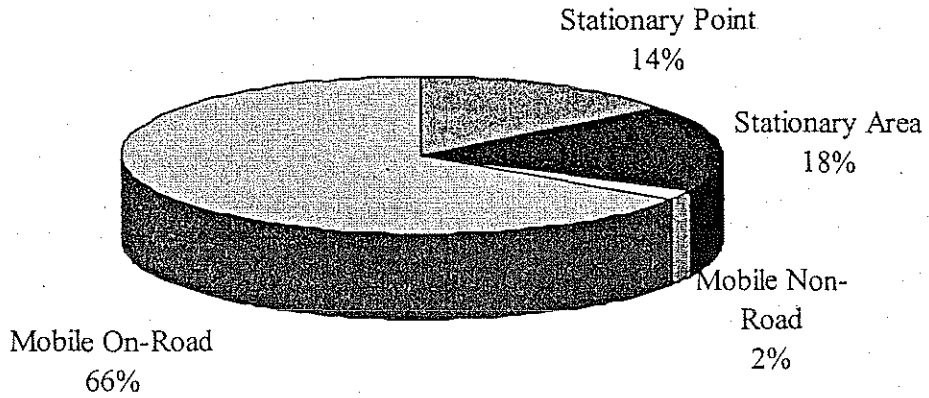
Details of the Oregon 1998 Medford-Ashland AQMA PM₁₀ Attainment Year and 2015 Maintenance Year SIP Emission Inventories from stationary point, stationary area, non-road mobile, and on-road mobile sources are presented in the following document.

Executive Summary Table 1: Summary of 1998 Emissions Data

Medford-Ashland PM₁₀ Emissions		
<i>1998 Emissions</i>	<i>Tons per Year</i>	<i>Pounds per Day</i>
Stationary Point Sources	535.4	3,274.0
Stationary Area Sources	685.0	13,503.5
Non-Road Mobile Sources	67.2	604.5
On-Road Mobile Sources	2,452.1	14,178.9
Total	3,739.8	31,560.8

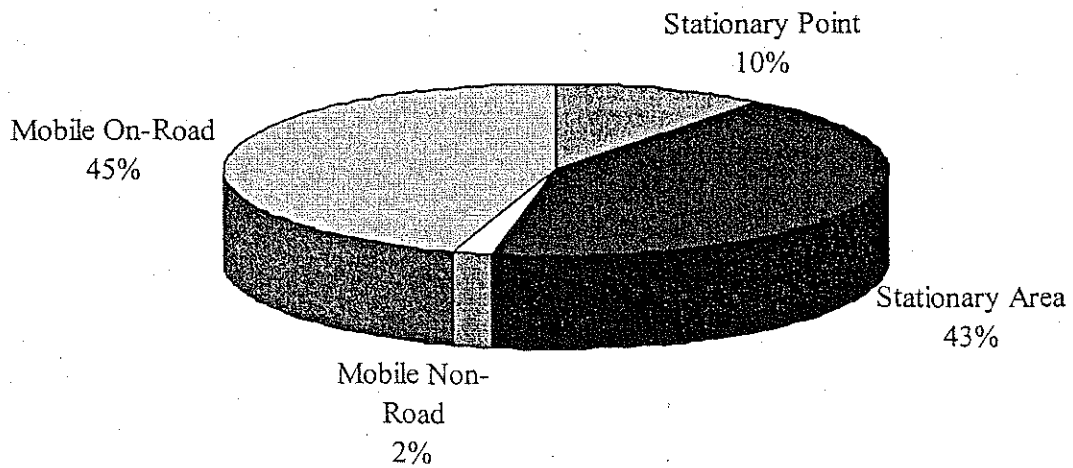
Executive Summary Figure A: 1998 Annual Emissions Percentage by Category

1998 Annual Emissions Medford-Ashland AQMA



Executive Summary Figure B: 1998 Seasonal Emissions Percentage by Category

1998 Worst Case Season Day Emissions Medford-Ashland AQMA



To show continued maintenance, the 1998 emissions inventory was projected out to the year 2015. Since levels of growth are varied depending upon the type of PM10 source category, a variety of applicable growth factors were developed for application to the 1998 emission inventory. Based on recommendations by the Medford-Ashland Air Quality Advisory Committee, ODEQ calculated the appropriate population, household, employment, VMT, aircraft activity, and selected employment growth rates. ODEQ also provided growth assumption for firewood use based on analysis of wood heating survey trends from 1985 to 1997. The growth rates can be found below in Table 2.

For each source category, the 1998 emissions were grown based on a linear non-compounding formula utilizing the growth rates. A discussion of this projection formula can be found in Section 2.7 of this document. When forecasting emissions for major point sources it is our common practice to reflect the future emissions at growth adjusted Plant Sight Emission Limits (PSEL) based on the industrial population growth rate. In the Medford-Ashland AQMA the major point sources are dominated by the wood products industry. The employment in this industrial segment however, is expected to decline during the first 10 years of the 21st century. Therefore the projected emissions from the major point sources are based on the higher of PSELs or rule adjusted baseline and held constant at this permitted level out to 2015.

Stationary area source emissions were projected using the linear growth formula and the appropriate source specific growth rate. For example, the commercial/institutional emissions from fossil fuel use for 2015 were grown with the rate that was determined by the growth in commercial population. The growth rate applied to each area source category can be found in Appendix B Table B-16.

The growth of the non-road mobile emissions was accomplished by using the population growth rate. The emissions from railroad activity were grown based on industrial employment figures.

Future year 2015 estimates for mobile source VMT are estimated through the EMME/2 travel demand model and the mobile source emissions are calculated from this VMT. The interim years are then calculated by adding the average yearly growth to the prior year.

The emissions for 2015 are summarized below in Table 3. Complete future year forecasted emission values, up to 2015, can be found in Appendix E tables. Figures G and H below compare the levels of emission sources between the inventory years.

Executive Summary Table 2: Growth Rate Summary

Category	Applied growth rate	Growth Type
Population (Zoning & Land Use Based)	1.56%	Linear, Non-Compounding
Household growth	1.52%	Linear, Non-Compounding
Commercial Population	1.40%	Linear, Non-Compounding
Industrial Population	1.47%	Linear, Non-Compounding
Wildfires, Slash Burning	0.00%	No Growth
Agricultural Population	1.67%	Linear, Non-Compounding

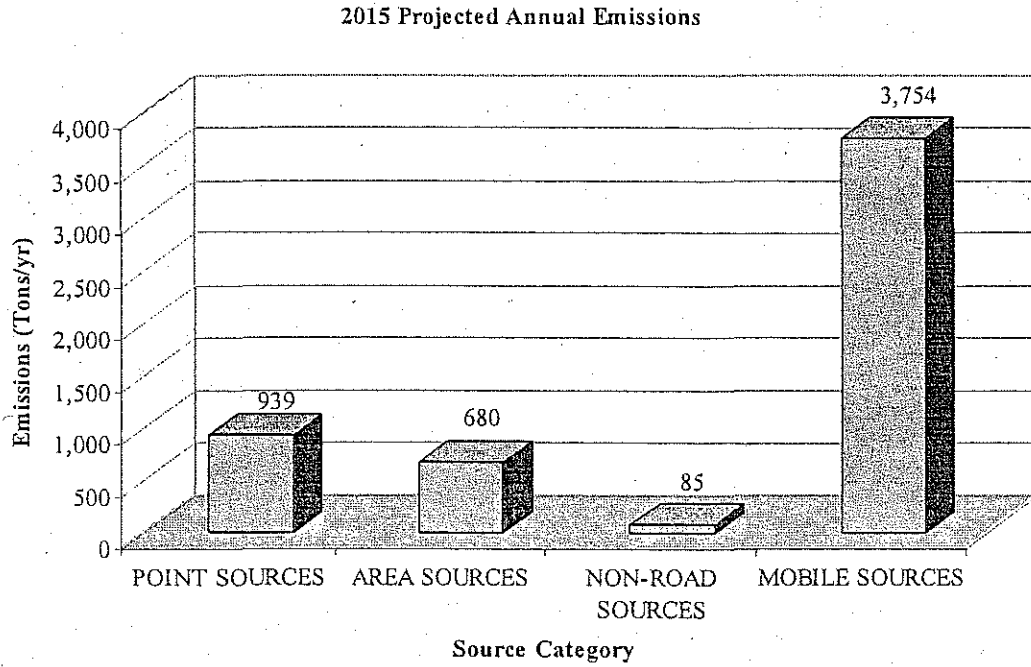
Executive Summary Table 3: Summary of 2015 Emissions Data

Medford-Ashland PM10 Emissions		
<i>2015 Emissions</i>	<i>Tons per year</i>	<i>Pounds per Day</i>
Stationary Point Sources (PSEs)	939.0	8,256.0
Stationary Area Sources	679.5	13,043.8
Non-Road Mobile Sources	85.1	764.6
Mobile Sources	3,754.1	20,998.9
Total	5,457.7	43,063.3

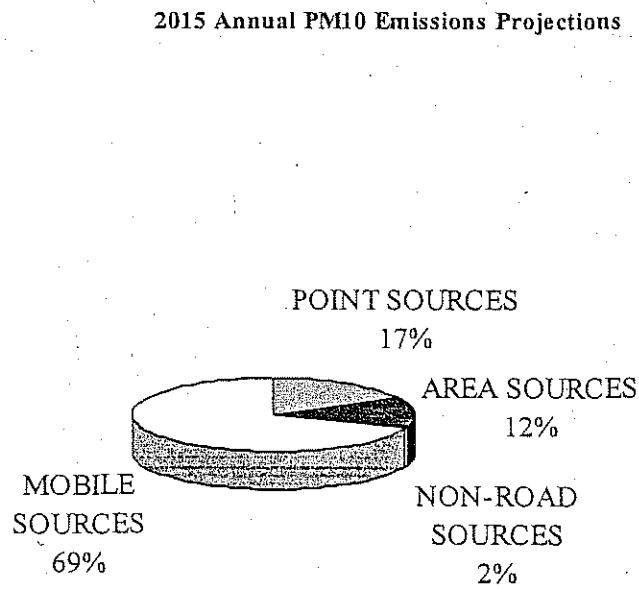
Lastly, EPA requires an in-depth analysis to demonstrate that the AQMA will remain in compliance with PM₁₀ standards. The analysis uses an air quality dispersion model that combines emissions and local meteorology to estimate PM₁₀ concentrations at over 700 locations in the AQMA. The PM₁₀ emissions inventory is used to support this analysis in three ways:

1. Model Performance Testing: The first step in the PM₁₀ modeling analysis is to verify that the dispersion model can reasonably predict PM₁₀ concentrations in the AQMA. Actual emissions from the calendar year 1998 Emissions Inventory (Table 1) were used in the dispersion model, together with 1998 meteorology, to estimate PM₁₀ concentrations in the AQMA. In order to evaluate the dispersion model performance, the model predicted PM₁₀ levels were compared to measured PM₁₀ levels at the Medford monitors located at the Welch and Jackson, Medford Court House, and White City Post Office locations. Actual 1998 emissions reflect reported and estimated activity data for 1998, including reported actual emissions from major point sources.
2. Attainment Analysis (demonstration of current compliance). The Attainment analysis must show that the AQMA is in compliance with PM₁₀ standards today, even under hypothetical worst-case conditions. The 1998 emissions inventory was used for this analysis, with one important modification: for the worst-case attainment scenario, emissions from major industry are represented at their maximum allowable permitted levels (not actual levels as reported for 1998). The Attainment analysis also uses meteorology from 1998, and stagnation meteorology from 1999 and 2000. The Attainment analysis is discussed in more detail in the PM₁₀ Attainment and Maintenance Plans, and in the modeling documentation.
3. Maintenance Analysis (demonstration of future compliance): The Maintenance analysis reflects predicted PM₁₀ levels in the AQMA in the year 2015 under worst-case conditions. The analysis reflects anticipated growth in emissions and utilizes the emissions forecast to 2015. Major industrial sources are again modeled at their legally allowable levels. The 2015 analysis also uses the stagnation meteorology from 1998, 1999, and 2000. The Maintenance analysis is discussed in more detail in the PM₁₀ Attainment and Maintenance Plans, and in the modeling documentation.

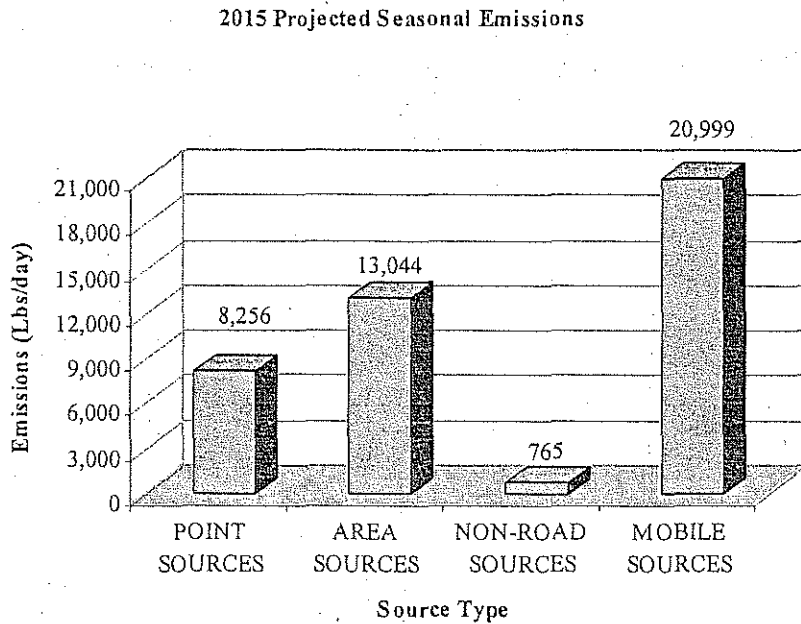
Executive Summary Figure C: 2015 Annual Emissions by Category



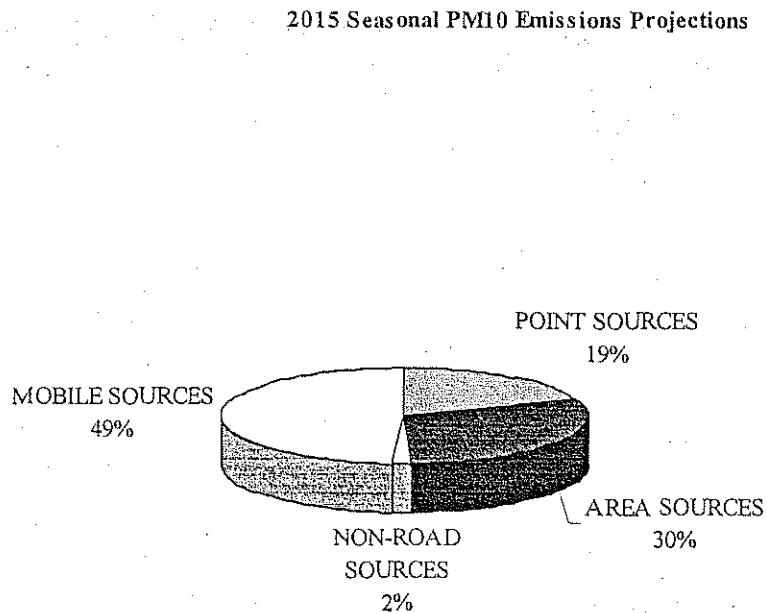
Executive Summary Figure D: 2015 Annual Emissions Percentage by Category



Executive Summary Figure E: 2015 Seasonal Emissions by Category

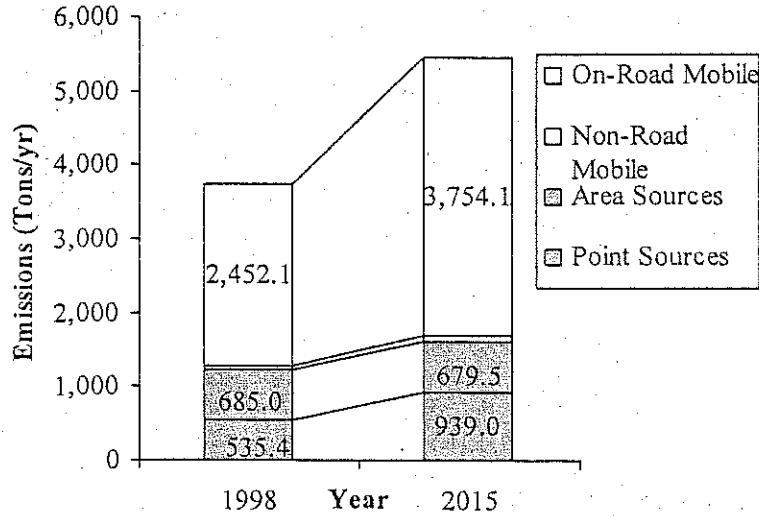


Executive Summary Figure F: 2015 Seasonal Emissions Percentage by Category



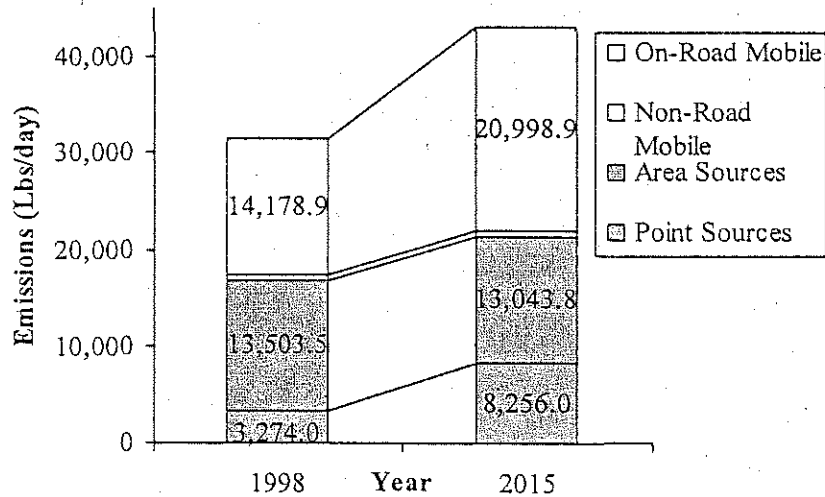
Executive Summary Figure G: Comparison of 1998 and 2015 PM10 Annual Emissions

Distribution of Annual PM10 Emissions Medford-Ashland
AQMA 1998 & 2015



Executive Summary Figure H: Comparison of 1998 and 2015 PM10 Seasonal Emissions

Distribution of Seasonal PM10 Emissions Medford-Ashland
AQMA 1998 & 2015



Appendix A-3

Summary of Local Open Burning Ordinances

SUMMARY OF OPEN BURNING ORDINANCES FOR JACKSON COUNTY
 Provided by Jackson County Health and Human Services
 Air Quality (541) 776-7318

Jurisdiction	Restrictions	V.I	Exceptions
Jurisdiction	Restrictions	V.I	Exceptions
Gold Hill Fire District #3 826-7100	Restricted during fire season. Open/Barrel Burning Advisory 776-7007	400	None.
Grants Pass 474-5431	No open burning permitted. Burn Advisory 476-9663	N/A	None.
Josephine County 474-5431	DEQ rules apply. No prohibited materials. No burning of industrial, construction or demolition waste.	400	Orchard prunings during February only with V.I >200 and agricultural burning for disease and pest control.
Jacksonville 899-1231 Fire Dept. 899-7246	No open/barrel burning permitted.	N/A	Outdoor cooking fires. As of January 1992 permits will be required for: tree prunings, agricultural pest and disease control, fire training, beehive disease/pest control.
Phoenix 535-1955 Fire Dept. 535-2883	Restricted during fire season. No burning November 1 - February 28. Open/Barrel Burning Advisory 776-7007	400	None.
Prospect 560-3333	No ordinance - Contact Oregon Department of Forestry (664-3328). Permit required during fire season only. Non-fire season: follow County regulations and contact local fire department.		
Rogue River Fire District #1 582-4411	Restricted during fire season. Open/Barrel Burning Advisory 582-BURN (2876)	400	None.
Shady Cove Fire District #4 878-2666	No ordinance - Contact fire department - follow County regulations.		
Talent 535-1566 Fire Dept. 535-1777	No permits issued when the State Forestry burn Index is >65 or wind is >10 mph.	400	None.



PUBLIC WORKS DEPARTMENT

CITY OF MEDFORD
MEDFORD, OREGON 97501

TELEPHONE: 775-2485
JAN 20 1983

January 17, 1983

Merlyn Hough
DEQ-Air Quality Division
P. O. Box 1760
Portland, Oregon 97207

AIR QUALITY CONTROL

Subject: Particulate Strategies: Winter Sanding/Cleanup Program

Dear Mr. Hough:

This letter is in addition to the December 17, 1982, documents from the City of Medford regarding program commitments to reduce particulate emissions. This letter describes the Medford winter street sanding and cleanup program.

1. Material. Pea gravel will continue to be used as the sanding material. This material minimizes the amount of fines available for resuspension.
2. Locations. Subject to public safety requirements, a minimal amount of sanding material is normally used. Winter sanding will generally be limited to the necessary curves, intersections and overpasses.
3. Cleanup. Sanding material will be picked up using the regular street sweeping equipment as described in the Sweeping Report. Sanding material will be cleaned up as soon as possible, normally within two days following the icing episode. The prompt cleanup of sanding materials reduces the material resuspension time period.
4. Records. Cubic yards of pea gravel and man-hours spent on winter sanding are included in reports each December and June. This information can be obtained from the Medford Public Works Department by July 1 for the preceding fiscal year.

The City of Medford winter sanding and cleanup program is designed to provide safe driving conditions and also minimize road dust emissions. Please call me if you need additional information on this program.

Sincerely yours,

Lewis N. Powell, P.E.
Public Works Director

CC: Mayor and Council
(via City Manager)
City Manager
Public Works Superintendent
Planning Director

ahf

Appendix A-4

Unified Woodburning Ordinances

CODIFIED ORDINANCES OF JACKSON COUNTY

PART EIGHTEEN - HEALTH AND SANITATION CODE

CHAPTER 1810
Air Pollution

- 1810.01 Definitions.
 - 1810.02 Exceptions to chapter.
 - 1810.03 Requirements for solid fuel heating device installation.
 - 1810.04 Solid fuel burning device omission standard.
 - 1810.05 Restriction of woodburning and emissions on high pollution days.
 - 1810.06 Trackout.
 - 1810.07 Open burning.
 - 1810.08 Burning of material emitting dense smoke or noxious odors in solid fuel burning devices.
 - 1810.09 Abatement; legal proceedings.
 - 1810.99 Penalty.
- Exhibits A-D

CROSS REFERENCES

- Quality control programs - see ORS 468A.010
 - Application of statutes - see ORS 468A.020
 - Contamination rules and standards; variances - see ORS 468A.075
 - Air quality control authorities - see ORS 468A.115
 - State aid - see ORS 468A.175
 - Authority to limit motor vehicle operation and traffic - see ORS 468A.405
 - Fires in parks - see S.U. & P.S. 1064.10
 - Fires in County Fairgrounds and Exposition Park - see S.U. & P.S. 1066.14
-

1810.01 DEFINITIONS.

As used in this chapter:

- (a) "Agricultural operation" means an activity on land currently used or intended to be used primarily for the purpose of obtaining a profit by raising, harvesting and selling crops or by raising and sale of livestock or poultry, or the produce thereof, which activity is necessary to serve that purpose.

- (b) "Agricultural waste" means any material actually generated or used by an agricultural operation, but excluding those materials described in Section 1810.07(d).
- (c) "Board" means the Board of County Commissioners.
- (d) "Critical PM₁₀ Control Area" means that part of the County specifically identified by the Board as the Critical PM₁₀ Control Area. A map and written description of the Critical PM₁₀ Control Area are included as Exhibits "A" and "B", respectively, following the text of this chapter.
- (e) "High pollution period" means a period of time commencing three hours after initial designation as a red or yellow day by the Oregon Department of Environmental Quality (hereinafter referred to as DEQ) or the Jackson County Department of Health and Human Services. In the event that more than one consecutive day is designated as red or yellow, it shall all be considered part of the same period.
- (f) "Medford-Ashland Air Quality Maintenance Area" (hereinafter referred to as AQMA) means that part of the County specifically identified by the Oregon Department of Environmental Quality as an air quality maintenance area, that is one of several areas in the State wherein air quality has deteriorated due to unhealthful levels of pollutants in the air. A map and written description of the AQMA are included as Exhibits "C" and "D", respectively, following the text of this chapter.
- (g) "Opacity" means the degree to which emissions from a solid fuel burning device reduce the transmission of light and obscure the view of an object in the background. It is expressed as a percentage representing the extent to which an object viewed through the smoke is obscured.
- (h) "Open burning" means burning in burn barrels or incinerators, open outdoor fires and any other burning where combustion air is not effectively controlled and combustion products are not effectively vented through a stack or chimney.
- (i) "Oregon certified stove" means a solid fuel burning device certified by DEQ as meeting the emission performance standards specified in Oregon Administrative Rules 340-21-115.
- (j) "PM₁₀" means airborne particles ranging from .01 to 10 microns in size, the breathing of which can be harmful to the human respiratory system.
- (k) "Red day" means a twenty-four hour period, beginning at 7:00 a.m., when PM₁₀ levels are forecast by the DEQ or the Jackson County Department of Health and Human Services to be 130 ug/m³ and above.
- (l) "Residence" means a building containing one or more dwelling units used for habitation by one or more persons.

- (m) "Residential woodburning" means utilization of wood in a solid fuel heating device inside a residence.
- (n) "Sole source of heat" means one or more solid fuel burning devices which constitute the only source of heating in a residence. No solid fuel burning device or devices shall be considered to be the sole source of heat if the residence is equipped with a permanently installed, furnace or heating system utilizing oil, natural gas, electricity or propane.
- (o) "Solid fuel burning device" means a device designed for solid fuel combustion so that usable heat is derived for the interior of a building, and includes, without limitation, solid fuel burning stoves, fireplaces or woodstoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel or solid fuel burning cooking stoves. Solid fuel burning devices do not include barbecue devices, natural gas-fired artificial fireplace logs, DEQ approved pellet stoves or Kachelofens.
- (p) "Space heating" means raising the interior temperature of a room.
- (q) "Trackout" means the deposit of mud, dirt and other debris on paved public roadways by motor vehicles. "Trackout" also means the material being so tracked onto public roadway. Trackout can become pulverized and blown into the air by vehicular traffic where it becomes a part of the total suspended particulate level.
- (r) "Ventilation index" means the National Weather Service's indicator of the relative degree of air circulation for a specified area and time period.
- (s) "Waste" means discarded or excess material, including:
- (1) Agricultural waste resulting from farming or agricultural practices and operations; and
 - (2) Nonagricultural waste resulting from practices and operations, other than farm operations, including industrial, commercial, construction, demolition and domestic wastes and yard debris.
- (t) "Yellow day" means a twenty-four hour period, beginning at 7:00 a.m., when the PM_{10} levels are forecast by the DEQ or the Jackson County Department of Health and Human Services to be 91 ug/m^3 and above but less than 130 ug/m^3 .

(Ord. 85-31. Passed 12-4-85; E. Ord 89-13. Passed 12-22-89; P. Ord. 89-12. Passed 12-20-89; Ord. 90-4. Passed 5-2-90.)

1810.02 EXCEPTIONS TO CHAPTER.

This chapter shall not apply:

- (a) Within incorporated limits of any city;
- (b) To Federal or State lands;
- (c) To prescribed slash burns regulated by the State Smoke Management Plan;
- (d) To open cooking fires or ceremonial fires; or
- (e) To orchard heating devices in which combustion air is effectively controlled and combustion products are effectively vented through a stack or chimney, provided that no materials which may emit dense smoke or noxious odors are burned; or
- (f) To fires set by a public agency for instruction of employees in the methods of firefighting.

(Ord. 85-31. Passed 12-4-85; E. Ord. 89-13. Passed 12-22-89; P. Ord. 89-12. Passed 12-20-89; Ord. 2001-17. Passed 8-22-01.)

1810.03 REQUIREMENTS FOR SOLID FUEL HEATING DEVICE INSTALLATION.

The purpose of this section is to reduce the amount of particulate pollution resulting from woodburning for space heating.

(a) It shall be unlawful for any new or used solid fuel heating device to be installed in the Medford-Ashland Air Quality Maintenance Area after the effective date of this chapter (December 22, 1989), unless:

- (1) The device is installed pursuant to the County Building Code and regulations of the Department of Planning and Development;
- (2) The solid fuel heating device complies with the Oregon Department of Environmental Quality 1988 Particulate Emission standards for certified woodstoves; and
- (3) For all new construction, the structure contains an alternate form of space heating, including natural gas, propane, electric, oil, solar or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat the home with other than a solid fuel heating device.

(b) If the conditions set forth in subsection (a) hereof are not fulfilled, no person in possession of the premises shall cause or permit, and no public agency shall issue any permit for, the installation of the device.

(Ord. 85-31. Passed 12-4-85; E. Ord. 89-13. Passed 12-22-89; P. Ord. 89-12. Passed 12-20-89.)

1810.04 SOLID FUEL BURNING DEVICE EMISSION STANDARD.

(a) Within the Critical PM₁₀ Control Area, no person owning or operating a solid fuel burning device shall at any time cause, allow or discharge emissions from such device which are of an opacity greater than fifty percent.

(b) The provisions of this section shall not apply to emissions during the starting or refueling of a new fire for a period not to exceed thirty minutes in any four-hour period.

(c) For the purposes of this section, opacity percentages shall be determined by a certified observer, using the standard visual method listed in 40 CFR 60A, Method 9, or operation of equipment approved by the Jackson County Department of Health and Human Services that is known to produce equivalent or better accuracy.

(Ord. 90-4. Passed 5-2-90.)

1810.05 RESTRICTION OF WOODBURNING AND EMISSIONS ON HIGH POLLUTION DAYS.

(a) Operation of Solid Fuel Burning Device Prohibition.

(1) The operation of a solid fuel burning device within the Critical PM₁₀ Control Area during a high pollution period shall be prohibited, unless an exemption has been granted pursuant to Section 1810.05(b). A presumption of a violation for which a citation shall be issued shall arise if smoke is being discharged through a flue or chimney after a time period of three hours has elapsed from the time of declaration of the high pollution period.

(2) Notwithstanding paragraph (a)(1) hereof, the operation of an Oregon Certified solid fuel burning device shall be permitted during a high pollution period so long as no visible emissions of smoke are discharged through a flue or chimney after a time period of three hours has elapsed from the time of the declaration of the high pollution period. The provisions of this subsection shall not apply to emissions of smoke during the starting or refueling of a fire for a period not to exceed thirty minutes in any four-hour period.

(3) After two years from the effective date of this chapter, no property owner within the Critical PM₁₀ Control Area shall rent or lease a residential unit that is not equipped with a secondary source of heat other than a solid fuel burning device, unless the landlord has a valid exemption under Section 1810.05(b)(2). Should a violation of this section occur, it shall be attributable to the property owner and not to the tenant or lessee.

(b) Exemptions. It is permissible for a household to operate a solid fuel burning device within the Critical PM₁₀ Control Area during a high pollution period when the head of that household has obtained one of the following exemptions. Exemptions granted under this section shall expire on September 1 of each year.

(1) Economic need. An exemption for an economic need to burn solid fuel for residential space heating purposes may be issued to heads of households who can show their eligibility for energy assistance under the Federal Department of Energy Low-income Energy Assistance Program (hereinafter referred to as L.I.E.A.P.), as administered by ACCESS, Inc. or its successor.

(2) Sole source. An exemption may be issued to the heads of households who sign a statement declaring their reliance on a solid fuel burning device as the sole source of heat for their residences. Sole source exemptions shall not be issued after two years from the effective date of this chapter, unless the residence is approved for installation of an alternative heating source through the Jackson County Wood Smoke Abatement CLEAR program guidelines, or, in the absence of the CLEAR program, when the head of the household can show that the family income is less than eighty percent of the median income level for the Medford metropolitan area, as established by the Federal Department of Housing and Urban Development (HUD). Households that qualify for an exemption based on economic need, as defined in this chapter, may continue to rely on a solid fuel burning device as the sole source of heat for the residence beyond two years from the effective date of this chapter.

(3) Special needs. Upon a showing of special need, as further defined by administrative rule, a temporary exemption may be granted authorizing the burning of a solid fuel burning device, notwithstanding Section 1810.05(a)(1) and (2). "Special need" shall include, but not be limited to, occasions when a furnace or central heating system is inoperable, other than through the owner or operator's own actions or neglect.

(c) Administrative Rules. The County Administrator shall develop administrative rules setting out the requirements necessary to qualify for the exemptions described herein and specifying the manner in which this chapter will be enforced.

(Ord. 85-31. Passed 12-4-85; Ord. 90-4. Passed 5-2-90.)

1810.06 TRACKOUT.

(a) The purpose of this section is to lessen the amount of particulate pollution which originates from roads and roadways. Dirt and other debris which may become deposited upon paved roads can be ground and pulverized by traffic into minute particles. These particles can then become airborne, adding to the particulate pollution problem.

(b) This section applies to construction sites, agricultural activities and commercial and industrial operations.

(c) No person shall trackout mud, dirt or other debris from private or public lands onto paved public roads without taking reasonable precautions to prevent such particulate matter from becoming airborne. These precautions shall include, where appropriate, the prompt removal of such material from the paved road surface. This section does not apply to noncommercial uses of public roads.

(d) No person shall violate the provisions of a stop-work order issued pursuant to subsection (e) hereof.

(e) The County may require the imposition of building permit conditions for the prevention of trackout. Conditions imposed may include, but are not limited to, the following:

(1) Posting of a bond by a contractor in an amount sufficient to ensure that funds are available for roadway cleanup by the County, if the contractor is negligent in the cleanup of an adjacent public roadway;

(2) Street sweeping, vacuuming or other means of removing trackout material from public roadways;

(3) The installation of wheel washers at exits of major construction sites;

(4) The use of temporary or permanent barricades to keep traffic off unpaved areas;

(5) Graveling of access roads on site;

(6) Limiting the use of public roadways by vehicles; and

(7) The issuance of a stop-work order.

(f) A stop-work order issued pursuant to subsection (e) hereof shall be posted at the work site and delivered by certified mail to an alleged violator. Appeals from any such order shall be

conducted pursuant to the provisions of Section 204 of the County Building Code, as amended in Section 1420.02 of these Codified Ordinances.

(Ord. 85-31. Passed 12-4-85.)

1810.07 OPEN BURNING.

(a) The purpose of this section is to minimize the accumulation of PM_{10} air pollution resulting from open burning. The public should be aware that open burning may also be restricted during the fire season (typically June through October) by the fire districts or other fire regulating authorities. These authorities base their restrictions of open burning on such factors as low humidity, high winds, drought or other conditions which make outside burning unsafe.

(b) Open burning of any kind is prohibited throughout unincorporated Jackson County on all days of the year when the maximum ventilation index is below 400.

(c) Open burning of any kind is prohibited within the Medford-Ashland Air Quality Maintenance Area during November, December, January and February of each year due to generally poor smoke dispersion.

(d) Open burning of any wet garbage, plastic, wire insulation, automobile part, asphalt, petroleum product, petroleum treated material, rubber product, animal remains or animal or vegetable matter resulting from the handling, preparation, cooking or service of food or of any other material which normally emits dense smoke or noxious odors is prohibited throughout the unincorporated areas of Jackson County.

(e) The provisions of this section do not apply to the open burning of agricultural wastes which is necessary for disease or pest control.

(f) The provisions of this section do not apply to fires set by a public agency for instruction of employees in the methods of firefighting.

(Ord. 85-31. Passed 12-4-85; E. Ord. 89-13. Passed 12-22-89; P. Ord. 89-12. Passed 12-20-89; Ord. 2001-17. Passed 8-22-01.)

1810.08 BURNING OF MATERIAL EMITTING DENSE SMOKE OR NOXIOUS ODORS IN SOLID FUEL BURNING DEVICES.

The burning of any of the materials listed in Section 1810.07(d) in a solid fuel burning device is prohibited throughout the unincorporated areas of Jackson County at all times.

(E. Ord. 89-13. Passed 12-22-89; P. Ord. 89-12. Passed 12-20-89.)

1810.09 ABATEMENT; LEGAL PROCEEDINGS.

Whoever violates or fails to comply with any of the provisions of this chapter shall be subject to appropriate legal proceedings to enjoin or abate such violation or noncompliance, in addition to the penalty provided in Section 1810.99.

(Ord. 85-31. Passed 12-4-85; E. Ord. 89-13. Passed 12-22-89; P. Ord. 89-12. Passed 12-20-89.)

1810.99 PENALTY.

EDITOR'S NOTE: See Section 202.99 for general Code penalty if no specific penalty is provided.)

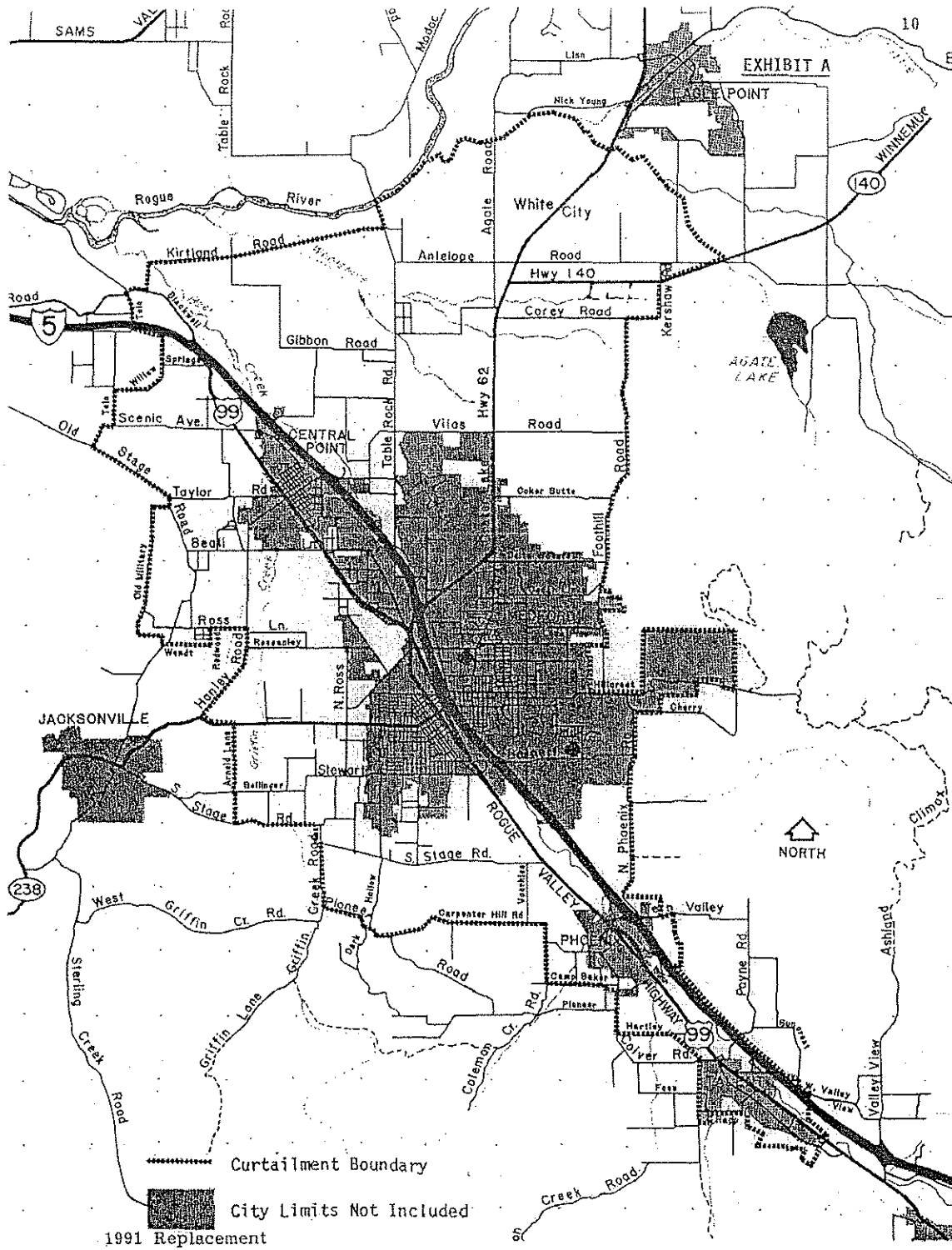


EXHIBIT B

PROPOSED CURTAILMENT BOUNDARY JACKSON COUNTY

Beginning on I-5 and Tolo Road, crossover north on Tolo Road to Old Hwy 99. East on Old Hwy 99 to Kirtland Road. Northeasterly on Kirtland Road to Tablerock Road. North on Tablerock Road to the Rogue River. Northeasterly along the southern bank of the Rogue River to the mouth of Little Butte Creek. Northeasterly along Little Butte Creek to Antelope Creek. Southeasterly along Antelope Creek to Dry Creek. Southeasterly on Dry Creek to Hwy 140. Southwesterly on Hwy 140 to Kershaw Road. South on Kershaw Road to Corey Road. West on Corey Road to Foothill Road. South on Foothill Road to Medford Urban Growth Boundary (UGB) (near Delta Waters Road). Follow eastern UGB south to North Phoenix Road. South on North Phoenix Road to Phoenix UGB. Follow eastern UGB south to I-5. Southeasterly on I-5 to Talent UGB. Follow the eastern, southern and western UGB until intersection with Southern Pacific Railroad track. Southern Pacific Railroad track north to Hartley Lane. West on Hartley Lane to Talent-Phoenix Road. North on Talent-Phoenix Road to Phoenix UGB. West along southern boundary of Phoenix UGB to Camp Baker Road. West on Camp Baker Road to Coleman Creek Road. North on Coleman Creek Road to Carpenter Hill Road. West on Carpenter Hill Road to Pioneer Road. Northwest on Pioneer Road to Griffin Creek Road. North on Griffin Creek Road to Medford UGB. North along Medford UGB to South Stage Road. West on South Stage Road to Arnold Lane. North on Arnold Lane to Jacksonville Hwy. West on Jacksonville Hwy to Hanley Road. Northeast on Hanley Road to Ross Lane. West on Ross Lane to Redwood Drive. South on Redwood Drive to LaPine Avenue. West on LaPine Avenue to Old Stage Road. North on Old Stage Road to Old Military Road. North on Old Military Road to Old Stage Road. Northwest on Old Stage Road to Scenic Avenue. Northwest on Scenic Avenue to Tolo Road. North on Tolo Road to Willow Springs Road. East on Willow Springs Road to Ventura Lane. North on Ventura Lane to I-5. Northwest on I-5 to crossover of Tolo Road.

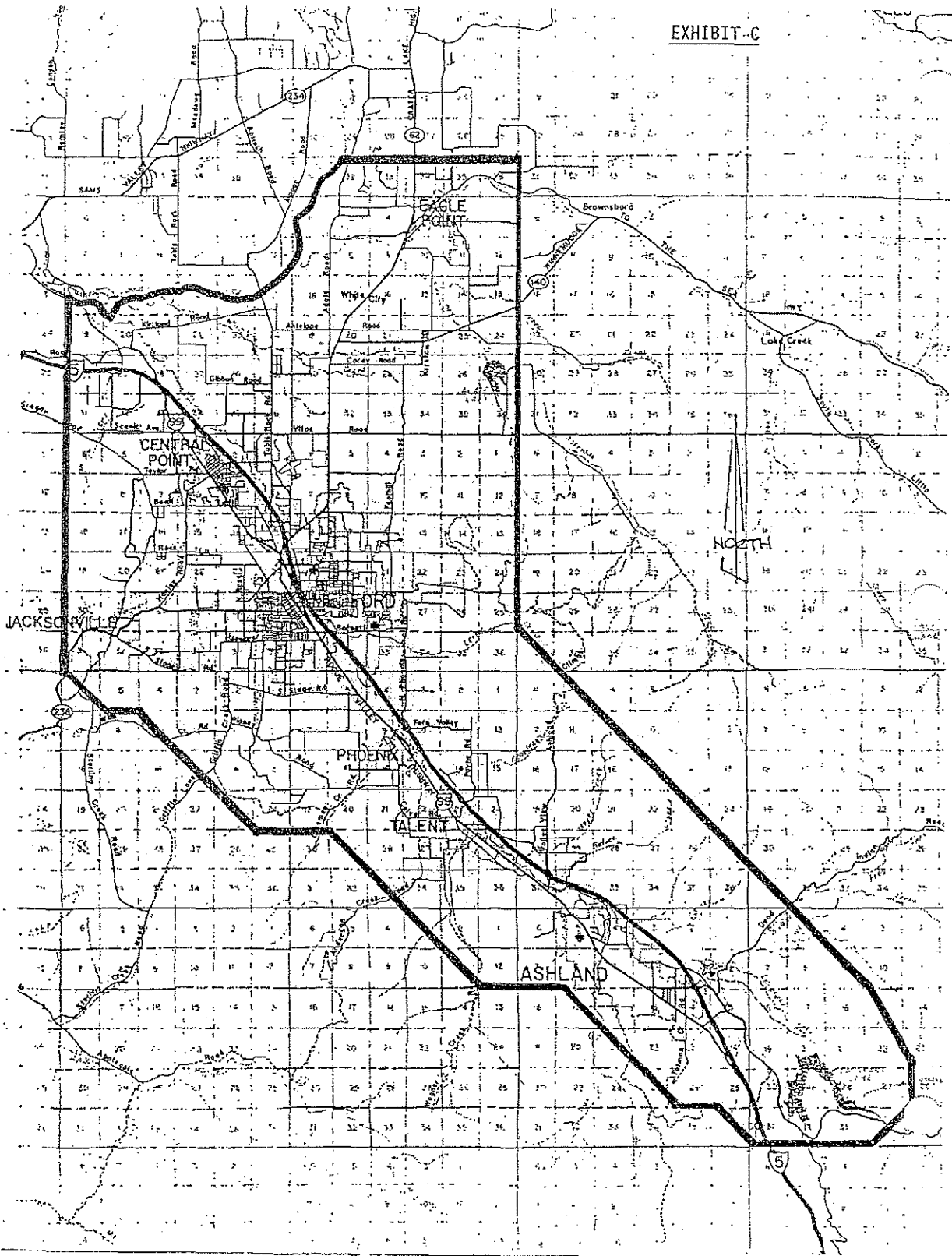


EXHIBIT D
BOUNDARY DESCRIPTION
MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA

The Medford-Ashland Air Quality Maintenance Area is defined as beginning at a point approximately one mile NE of the town of Eagle Point, Jackson County, Oregon, at the NE corner of Section 36, T35S, R1W; thence south along the Willamette Meridian to the SE corner of Section 25, T37S, R1W; thence SE along a line to the SE corner of Section 9, T39S, R2E; thence SSE to the SE corner of Section 22, T39S, R2E; thence south to the SE corner of Section 27, T39S, R2E; thence SW to the SE corner of Section 33, T39S, R2E; thence west to the SW corner of Section 31, T39S, R2E; thence NW to the NW corner of Section 36, T39S, R1E; thence west to the SW corner of Section 26, T39S, R1E; thence NW along a line to the SE corner of Section 7, T39S, R1E; thence west to the SW corner of Section 12, T39S, R1W; thence NW along a line to the SW corner of Section 20, T38S, R1W; thence west to the SW corner of Section 24, T38S, R2W; thence NW along a line to the SW corner of Section 4, T38S, R2W; thence west to the SW corner of Section 5, T38S, R2W; thence NW along a line to the SW corner of Section 31, T37S, R2W; thence north along a line to the Rogue River, thence north and east along the Rogue River to the north boundary of Section 32, T35S, R1W; thence east along a line to the point of beginning.

5.550 Outside Burning

(1) No person shall start or maintain any fire outside a building (except for an outdoor cooking fire and agricultural heating devices) for the purpose of burning any combustible material, or cause or participate therein, nor shall any person in control of any premises cause or knowingly allow any such fire to be started or maintained on any part of said premises unless:

- (a) A written permit has been issued by the city Fire Chief or his agent to maintain such fire at that location; and
- (b) The fire is started and maintained in accordance with the terms of the permit and the following requirements of this section.

No outside burning whatsoever shall be permitted during December and January, except for an outdoor cooking fire and agricultural heating devices.

(2) No permit will be issued where burning would violate Oregon Administrative Rules governing open burning in the Rogue Basin Open Burning Control Area.

(3) Each permit shall contain a written condition in bold-face type to the effect that the permittee shall contact the Fire Chief's office before each fire is started and ascertain that outside burning is approved, under subsections (4) and (5), by the Fire Chief for that day. No permit shall be valid as to any day on which the Fire Chief has ascertained that burning is not permitted under said subsections. In addition, the Fire Chief may condition any permit issued hereunder to exclude the burning of any particular material when he finds that the burning of such material would be unduly obnoxious in the locality of the proposed burning site.

(4) The Fire Chief or his agent shall not approve outside burning on any day if he determines that low humidity, high winds, drought, or other weather or other unusual conditions exist which make outside burning generally, or at the particular time and place proposed, unreasonably hazardous to the safety of persons or property. In no event shall the Fire Chief approve outside burning on a day when one or more of the following conditions exist, or in his determination will exist:

- (a) Temperatures above 90E Fahrenheit;
- (b) Wind above 20 miles per hour; or
- (c) Humidity below 30 percent.

(5) The Fire Chief or his agent may approve outside burning on any day when he determines that the ventilation index is or will be greater than 400 during that day. The ventilation index is the National Weather Service's indicator of the relative degree of air circulation for the Medford area.

(6) Fires which are subject to this section shall be maintained during daylight hours and by a competent adult person and shall be extinguished prior to darkness unless continued burning is specifically authorized in writing by the Fire Chief.

(7) A permit may be issued only for the following purposes:

- (a) controlling agricultural diseases such as blight that must be quickly destroyed by fire to prevent the spread of the disease;
- (b) burning contaminated pesticide containers as prescribed by D.E.Q. and manufacturer specifications;
- (c) burning bee hives and beekeeping paraphernalia to eradicate the spread of disease;
- (d) burning a structure or the other use of fire for training purposes by a fire department in coordination with D.E.Q.; or
- (e) field burning in agricultural areas.

(8) Violation of this section constitutes a violation.

(9) Outside burning without a permit is hereby declared to be a public nuisance and may be summarily abated by the Fire Chief or Chief of Police.

[Amd. Ord. No. 4732, Oct. 21, 1982; Amd. Ord. No. 6403, July 6, 1989; Amd. Ord. No. 6430, Aug. 17, 1989; Amd. Ord. No. 2000-45, March 16, 2000.]



MEDFORD: WOODSTOVES

7.220 Definitions

For purposes of Sections 7.220 through 7.242, the following definitions shall apply:

- (1) "Alternative heat source" means a heat source other than a solid fuel burning device.
 - (2) "High pollution period" means a period of time commencing three hours after initial designation as a red or yellow day by the DEQ or Jackson County Department of Health and Human Services. In the event that the DEQ or Jackson County Department of Health and Human Services designates consecutive days as red or yellow, they shall all be considered a part of the same period.
 - (3) "Medford-Ashland Air Quality Maintenance Area" means that part of the County specifically identified by DEQ as an air quality maintenance area, that is one of several areas in the State wherein air quality has deteriorated due to unhealthful levels of pollutants in the air. A map and written description of the Medford-Ashland Air Quality Maintenance Area (hereinafter referred to as AQMA) are included as Exhibits "A" and "B" respectively, following the text of this ordinance.
 - (4) AOpacity@ means the degree to which emissions from a solid fuel burning device reduce the transmission of light and obscure the view of an object in the background. It is expressed as a percentage representing the extent to which an object viewed through the smoke is obscured.
 - (5) "Oregon certified stove" means a solid fuel burning device certified by DEQ or EPA as meeting the emission performance standards specified in Oregon Administrative Rules 340-34-045 through 340-34-115.
 - (6) APM10" means airborne particles ranging from .01 to 10 microns in size, the breathing of which can be harmful to the human respiratory system.
 - (7) "Red day" means a 24 hour period beginning at 7:00 a.m. when PM10 levels are forecast by the DEQ or the Jackson County Department of Health and Human Services to be 130 ug/m3 and above .
 - (8) AResidence@ means a building containing one or more dwelling units used for habitation by one or more persons.
 - (9) AResidential woodburning@ means utilization of wood in a solid fuel heating device inside a new residence.
 - (10) "Sole source of heat" means one or more solid fuel burning devices which constitute the only source of heating in a residence. No solid fuel burning device or devices shall be considered to be the sole source of heat if the residence is equipped with a permanently installed furnace or heating system utilizing oil, natural gas, electricity or propane.
 - (11) "Solid fuel burning device" means a device designed for solid fuel combustion so that usable heat is derived for the interior of a building, and includes, without limitation, solid fuel burning stoves, fireplaces, fireplace inserts, or woodstoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, or solid fuel burning cooking stoves. Solid fuel burning devices do not include barbecue devices, natural gas-fired artificial fireplace logs, DEQ approved pellet stoves, or Kachelofens.
 - (12) ASpace heating@ means raising the interior temperature of a room.
 - (13) "Yellow day" means a 24 hour period beginning at 7:00 a.m. when the PM10 levels are forecast by the DEQ or Jackson County Department of Health and Human Services to be 91 ug/m3 and above but less than 130 ug/m3 .
- [Amd. Sec. 1, Ord. No. 6992, October 3, 1991; Amd. Sec. 1, Ord. No. 1998-203, Sept. 17, 1998.]

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7.222 Operation of Solid Fuel Burning Device Prohibition

(1) The operation of a solid fuel burning device within the City of Medford during a high pollution period shall be prohibited unless an exemption has been granted pursuant to Section 7.224. A rebuttable presumption of a violation for which a citation shall be issued shall arise if smoke is being discharged through a flue or chimney after a time period of three hours has elapsed from the time of declaration of the high pollution period. Any resident of the premises who is over the age of eighteen years shall be presumed to be the violator unless rebutted by contrary evidence.

(2) Notwithstanding subsection (1) of this section, the operation of an Oregon Certified solid fuel burning device shall be permitted during a high pollution period so long as no visible emissions of smoke are discharged through a flue or chimney after a time period of three hours has elapsed from the time of the declaration of the high pollution period. The provisions of this subsection shall not apply to emissions of smoke during the starting or refueling of a fire for a period not to exceed 30 minutes in any four-hour period.

(3) No property owner within the City of Medford shall rent or lease a residential unit that is not equipped with a secondary source of heat other than a solid fuel burning device, unless the landlord has a valid exemption under Section 7.224. Should a violation of this section occur it shall be attributable to the property owner and not to the tenant or lessee.

(4) No person owning or operating a solid fuel burning device shall at any time cause, allow, or discharge emissions from such device which are of an opacity greater than fifty percent (50%). The provisions of this subsection shall not apply to emissions during the starting or refueling of a new fire for a period not to exceed 30 minutes in any four-hour period. For the purposes of this section opacity percentages shall be determined by a certified observer using the standard visual method listed in 40 CFR 60A, Method 9, or operation of equipment approved by the Jackson County Department of Health and Human Services that is known to produce equivalent or better accuracy.

(5) It shall be unlawful for any new or used solid fuel heating device to be installed in the City of Medford after the effective date of this section of the Code unless the device is installed pursuant to the City of Medford regulations; the solid fuel heating device complies with the Oregon Department of Environmental Quality Particulate Emission standards for certified woodstoves; and for all new construction, the structure contains an alternate form of space heating, including natural gas, propane, electric, oil, solar, or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat the home with other than a solid fuel heating device. If the conditions set forth in this subsection are not fulfilled, no person in possession of the premises shall cause or permit, and no public agency shall issue any permit for the installation of the device.

[Amd. Sec. 2, Ord. No. 6992, October 3, 1991; Amd. Sec. 2, Ord. No. 1998-203; Sept. 17, 1998.]

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7.224 Exemptions

It is permissible for a household to operate a solid fuel burning device within the City of Medford during a high pollution period when the head of that household has previously obtained one of the following exemptions. Exemptions granted under this section shall expire on September 1 of each year:

(1) Economic Need: An exemption for an economic need to burn solid fuel for residential space heating purposes may be issued to heads of households who can show their eligibility for energy assistance under the Low-Income Energy Assistance Program (hereinafter referred to as L.I.E.A.P.), as administered by ACCESS, Inc. or its successor. (2) Sole Source: An exemption may be issued to the heads of households who sign a sworn statement declaring their reliance on a solid fuel burning device as the sole source of heat for their residence. Sole source exemptions shall not be issued unless the residence is approved for installation of an alternative heating source through the Jackson County Housing Authority woodstove replacement program guidelines or in the absence of such a program, when the head of a household can show that the family income is less than 80% of the median income level for the Medford metropolitan area as established by the Federal Department of Housing and Urban Development (HUD). Households that qualify for an exemption based on economic need, as defined in this chapter, may continue to rely on a solid fuel burning device as the sole source of heat for the residence beyond two years from the effective date of this section. (3) Special Need: Upon a showing of special need which shall include, but not be limited to, occasions when a furnace or central heating system is inoperable other than through the owner or operator's own actions or neglect. [Amd. Sec. 3, Ord. No. 6992, October 3, 1991; Amd. Sec. 3, Ord. No. 1998-203, Sept. 17, 1998.]

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7.226 Abatement; Legal Proceedings

Whoever violates or fails to comply with any of the provisions of this chapter shall be subject to appropriate legal proceedings to enjoin or abate such violation or noncompliance, in addition to the penalty provided in Section 7.300 below.

[Added Ord. No. 6484, Nov. 2, 1989, effective November 20, 1989.]

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7.228 Administrative Regulations

The City Manager shall prescribe administrative regulations governing the procedure for granting exemptions.

[Added Ord. No. 6484, Nov. 2, 1989, effective November 20, 1989.]

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7.240 Installation of Solid-Fuel Heating Devices

No person shall install any new or used solid-fuel heating device in any building unless such device has been certified by the Oregon Department of Environmental Quality (DEQ) to comply with DEQ emission standards for such devices and such device bears an authorized permanent DEQ or EPA label attached by the manufacturer stating that the device has been certified. In addition to the penalties provided by this code, violation of this section shall be a public nuisance subject to abatement.

[Added Ord. No. 6686, August 2, 1990.]

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7.242 Prohibited Materials

It shall be unlawful for a person to cause or allow any of the following materials to be burned in a solid fuel burning device: garbage, treated wood, plastic, wire insulation, automobile parts, asphalt, petroleum products, petroleum treated material, rubber products, animal remains, paint, animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or any other material which normally emits dense smoke or noxious odors.
[Added Sec. 4, Ord. No. 1998-203, Sept. 17, 1998.]

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7.300 Penalty

Violation of a provision of this Chapter 7 constitutes a violation. Each day in which a violation is caused or permitted to exist constitutes a separate violation.

[Added Sec. 4, Ord. No. 5435, May 2, 1985; Amd. Sec. 4, Ord. No. 2000-55, April 6, 2000.]

NOTE: Ordinance No. 4740 adopted by the Council Nov. 4, 1982 and signed by the Mayor Nov. 11, 1982 provides as follows:

Section 1. General Definitions

1.1 Air stagnation advisory: Forecast made by the National Weather Service for poor ventilation conditions.

1.2 Council: The City Council of the City of Medford.

1.3 Cost-effective level of weatherization: Minimum, cost-efficient standards of weatherization, including standards for materials and installation, which shall be set by the Director of Building Safety. These standards shall reflect, but not exceed the levels defined in ORS 469.710(2).

1.4 Medford-Ashland AQMA: That part of Jackson County, Oregon, specifically identified by the Oregon Department of Environmental Quality as an air quality maintenance area -- one of several areas in the state wherein air quality has deteriorated due to unhealthful levels of pollutants in the air.

1.5 Particulate: Airborne particles ranging from .01 to 1,000 microns in size. These particles are inhaled during breathing and can be harmful.

1.6 Person: Includes individuals, corporations, associations, firms, partnerships, and joint stock companies.

1.7 Primary particulate standard: An average particulate concentration of 260 micrograms per cubic meter of air during a twenty-four hour period.

1.8 Proof of weatherization: Certification, receipts, contracts, or other such documents specifically listing weatherization steps taken by the homeowners, which may be reviewed by building inspectors at the time of solid fuel heating system installation.

1.9 Regulations: Regulations promulgated by the Council pursuant to this ordinance.

1.10 Residential building: An existing building used for permanent or seasonal habitation by one or more persons, containing four or fewer dwelling units, and constructed prior to January 1, 1979.

1.11 Residential woodburning: Utilization of a wood heating device inside a dwelling unit.

1.12 Spaceheating: Raising the interior temperature of a room or rooms.

1.13 Total suspended particulate level: Amount of particulate in ambient air.

1.14 Trackout: The deposition of mud, dirt and other debris on paved public roadways by motor vehicles; the material being so tracked onto public roadways. Trackout can become pulverized and blown into the air by vehicular traffic, where it becomes a part of the total suspended particulate level.

1.15 Ventilation index: The National Weather Service's indicator of the relative degree of air circulation for a specified area.

1.16 Wood heating devices: A stove, heater, fireplace, or other receptacle wherein wood is heated to the point of combustion.

Section 2. Severability.

2.1 If any portion of this ordinance is declared to be invalid by a court of competent jurisdiction, such invalidity shall be confined to the section to which such declaration of invalidity relates, and the remainder of this ordinance shall continue to be operative.

Section 3. Weatherization Requirements for Solid Fuel Heating Device Installation.

The purpose of this section is to reduce the amount of particulate pollution resulting from residential woodburning for building heating. Most buildings constructed before 1979 were built to lower weatherization standards than buildings constructed since that date. A highly weatherized and insulated building will require less fuel to attain and hold a given temperature. It will produce less smoke pollution and will also result in a savings of the wood or other fuel resource. Additionally, weatherization prior to or at the time of installation of a solid fuel heating device will generally result in the selection of a device more appropriately sized for the building and will lessen the potential amount of smoke produced. Therefore:

3.1 The installation of a wood stove, fireplace, or any other form of solid fuel, space heating device is allowed if:

A) The space heating device is installed pursuant to the uniform building code and regulations of the Medford Department of Building Safety.

B) The structure contains an alternate form of space heating, including natural gas, propane, electric, oil, solar, or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat the home with other than a solid fuel burning, smoke producing method.

C) The residence meets or is proposed to meet within 90 days the cost-effective levels of weatherization as defined in Section 1.3 of this ordinance.

Section 4. [Repealed Ord. No. 5072, Feb. 16, 1984.]

The purpose of this section is to minimize particulate emissions from home heating devices by improving home weatherization and reducing energy loss. This section is also intended to encourage homeowners to make use of free energy audits and low-interest financing available from local utility companies. It is the City's intent to advertise and make known programs which are already available for weatherizing homes and to assist citizens in taking advantage of those programs.

4.1 It is the goal of the City of Medford to assist citizens to weatherize all residences to the cost-effective level by January 1, 1987.

4.2 All residential buildings shall have received an energy audit prior to the time of sale or rental, and such information shall be made available to potential purchasers or renters as a condition of such sale or rental. This section shall become effective six months after adoption of this ordinance.

4.3 In January of 1984, if the primary particulate health standards are not being maintained, all homes with a wood heating system shall be weatherized to cost-effective levels at the time of sale or rental.

Section 5. Pollution Episode Curtailment

The purpose of this section is to reduce the amount of particulate pollution during periods of air stagnation or when pollution levels are critical. Periods of air stagnation occur at various times in a year and can create a severe accumulation of pollutants. Residential woodburning can contribute as much as 50 percent of the particulate pollution during these conditions.

5.1 The use of residential woodburning devices is prohibited on each day that an air stagnation advisory announcement for the Medford-Ashland AQMA has been issued by the National Weather Service. This subsection takes effect on July 1, 1984, if the particulate health standard is not attained in the Medford-Ashland Air Quality Maintenance Area by that date.

5.2 Residences having no other form of space heating are exempt from this section.

Section 6. Trackout

The purpose of this section is to lessen the amount of particulate pollution which originates from roads and roadways. Dirt and other debris, which may become deposited upon paved roads, can be ground and pulverized by traffic into minute particles. These particles can then become airborne adding to the particulate pollution problem.

6.1 No person shall place or deposit mud, dirt or debris upon any street, alley, sidewalk or other public way.

6.2 Violation of subsection 6.1 is hereby declared to be a public nuisance and subject to summary abatement by the City Manager or his designate. Summary abatement includes but is not limited to suspension of any and all city permits relating to construction on the site which is the source of the mud, dirt or debris.

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CENTRAL POINT: WOODSTOVES

8.01.010

Title 8

HEALTH AND SAFETY

Chapters:

- 8.01 Solid Fuel Burning Devices
- 8.04 Nuisances
- 8.08 Weed Abatement
- 8.10 Tobacco Retail Licenses
- 8.11 Smoking Restrictions
- 8.12 Removal of Animal Carcass
- 8.16 Uniform Fire Code
- 8.24 Flood Damage Prevention and Hazard Mitigation
- 8.28 Drainage Channel Maintenance
- 8.32 Bear Creek Greenway

Chapter 8.01

SOLID FUEL BURNING DEVICES

Sections:

- 8.01.010 Definitions.
- 8.01.012 Requirements for solid fuel burning device installation.
- 8.01.014 Solid fuel burning device emission standard.
- 8.01.020 Operation of solid fuel burning device prohibition.
- 8.01.030 Exemptions.
- 8.01.032 Prohibited materials.
- 8.01.040 Penalty and abatement.
- 8.01.050 Administrative regulations.

8.01.010 Definitions. For the purpose of this chapter, the following definitions shall apply:

"High pollution period" means a period of time commencing three hours after initial designation as a red or yellow day by the Oregon department of environmental quality (hereinafter referred to as "DEQ") or the Jackson County department of health and human services (hereinafter referred to as "Jackson County"). In the event that more than one consecutive days are designated as red or yellow, they shall all be considered a part of the same period.

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"Opacity" means the degree to which emissions from a solid fuel burning device reduce the transmission of light and obscure the view of an object in the background. It is expressed as a percentage representing the extent to which an object viewed through the smoke is obscured.

"Oregon certified solid fuel burning device" means a solid fuel burning device certified by DEQ as meeting the

emission performance standards specified in Oregon Administrative Rules (OAR) 340-034-0045 through 340-034-0115.

"PM₁₀" means airborne particles ranging from .01 to ten microns in size, the breathing of which can be harmful to the human respiratory system.

"Red day" means a twenty-four-hour period beginning at seven a.m. when PM₁₀ levels are forecast by DEQ or Jackson County to be one hundred thirty µg/m³ and above.

"Residence" means a building containing one or more dwelling units used for habitation by one or more persons.

"Residential woodburning" means utilization of wood in a solid fuel burning device inside a residence.

"Sole source of heat" means one or more solid fuel burning devices which constitute the only source of heating in a residence. No solid fuel burning device or devices shall be considered to be the sole source of heat if the residence is equipped with a permanently installed furnace or heating system utilizing oil, natural gas, electricity or propane.

"Solid fuel burning device" means a device designed for solid fuel combustion so that usable heat is derived for the interior of a building, and includes, without limitation, solid fuel burning stoves, fireplaces, fireplace inserts or woodstoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, or solid fuel burning cooking stoves. Solid fuel burning devices do not include barbecue devices, natural gas-fired artificial fireplace logs, DEQ approved pellet stoves, or stoves of kachelofens design.

"Space heating" means raising the interior temperature of a room.

"Yellow day" means a twenty-four-hour period beginning at seven a.m. when the PM₁₀ levels are forecast by DEQ or Jackson County to be ninety-one µg/m³ and above but less than one hundred thirty µg/m³. (Ord. 1790 (part), 1998: Ord. 1661 §1(part), 1991: Ord. 1629 §1(part), 1989).

8.01.012 Requirements for solid fuel burning device installation. A. The purpose of this section is to reduce the amount of particulate pollution resulting from woodburning for space heating.

B. It is unlawful for any new or used solid fuel burning device to be installed in the city after the effective date of the ordinance codified in this chapter, unless:

1. The device is installed pursuant to CPMC Chapter 15.04, Building Code; and
2. The solid fuel burning device complies with the Oregon DEQ particulate emission standards for such devices or is exempt under OAR 340-034-0015; and
3. For all new construction, the structure contains an alternate form of space heating, including natural

gas, propane, electric oil, solar or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat the home with other than a solid fuel burning device.

C. If the conditions set forth in this section are not fulfilled, no person in possession of the premises shall cause or permit, and no public agency shall issue any permit for, the installation of the device. (Ord. 1790 (part), 1998).

8.01.014 Solid fuel burning device emission standard.

A. Within the city, no person owning or operating a solid fuel burning device shall at any time cause, allow or discharge emissions from such device which are of an opacity greater than fifty percent.

B. The provisions of this section shall not apply to emissions during the starting or refueling of a new fire for a period not to exceed thirty minutes in any four-hour period.

C. For the purposes of this section, opacity percentages shall be determined by a certified observer using the standard visual method listed in 40 CFR 60A, method 9, or operation of equipment approved by Jackson County that is known to produce equivalent or better accuracy. (Ord. 1790 (part), 1998).

8.01.020 Operation of solid fuel burning device prohibition. A. The operation of a solid fuel burning device during a high pollution period shall be prohibited unless an exemption has been granted pursuant to Section 8.01.030. A presumption of a violation for which a citation may be issued shall arise if smoke is being discharged through a flue or chimney after a time period of three hours has elapsed from the time of declaration of a high pollution period.

B. Notwithstanding subsection A of this section, the operation of an Oregon certified solid fuel burning device shall be permitted during a high pollution period so long as no visible emissions of smoke are discharged through a flue or chimney after a time period of three hours has elapsed from the time of the declaration of the high pollution. The provisions of this subsection shall not apply to emissions of smoke during the starting or refueling of a fire for a period not to exceed thirty minutes in any four-hour period.

C. After August 31, 1994, no property owner shall rent or lease a residential unit unless such unit is equipped with an alternate heat source complying with ORS 91.770. If the landlord violates this subsection B, the tenant shall not be charged with any violation of subsec-

CENTRAL POINT: OPEN BURNING (PART OF)

8.04.020 Mill pond--Unlawful. It is unlawful for any person, persons, firm or corporation or any agent for such person, persons, firm or corporation, or an employee thereof to construct and maintain any pond or open excavation to be filled with water and used in the operation of any sawmill, planing mill or other mill business. (Ord. 301 §2, 1951).

8.04.030 Poplar trees. Because of the destructive character of the roots of the poplar trees, in the upheaval of sidewalks and the stoppage of sewer pipes, located and growing within the city said trees are declared to be a nuisance and may be removed and abated according to this chapter. (Ord. 880 §1, 1967).

8.04.035 Unlawful accumulation of junk. A. No person shall cause or allow an unsightly or malodorous accumulation of junk, garbage, animal feces, scrap metal, scrap lumber, used tires, discarded building material, discarded vehicles or parts thereof, appliances or fixtures, or dismantled machinery on public or private property unless the property is in lawful use for junk storage or recycling in compliance with applicable state and federal laws and this code.

B. A violation of this section shall be punishable under and subject to the terms of the general penalty section contained in Chapter 1.16 of this code.

C. In addition, the unlawful accumulation of junk as defined by this section is declared to be a nuisance and may be abated as provided for hereinafter in this chapter. (Ord. 1577, 1986).

8.04.040 Nuisances affecting public health. The following are declared to be nuisances affecting the public health and may be abated in the manner prescribed by this chapter:

A. Privies. Any open vault or privy maintained within the city, except those privies used in connection with construction projects and constructed in accordance with the directions of the city engineer;

B. Debris on Private Property. All accumulations of debris, rubbish, manure and other refuse located on private property and which has not been removed within a reasonable time and which affects the health, safety or welfare of the city;

C. Stagnant Water. Any pool of water which is without a proper inlet or outlet and which, if not controlled, will be a breeding place for mosquitoes and other similar insects;

D. Water Pollution. The pollution of any body of water or stream or river by sewage, industrial wastes or other substances placed in or near such water in a manner that will cause harmful material to pollute the water;

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E. Food. All decayed or unwholesome food which is offered for human consumption;

F. Odor. Any premises which are in such a state or condition as to cause an offensive odor or which are in an unsanitary condition;

G. Burning Garbage or Refuse. Any burning of garbage or refuse;

H. Air Pollution. The pollution of any air within the city, whether from a source within or without the city, by depositing smoke, particulate, odor or heat into the air by any means;

I. Any street, road, alley, bridge, culvert, ditch or body of water within the city, whether privately or publicly owned, which is open to use by the public, and which is in such a condition or state of disrepair as to constitute an immediate hazard to the health, safety or welfare of any person. (Ord. 1341 §1, 1979: Ord. 1309 §1, 1978: Ord. 877, 1967: Ord. 860, 1967: Ord. 817 §1, 1966).

8.04.050 Attractive nuisances. A. No owner, lessee, occupant or other person having control, custody or management of any premises shall suffer or permit to remain unguarded upon the premises any machinery, equipment or other devices which are attractive and dangerous to children.

B. No owner, lessee, occupant or person having control, custody or management of any premises shall suffer or permit to remain unguarded upon the premises a pit, quarry, cistern,

ASHLAND: OPEN BURNING

10.30.005 Definitions

The following words and phrases whenever used in this chapter shall be construed as defined in this section unless from the context a different meaning is intended.

- A. "Fire Chief" means the City of Ashland Fire Chief or the Chief's representative.
- B. "Campfire" means any fire for cooking located outside of a building or recreational vehicle.
- C. "Outdoor fire" includes any fire except a fire for cooking.
- D. "Person in charge" means a person or a representative or an employee of a person who has lawful control of the site of the fire by ownership, tenancy, official position or other legal relationship.
- E. "Ventilation index" means the National Weather Service's indicator of the relative degree of air circulation in the Rogue Valley.

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10.30.010 Outdoor and Indoor Burning Restricted

- A. No person shall start or maintain any outdoor fire except as authorized in this chapter.
- B. No person in charge shall cause or knowingly allow any outdoor fire to be started or maintained on any part of such premises, except as authorized in this chapter.
- C. Except for religious fires, any outdoor fire authorized in this chapter shall only be used to burn woody debris such as limbs or branches. No person shall start or maintain any outdoor fire authorized in this chapter in a barrel.
- D. No person shall start or maintain any campfire except as provided in this chapter. It is an affirmative defense to a prosecution of any charge under this subsection that the campfire was authorized by the person in charge.

(Ord. 2822 S2, 1998)

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10.30.020 Period When Outdoor Burning is Authorized

After a permit is obtained from the Fire Chief, outdoor fires are authorized as follows:

A. From March 1, 1997, through October 31, 1997, excluding fire season, when the ventilation index is over 400 and fire fuel conditions are conducive to burning.

1. The council may authorize outdoor fires between March 1 and October 31 of each year after 1997, excluding fire season, when the ventilation index is over 400 and fire fuel conditions are conducive to burning by adopting a resolution to that effect in February of the year for which such fires are to be authorized. An authorization by resolution under this subsection shall be valid for no more than one year at a time.

2. Except as provided in subsection A.1 of this section, after October 31, 1997, outdoor fires are authorized each year only during April, May, and September 15 to October 15, excluding fire season, when the ventilation index is over 400 and fire fuel conditions are conducive to burning. The Fire Chief shall have the authority to extend the dates for outdoor fires beyond October 15, but not beyond November 1, for any year in which fire conditions do not allow burning during some or all of the period between September 15 to October 15.

B. Outdoor fires are permitted on any day of the year the ventilation index is over 400 if fire fuel conditions are conducive to burning and the outdoor fire is for the purpose of burning a structure or other use of fire for training purposes by the Fire Department or under supervision of the Fire Department;

C. Religious fires are permitted on any day of the year after notice of the specific date to the Fire Chief and provided that all safety precautions required by the Fire Chief are met.

D. Campfires in areas designated by the Park Commission are permitted in Lithia Park on any day of the year except during periods of extreme fire danger.

The Fire Chief shall annually report to the council in January of each year the outdoor fires regulated under this section and any recommendations the Chief may have regarding such fires or this section. The council shall then consider the report.

(Ord 2795, 1997; Ord 2862, 2000)

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10.30.030 Requirements for Permitted Fires

All outdoor fires permitted under this chapter shall comply with the following requirements.

A. All fires shall conform with Article 11 of the Uniform Fire Code.

B. Except for religious fires, all fires shall occur during daylight hours only and shall be extinguished prior to darkness unless continued burning is specifically authorized by the Fire Chief.

C. All fires shall occur only in the presence of an adult person who shall constantly monitor the fire.

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10.30.040 Permits Required

An outdoor fire permit is required for all outdoor fires authorized under this chapter. The Fire Chief shall have the authority to issue such permits. Except for religious fires the Fire Chief shall have the authority to establish and assess a fee for any necessary investigation, inspection and processing of each permit. The fee shall not exceed the actual cost of the investigation, inspection and processing.

A. Upon receipt of a request for a permit and the required fee, the Fire Chief shall undertake whatever investigation deemed necessary. Based on this investigation, the Fire Chief shall approve the permit only when it is determined the fire does not constitute a hazard and that steps have been taken to assure reasonable public safety. In addition, the Fire Chief may deny a permit for fires allowed under Section 10.30.020.B if it is determined that the debris proposed for burning has a high moisture content and would burn better after a period of aging.

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10.30.050 Enforcement and Penalties

A. Any person, firm or corporation, whether as a principal agent, employee or otherwise, violating or causing violation of any of the provisions of this ordinance, has committed an infraction, and upon conviction thereof, is punishable as prescribed in Section 1.08.020 of the Ashland Municipal Code. Such person, firm or corporation is guilty of a separate violation for each and every day during which any violation of this Title is committed or continued by such person, firm or corporation.

B. Outside burning without a permit or a campfire in violation of this chapter is a public nuisance and may be summarily abated by the Fire Chief, Chief of Police, or their representatives.

(Ord. 2535, 1989; 2637, 1991, 2671, 1992; Ord. 2717, 1993)

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ASHLAND: WOOD STOVES

9.24.010 Definitions

For the purposes of this Chapter, the following definitions apply:

A. "High pollution period" means a period of time commencing three hours after initial designation as a red or yellow day by the Oregon Department of Environmental Quality (further referred to in this chapter as DEQ) or the Jackson County Department of Health and Human Services. In the event more than one consecutive days are designated as red or yellow, they shall all be considered a part of the same period.

B. "Opacity" means the degree to which emissions from a solid fuel burning device reduce the transmission of light and obscure the view of an object in the background. It is expressed as a percentage representing the extent to which an object viewed through the smoke is obscured.

C. "Oregon certified stove" means a solid fuel burning device certified by DEQ as meeting the emission performance standards specified in Oregon Administrative Rules 340-34-045 through 340-34-115.

D. "PM10" means airborne particles ranging from .01 to 10 microns in size, the breathing of which can be harmful to the human respiratory system.

E. "Red day" means a 24-hour period beginning at 7 a.m. when PM10 levels are forecast by the DEQ or the Jackson County Department of Health and Human services to be 130 Fg/m3 and above.

F. "Residence" means a building containing one or more dwelling units used for habitation by one or more persons.

G. "Residential Woodburning" means utilization of wood in a solid fuel heating device inside a residence.

H. "Sole source of heat" means one or more solid fuel burning devices which constitute the only source of heating in a residence. No solid fuel burning device or devices shall be considered to be the sole source of heat if the residence is equipped with a permanently installed furnace or heating system utilizing oil, natural gas, electricity, or propane.

I. "Solid fuel burning device" means a device designed for solid fuel combustion so that usable heat is derived for the interior of a building, and includes, without limitation, solid fuel burning stoves, fireplaces, fireplace inserts, or woodstoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, or solid fuel burning cooking stoves. Solid fuel burning devices do not include barbecue devices, natural gas-fired artificial fireplace logs, DEQ approved pellet stoves, or Kachelofens.

J. "Space Heating" means raising the interior temperature of a room.

K. "Yellow day" means a 24-hour period beginning at 7 a.m. when the PM10 levels are forecast by the DEQ or the Jackson County Department of Health and Human Services to be 91 Fg/m3 and above but less than 130 Fg/m3.

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9.24.020 Requirements for Solid Fuel Heating Device Installation

The purpose of this section is to reduce the amount of particulate pollution resulting from woodburning for space heating.

A. It shall be unlawful for any new or used solid fuel heating device to be installed in the City of Ashland after the effective date of this Ordinance, unless:

1. The device is installed pursuant to the City Building Code and regulations of the Department of Planning and Development; and
2. The solid fuel heating device complies with the Oregon Department of Environmental Quality Particulate Emission standards for certified woodstoves; and
3. For all new construction, the structure contains an alternate form of space heating, including natural gas, propane, electric, oil, solar, or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat the home with other than a solid fuel heating device.

B. If the conditions set forth in this subsection are not fulfilled, no person in possession of the premises shall cause or permit, and no public agency shall issue any permit for, the installation of the device.

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9.24.030 Solid Fuel Burning Device Emission Standard

A. Within the City of Ashland, no person owning or operating a solid fuel burning device shall at any time cause, allow, or discharge emissions from such device which are of an opacity greater than 40 percent.

B. The provisions of this subsection shall not apply to emissions during the starting or refueling of a new fire for a period not to exceed 30 minutes in any four-hour period.

C. For the purposes of this section opacity percentages shall be determined by a certified observer using the standard visual method listed in 40 CFR 60A, Method 9, or operation of equipment approved by the Jackson County Department of Health and Human Services that is known to produce equivalent or better accuracy.

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9.24.040 Restriction of Woodburning and Emissions on High Pollution Days

Operation of Solid Fuel Burning Device Prohibition.

The operation of solid fuel burning device within the City of Ashland during a high pollution period shall be prohibited unless an exemption has been granted pursuant to section 9.24.040.B. A presumption of violation for which a citation shall be issued shall arise if smoke is being discharged through a flue or chimney after a time period of three hours has elapsed from the time of declaration of the high pollution period.

Notwithstanding section 9.24.040A.1, the operation of an Oregon certified stove shall be permitted during a high pollution period so long as no visible emissions of smoke are discharged through a flue or chimney after a time period of three hours has elapsed from the time of the declaration of the high pollution period. The provisions of this subsection shall not apply to emissions of smoke during the starting or refueling of a fire for a period not to exceed 30 minutes in any four-hour period.

After June 30, 2000, no property owner within the City of Ashland shall rent or lease a residential unit that is not equipped with a secondary source of heat other than a solid fuel burning device, unless the landlord has a valid exemption under section 9.24.040.B.2. Should a violation of this section occur it shall be attributable to the property owner and not to the tenant or lessee.

Exemptions. It is permissible for a household to operate a solid fuel burning device within the City of Ashland during a high pollution period when the head of that household has obtained one of the following exemptions. Exemptions granted under this section shall expire on September 1 of each year.

Economic Need: An exemption for an economic need to burn solid fuel for residential space heating purposes may be issued to heads of households who can show their eligibility for energy assistance under the Federal Department of Energy Low-income Energy Assistance Program, as administered by ACCESS, Inc. or other approved entity.

Sole Source: An exemption may be issued to the heads of households who sign a statement declaring their reliance on a solid fuel burning device as the sole source of heat for their residence. Sole source exemptions shall not be issued after June 30, 2000, unless the residence is approved for installation of an alternative heating source through a woodstove replacement program guidelines or in the absence of such a program when the head of the household can show that the family income is less than 80% of the median income level for the Medford metropolitan area as established by the Federal Department of Housing and Urban Development.

3 Special Need: Upon a showing of special need, as determined by the city administrator or designee, a temporary exemption may be granted authorizing the burning of a solid fuel burning device notwithstanding section 9.24.040.A.1. "Special need" shall include, but not be limited to occasions when a furnace or central heating system is inoperable other than through the owner or operator's own actions or neglect.

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9.24.050 Prohibited Materials

It shall be unlawful for a person to cause or allow any of the following materials to be burned in a solid fuel burning device: garbage, treated wood, plastic, wire insulation, automobile parts, asphalt, petroleum products, petroleum treated material, rubber products, animal remains, paint, animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or any other material which normally emits dense smoke or noxious odors.

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9.24.060 Penalty

Any person violating or causing the violation of any of the provisions of this Chapter shall be punishable as prescribed in Section 1.08.020 of the Ashland Municipal Code.

(Passed by voters November 6, 1990; wording from Resolution. 90-44, Sept., 1990) (Ord. 2822 S1, 1998)

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ORDINANCE #565

TALENT: OPEN BURNING

AN ORDINANCE OF THE CITY OF TALENT ADOPTING A UNIFORM FIRE CODE - PRESCRIBING REGULATIONS GOVERNING CONDITIONS HAZARDOUS TO LIFE AND PROPERTY FROM FIRE OR EXPLOSION - ESTABLISHING A BUREAU OF FIRE PREVENTION AND PROVIDING OFFICERS THEREFORE - DEFINING POWERS AND DUTIES - EFFECTIVE DATE.

The City of Talent ordains as follows:

Section 1. [Adoption of Fire Prevention Code] There is hereby adopted by the City of Talent, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, that certain code known as the Uniform Fire Code as recommended by the International Conference of Building Officials and the Western Fire Chiefs Association, being particularly the 1991 edition as hereinafter deleted, modified or amended, and the same is hereby adopted and incorporated as fully as if set out at length herein.

Section 2. [Application to New and Existing Conditions] The provisions of this code shall apply equally to new and existing conditions, except that existing conditions not in strict compliance with the terms of this code shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property.

Section 3. [Liability for Damage] This code shall not be construed to affect the responsibility of any person owning, operating or installing any equipment for damage to persons or property caused by any defect therein; nor shall the City of Talent be held as assuming any such liability by reason of the inspection or reinspection authorized herein or the permit issued as herein provided, or by reason of the approval or disapproval of any equipment authorized herein.

Section 4. [Adoption of State Laws - Conflict] All the provisions of ORS 479.010 to 479.200, inclusive, are hereby adopted as a part of this ordinance and, by reference, hereby made a part hereof as though fully set forth herein; provided, however, that if any regulation contained in any of said statutes conflicts with any other regulation contained in this ordinance, then the more restrictive regulation shall apply.

Section 5. [Definitions] As used in this ordinance:

- (a) Agricultural Operation means the activity on land currently used or intended to be used primarily for the purpose of obtaining a profit by raising, harvesting and selling crops or by raising and sale of livestock or poultry, or the produce thereof, which activity is necessary to serve that purpose.
- (b) Agricultural Waste means any material actually generated or used by an agricultural operation but excluding those materials described in Section 11 of this ordinance.
- (c) Municipality as used in the Uniform Fire Code means the City of Talent
- (d) Corporation Counsel as used in the Uniform Fire Code means the attorney of the City of Talent. (Amended by Ordinance #633 - adopted February 18, 1998)

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Section 6. [Establishment and Duties of Bureau of Fire Prevention] There is hereby established a Bureau of Fire Prevention within the fire department of the City of Talent which shall be under the supervision of the chief of the fire department.

Section 7. [Delegation of Authority] The chief of the fire department may detail such members of the fire department as inspectors as shall from time to time be necessary. The chief of the fire department shall recommend to the city administrator the employment of technical inspectors, who, when such authorization is made, shall be selected through an examination to determine their fitness for the position. Such inspectors shall be appointed after examination and the appointment shall be for an indefinite term with removal only by the city council for cause.

Section 8. [Establishment of Limits of Districts in Which Storage of Explosives and Blasting Agents is to be Prohibited] The limits referred to in Section 77.201 of the uniform fire code are as follows:

The planning commission shall recommend to the city council a location for such a storage if the location is outside of the principal business district, closely built commercial areas, and heavily populated areas; the code shall be enforced in full as detailed in Section 77.201. Prior to a permit being issued, the chief of the fire department, or designee, shall inspect and approve the location. Joint approval shall be obtained from all departments concerned.

Section 9. [Penalties] Any person who shall violate any of the provisions of the code hereby adopted or fail to comply therewith; or who shall violate or fail to comply with any order made thereunder; or who shall build in violation of any detailed statement of specifications or plans submitted and approved thereunder; or any permit or certificate issued thereunder, and from which no appeal has been taken; or who shall fail to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, with the time fixed herein; shall severally for each and every such violation and noncompliance respectively be guilty of an infraction punishable by a fine of not less than \$25.00 nor more than \$100.00. The imposition of one (1) penalty for any violation shall not excuse the violation or permit it to continue; and all such persons shall be required to correct or remedy such violations or defects within a reasonable time; and when not otherwise specified, each ten (10) days that the prohibited conditions are maintained shall constitute a separate offense.

Section 10. [Modifications] The chief of the fire department shall have power to modify any of the provisions of the fire prevention code, upon application in writing by the owner or lessee, or duly authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the code; provided, that the spirit of the code shall be observed, public safety secured and substantial justice done. The particulars of such modification when granted or allowed, and the decision of the chief of the fire department thereon, shall be entered upon the records of the department; and a signed copy shall be furnished the applicant.

Section 11. [Amendments to the Uniform Fire Code] The Uniform Fire Code shall be amended as follows:

(a) Open Burning:

- (1) The purpose of this section is to minimize the accumulation of PM-10 air pollution resulting from open burning. The public should be aware that open burning may also be restricted during the fire season (typically June through October) by the fire department or other fire regulating authorities. These authorities base their restrictions of open burning on such factors as low humidity, high winds, drought, or other conditions which make outside burning unsafe.
- (2) Open burning of any kind is prohibited throughout the incorporated limits of the City of Talent on all days of the year when the maximum ventilation index is below 400.
- (3) Open burning of any kind is prohibited within the incorporated limits of the City of Talent during November, December, January and February of each year due to generally poor smoke dispersion.
- (4) Open burning of any wet garbage, plastic, wire insulation, automobile parts, asphalt, petroleum product, petroleum treated material, rubber product, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or of any other material which normally emits dense smoke or noxious odors is prohibited throughout the incorporated limits of the City of Talent.
- (5) The provisions of this section do not apply to open burning of agricultural wastes which is necessary for disease or pest control.

(b) Permit Required:

The city council shall adopt a burn program by resolution providing for permit procedures related to open burning within the City of Talent.

(Amended by Ordinance #633 - adopted February 18, 1998)

Section 12. [Appeals] Whenever the fire chief shall refuse to grant a permit applied for, or when it is claimed that the provisions of the code do not apply or that the true intent and meaning of the code have been misconstrued or wrongly interpreted, the applicant may appeal from the decision of the chief of the fire department to the city council. Such appeal shall be made in writing within ten (10) days from the service of the order or denial of the permits; after a decision from the corporation counsel, the fire chief shall affirm, modify or revoke the decision; and the appealing person shall, within the time limit then set by the fire chief, comply with the order as affirmed or modified; provided, that if the decision of the fire chief is revoked, then the permit shall be forthwith granted or the order appealed from shall be deemed vacated.

Section 13. [New Materials, Processes or Occupancies which may Require Permits] The corporation counsel, the chief of the fire department and the city building official shall act as a committee to determine and specify, after giving affected persons an opportunity to be heard, any new materials, processes or occupancies which shall require permits, in addition to those now enumerated in said code.

Section 14. [Repealer] Upon the adoption of this ordinance, Talent Ordinance #366, as amended, adopted August 1977, is repealed.

Section 15. [Validity] The city council hereby declares that should any section, paragraph, sentence or work of this ordinance or of the code hereby adopted be declared for any reason to be invalid, it is the intent of the city council that it would have adopted all other portions of this ordinance independent of the elimination herefrom of any such portion as may be declared invalid.

Section 16. [Effective Date] Under the provisions of the Talent Charter of 1958, Section 35, an emergency is hereby declared and the provisions of this ordinance shall take effect upon passage.

(Adopted the 19th day of August, 1992 and signed by the mayor on the 20th of August, 1992)

TALENT: WOOD STOVES

4-9.1

Talent Ordinance

4-9.1

ORDINANCE #98-635-0

AN ORDINANCE REGULATING THE USE OF SOLID FUEL BURNING DEVICES WITHIN THE CITY OF TALENT, OREGON.

The City of Talent ordains as follows:

- I. [Definitions] As used in this ordinance:
- (A) High Pollution Period means a period of time commencing three (3) hours after initial designation as a red or yellow day by the Oregon Department of Environmental Quality (hereinafter referred to as DEQ) or the Jackson County Department of Health and Human Services. In the event more than one (1) consecutive days are designated as red or yellow, they shall all be considered a part of the same period.
 - (B) Opacity means the degree to which emissions from a solid fuel burning device reduce the transmission of light and obscure the view of an object in the background. It is expressed as a percentage representing the extent to which an object viewed through the smoke is obscured.
 - (C) Oregon Certified Stove means a solid fuel burning device certified by DEQ as meeting the emission performance standards specified in Oregon Administrative Rules 340-34-045 through 340-34-115.
 - (D) PM₁₀ means airborne particles ranging from .01 to 10 microns in size, the breathing of which can be harmful to the human respiratory system.
 - (E) Red Day means a twenty-four (24) hour period beginning at 7:00am when PM₁₀ levels are forecast by the DEQ or the Jackson County Department of Health and Human Services to be 130 ug/m³ and above.
 - (F) Residence means a building containing one or more dwelling units used for habitation by one or more persons.
 - (G) Residential Woodburning means utilization of wood in a solid fuel heating device inside a residence.
 - (H) Sole Source of Heat means one or more solid fuel burning devices which constitute the only source of heating in a residence. No solid fuel burning device or devices shall be considered to be the sole source of heat if the residence is equipped with a permanently installed furnace or heating system utilizing oil, natural gas, electricity, or propane.
 - (I) Solid Fuel Burning Device means a device designed for solid fuel combustion so that usable heat is derived for the interior of a building, and includes, without limitation, solid fuel burning stoves, fireplaces, fireplace inserts, or woodstoves of any nature, combination fuel furnaces or boilers used for space heating which can burn sold fuel, or solid fuel burning cooking stoves. Solid fuel burning devices do not include barbecue devices, natural gas-fired artificial fireplace logs, DEQ approved pellet stoves, or Kachelofens.
 - (J) Space Heating means raising the interior temperature of a room.
 - (K) Yellow Day means a twenty-four (24) hour period beginning at 7:00 am when the PM₁₀ levels are forecast by the DEQ of the Jackson County Department of Health and Human Services to be 91 ug/m³ and above but less than 130 ug/m³.

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II. [Requirements for Solid Fuel Heating Device Installation] The purpose of this section is to reduce the amount of particulate pollution resulting from woodburning for space heating.

- (A) It shall be unlawful for any new or used solid fuel heating device to be installed in the City of Talent after the effective date of this ordinance, unless:
- (1) The device is installed pursuant to the City Building Code and regulations of the Department of Planning and Development; and
 - (2) The solid fuel heating device complies with the Oregon Department of Environmental Quality Particulate Emission standards for certified woodstoves; and
 - (3) For all new construction, the structure contains an alternate form of space heating, including natural gas, propane, electric, oil, solar, or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat the home with other than a solid fuel heating device.
- (B) If the conditions set forth in this subsection are not fulfilled, no person in possession of the premises shall cause or permit, and no public agency shall issue any permit for, the installation of the device.

III. [Solid Fuel Burning Device Emission Standard]

- (A) Within the City of Talent, no person owning or operating a solid fuel burning device shall at any time cause, allow, or discharge emissions from such device which are of an opacity greater than fifty percent (50%).
- (B) The provisions of this subsection shall not apply to emissions during the starting or refueling of a new fire for a period not to exceed thirty (30) minutes in any four (4) hour period.
- (C) For the purposes of this section opacity percentages shall be determined by a certified observer using the standard visual method listed in 40 CFR 60A, Method 9, or operation of equipment approved by the Jackson County Department of Health and Human Services that is known to produce equivalent or better accuracy.

IV. [Restriction of Woodburning and Emissions on High Pollution Days]**(A) Operation of Solid Fuel Burning Device Prohibition**

- (1) The operation of a solid fuel burning device within the City of Talent during a high pollution period shall be prohibited unless an exemption has been granted pursuant to Section IV(B) of this Chapter. A presumption of a violation for which a citation shall be issued shall arise if smoke is being discharged through a flue or chimney after a time period of three (3) hours has elapsed from the time of declaration of the high pollution period.
- (2) Notwithstanding subsection (A)(1) of this section, the operation of an Oregon certified solid fuel burning device shall be permitted during a high pollution period so long as no visible emissions of smoke are discharged through a flue of chimney after a time period of three (3) hours has elapsed from the time of the declaration of the high pollution period. The provisions of this subsection shall not apply to emissions of smoke during the starting or refueling of a fire for a period not to exceed thirty (30) minutes in any four (4) hour period.
- (3) After two (2) years from the effective date of this ordinance, no property owner within the City of Talent shall rent or lease a residential unit that is not equipped with a secondary source of heat other than a solid fuel burning device, unless the landlord has a valid exemption under Section IV (B)(2) of this chapter. Should a violation of this section occur it shall be attributable to the property owner and not to the tenant or lessee.

(B) Exemptions It is permissible for a household to operate a solid fuel burning device within the City of Talent during a high pollution period when the head of that household has obtained one of the following exemptions. Exemptions granted under this section shall expire on September 1st of each year.

- (1) Economic Need: An exemption for an economic need to burn solid fuel for residential space heating purposes may be issued to heads of households who can show their eligibility for energy assistance under the Federal Department of Energy Low-Income Energy Assistance Program (hereinafter referred to as L.I.E.A.P.), as administered by ACCESS Inc. or its successor.

IV. [Restriction of Woodburning and Emissions on High Pollution Days] cont.

- (2) Sole Source An exemption may be issued to the heads of households who sign a statement declaring their reliance on a solid fuel burning device as the sole source of heat for their residence. Sole source exemptions shall not be issued after two (2) years from the effective date of this ordinance, unless the residence is approved for installation of an alternative heating source through the Jackson County Housing Authority Woodstove Replacement Program Guidelines or in the absence of such a program when the head of the household can show that the family income is less than eighty percent (80%) of the median income level for the Medford metropolitan area as established by the Federal Department of Housing and Urban Development (HUD). Households that qualify for an exemption based on economic need, as defined in this Chapter, may continue to rely on a solid fuel burning device as the sole source of heat for the residence beyond two (2) years from the effective date of this ordinance.
- (3) Special Need Upon a showing of special need, as further defined by administrative rule, a temporary exemption may be granted authorizing the burning of a solid fuel burning device notwithstanding Section IV (A)(1) of this ordinance. "Special need" shall include, but not be limited to occasions when a furnace or central heating system is inoperable other than through the owner or operator's own actions or neglect.

V. [Prohibited Materials] It shall be unlawful for a person to cause or allow any of the following materials to be burned in a solid fuel burning device: garbage, treated wood, plastic, wire insulation, automobile parts, asphalt, petroleum products, petroleum treated material, rubber products, animal remains, paint, animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or any other material which normally emits dense smoke or noxious odors.

(Adopted by the council and approved by the Mayor, March 4, 1998)

PHOENIX: OPEN BURNING/
WOODSTOVES

8.12.050--8.16.010

8.12.050 Civil proceedings. The city may, instead of penal enforcement of this chapter, maintain civil proceedings in the courts of the state of Oregon against any person, persons, partnerships, association, corporation, municipal corporation, quasi-municipal corporation, or other entity, incorporated or otherwise, to enforce any requirement or prohibition of this chapter when the city seeks:

A. To enjoin continuation of a violation that has existed for ten days or more; or

B. To enjoin further commission of a violation that otherwise may result in additional violations affecting the public health or safety. (Ord. 222 §7, 1966)

8.12.060 Violation--Penalty. If any such person, persons, partnership, association, corporation, municipal corporation, quasi-municipal corporation, or other entity, incorporated or otherwise, as described in Section 8.12.030 shall fail to comply with any provision of this chapter, the person, persons, partnership, association, corporation, municipal corporation, quasi-municipal corporation, or entity, incorporated or otherwise, shall be punished upon conviction by a fine of not to exceed one hundred dollars for each violation. Each day in which any of the violations shall exist shall constitute a separate violation. (Ord. 222 §5, 1966)

Chapter 8.16

FIRE PREVENTION AND PROTECTION

Sections:

- 8.16.010 Uncontrolled fire--Authority to extinguish.
- 8.16.020 Uncontrolled fire--Method.
- 8.16.030 Uncontrolled fire--Cost for services.
- 8.16.040 Trash burning prohibitions.
- 8.16.050 Burn days.
- 8.16.060 Incinerator permit--Authority.
- 8.16.070 Incinerator permit--Requirements.
- 8.16.080 Dangerous fire--Prohibited.
- 8.16.090 Prohibited materials.

8.16.010 Uncontrolled fire--Authority to extinguish.
In accord with House Bill 1689 passed by the Oregon State 1971 Legislature, the fire chief or his representative is authorized to extinguish uncontrolled fires that are found to be burning in unprotected areas situated outside the boundaries of this city and that are causing or may cause an undue jeopardy to life or property if, in the opinion of the

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fire chief or his representative, such fire is causing or may cause an undue jeopardy to life or property. (Ord. 344 §1, 1972)

8.16.020 Uncontrolled fire--Method. In extinguishing a fire pursuant to Section 8.16.010, the fire chief or his representative may employ the same means and resources used by them to extinguish similar fires within the city. (Ord. 344 §2, 1972)

8.16.030 Uncontrolled fire--Cost for services. Whenever a fire is extinguished or attempted to be extinguished pursuant to the terms of Sections 8.16.010 and 8.16.020, the owner of the property involved in such fire shall be billed for the cost of providing such fire suppression service on forms furnished by the State Fire Marshal for such purposes. The cost of such fire suppression service shall be in accord with the State Standardized Cost Schedule which has been approved by the State Fire Marshal and which is as follows:

- A. One hundred dollars for each piece of apparatus for the first hour or fraction thereof;
- B. One hundred dollars for each piece of apparatus per hour following first hour broken down to the fractional portion of this charge for each fraction of an hour after the first hour;
- C. Five dollars per hour per man (minimum charge: one hour) for each man responding to and performing service at the scene of the fire emergency to be billed on a fractional basis after the first hour for any fractional portions of hours of service. (Ord. 344 §3, 1972)

8.16.040 Trash burning prohibitions. All burning of trash and other materials is prohibited as follows:

- A. Based upon considerations of reasonable safety of life and property, the chief of the fire department may suspend and prohibit the burning of trash and other materials for such period of time as unreasonable fire danger exists.
- B. At any time that trash burning and the burning of other materials is permitted, such burning shall be allowed only in an approved incinerator for which a permit has been issued.
- C. The burning of trash and other materials is totally prohibited on a nonburn day except for fire department training purposes or when reasonably necessary for safety purposes in the reasonable judgment of the fire chief of the city or his appointee.
- D. Hours of burning on a burn day are as follows and burning at any other time is absolutely prohibited:
 - 1. November through May from sunrise to sunset;
 - 2. For the months of June, July, August, September and October, from six a.m. to ten a.m. only. (Ord. 543 §2, 1982)

8.16.050 Burn days. A burn day is any day except when any of the following exist:

- A. A reported burn index of greater than sixty-five;
- B. Ventilation index less than two hundred;
- C. Temperature greater than ninety degrees;
- D. Relative humidity less than thirty percent. (Ord. 543 §3, 1982)

8.16.060 Incinerator permit--Authority. A permit for an incinerator may be obtained from the Phoenix fire chief, the assistant chief or any captain in the fire department. (Ord. 543 §4, 1982)

8.16.070 Incinerator permit--Requirements. The requirements for obtaining a permit are:

A. The incinerator shall be heavy metal or concrete. A fourteen gauge screen of not more than one-quarter-inch mesh shall be on top of the incinerator chimney at all times during burning.

B. The ground around the incinerator must be cleared of combustible materials for a distance of ten feet in every direction. However, this distance may be shortened by the chief of the fire department if he believes that the conditions are such that a distance of less than ten feet will not create an unreasonable danger of fire or an unreasonable danger to life and property. (Ord. 543 §5, 1982)

8.16.080 Dangerous fire--Prohibited. It is unlawful for any person to build, maintain or permit to burn any fire that is an unreasonable danger to persons or property. (Ord. 543 §5, 1982)

8.16.090 Prohibited materials. It is unlawful for any person at any time to burn household garbage, plastics, wire insulation, auto bodies, asphalt, waste petroleum products, rubber products, animal or vegetable waste resulting from the preparation, cooking or service of food and aerosol and pressurized cans. (Ord. 543 §6, 1982)

Chapter 8.20

WOODHEATING REGULATIONS

Sections:

- 8.20.010 Definitions.
- 8.20.020 Requirements for solid fuel heating device installation.
- 8.20.030 Solid fuel burning device emission standard.

Sections: (Continued)

8.20.040 Restriction of woodburning and emissions on high pollution days.

8.20.050 Prohibited materials.

8.20.010 Definitions. As used in this chapter:

"High pollution period" means a period of time commencing three hours after initial designation as a red or yellow day by the Oregon Department of Environmental Quality (hereinafter referred to as DEQ) or the Jackson County Department of Health and Human Services. In the event more than one consecutive days are designated as red or yellow, they shall all be considered a part of the same period.

"Opacity" means the degree to which emissions from a solid fuel burning device reduce the transmission of light and obscure the view of an object in the background. It is expressed as a percentage representing the extent to which an object viewed through the smoke is obscured.

"Oregon-certified stove" means a solid fuel device certified by DEQ as meeting the emission performance standards specified in Oregon Administrative Rules 340-34-045 through 340-34-115.

"PM₁₀" means airborne particles ranging from .01 to 10 microns in size, the breathing of which can be harmful to the human respiratory system.

"Red day" means a twenty-four hour period beginning at seven a.m. when PM₁₀ levels are forecast by the DEQ or the Jackson County Department of Health and Human services to be 130 µg/m³ and above.

"Residence" means a building containing one or more dwelling units used for habitation by one or more persons.

"Residential woodburning" means utilization of wood in a solid fuel heating device inside a residence.

"Sole source of heat" means one or more solid fuel burning devices which constitute the only source of heating in a residence. No solid fuel burning device or devices shall be considered to be the sole source of heat if the residence is equipped with a permanently installed furnace or heating system utilizing oil, natural gas, electricity, or propane.

"Solid fuel burning device" means a device designed for solid fuel combustion so that usable heat is derived for the interior of a building, and includes, without limitation, solid fuel burning stoves, fireplaces, fireplace inserts, or woodstoves of any nature combination fuel furnaces or boilers used for space heating which can burn solid fuel, or solid fuel burning cooking stoves. Solid fuel burning devices do not include barbecue devices, natural gas-fired artificial fireplace logs, DEQ approved pellet stoves, or Kachelofens.

"Space heating" means raising the interior temperature of a room.

"Yellow day" means a twenty-four hour period beginning at seven a.m. when the PM_{10} levels are forecast by the DEQ or the Jackson County Department of Health and Human Services to be $91 \mu\text{g}/\text{m}^3$ and above but less than $130 \mu\text{g}/\text{m}^3$. (Ord. 794 §1, 1998)

8.20.020 Requirements for solid fuel heating device installation. The purpose of this section is to reduce the amount of particulate pollution resulting from woodburning for space heating.

A. It shall be unlawful for any new or used solid fuel heating device to be installed in the city of Phoenix after the effective date of the ordinance codified in this chapter, unless:

1. The device is installed pursuant to the city building code and regulations of the department of planning and development; and

2. The solid fuel heating device complies with the Oregon Department of Environmental Quality Particulate Emission standards for certified woodstoves; and

3. For all new construction, the structure contains an alternate form of space heating, including natural gas, propane, electric, oil, solar, or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat with other than a solid fuel heating device.

B. If the conditions set forth in this subsection are not fulfilled, no person in possession of the premises shall cause or permit, and no public agency shall issue any permit for, the installation of the device. (Ord. 794 §2, 1998)

8.20.030 Solid fuel burning device emission standard.

A. Within the city of Phoenix, no person owning or operating a solid fuel burning device shall at any time cause, allow, or discharge emissions from such device which are of an opacity greater than fifty percent.

B. The provisions of this subsection shall not apply to emissions during the starting or refueling of a new fire for a period not to exceed thirty minutes in any four-hour period.

C. For the purposes of this section opacity percentages shall be determined by a certified observer using the standard visual method listed in 40 CFR 60A, Method 9, or operation of equipment approved by the Jackson County department of health and human services that is known to produce equivalent or better accuracy. (Ord. 794 §3, 1998)

8.20.040 Restriction of woodburning and emissions on high pollution days. A. Operation of Solid Fuel Burning Device Prohibition.

1. The operation of a solid fuel burning device within the city of Phoenix during a high pollution period shall be prohibited unless an exemption has been granted pursuant to subsection B of this section. A presumption of a violation for which a citation shall be issued shall arise if smoke is being discharged through a flue or chimney after a time period of three hours has elapsed from the time of declaration of the high pollution period.

2. Notwithstanding subsection (A)(1) of this section, the operation of an Oregon Certified solid fuel burning device shall be permitted during a high pollution period so long as no visible emissions of smoke are discharged through a flue or chimney after a time period of three hours has elapsed from the time of the declaration of the high pollution period. The provisions of this subsection shall not apply to emissions of smoke during the starting or refueling of a fire for a period not to exceed thirty minutes in any four-hour period.

3. After two years from the effective date of this ordinance, no property owner within the city of Phoenix shall rent or lease a residential unit that is not equipped with a secondary source of heat other than a solid fuel burning device, unless the landlord has a valid exemption under subsection (B)(2) of this chapter. Should a violation of this section occur it shall be attributable to the property owner and not the tenant or lessee.

B. Exemptions. It is permissible for a household to operate a solid fuel burning device within the city of Phoenix during a high pollution period when the head of that household has obtained one of the following exemptions. Exemptions granted under this section shall expire on September 1st of each year.

1. Economic Need. An exemption for an economic need to burn solid fuel for residential space heating purposes may be issued to heads of households who can show their eligibility for energy assistance under the Federal Department of Energy Low-Income Energy Assistance Program (hereinafter referred to as L.I.E.A.P.), as administered by ACCESS Inc. or its successor.

2. Sole Source. An exemption may be issued to the heads of households who sign a statement declaring their reliance on a solid fuel burning device as the sole source of heat for their residence. Sole source exemptions shall not be issued after two years from the effective date of this ordinance, unless the residence is approved for installation of an alternative heating source through the Jackson County Housing Authority woodstove replacement program guidelines or in the absence of such a program when the head of household can show that the family income is

less than eighty percent of the median income level for the Medford metropolitan area as established by the Federal Department of Housing and Urban Development (HUD). Households that qualify for an exemption based on economic need, as defined in this chapter, may continue to rely on a solid fuel burning device as the sole source of heat for the residence beyond two years from the effective date of the ordinance codified by this chapter.

3. Special Need. Upon a showing of special need, as further defined by administrative rule, a temporary exemption may be granted authorizing the burning of a solid fuel burning device notwithstanding subsection (A)(1) of this section. "Special need" shall include, but not be limited to occasions when a furnace or central heating system is inoperable other than through the owner or operator's own actions or neglect. (Ord. 794 §4, 1998)

8.20.050 Prohibited materials. It shall be unlawful for a person to cause or allow any of the following materials to be burned in a solid fuel burning device: garbage, treated wood, plastic, wire insulation, automobile parts, asphalt, petroleum products, petroleum treated material, rubber products, animal remains, paint, animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or any other material which normally emits dense smoke or noxious odors. (Ord. 794 §5, 1998)

JACKSONVILLE: OPEN BURNING

ORDINANCE NO: 375

AN ORDINANCE AMENDING CHAPTER 8.08.100 OF THE JACKSONVILLE MUNICIPAL CODE AND REPEALING ORDINANCE #348;

Section 8.08.100 - Fire Season. Fire Season, as such, is hereby discontinued. Ordinance #348 is hereby repealed.

A. No person shall start or maintain any fire outside a building (except for an outdoor cooking fire and agricultural use of orchard heaters) for the purpose of burning any material, or cause or participate therein, nor shall any person in control of any premises cause or knowingly allow any such fire to be started or maintained on any part of said premises, unless:

- a. A written permit has been issued by the City Fire Chief or his designate to maintain such fire at that location; and
- b. The fire is started and maintained in accordance with the terms of the permit and the following requirements of this section.

A BURN PERMIT MAY BE ISSUED FOR THE FOLLOWING PURPOSES ONLY:

1. Controlling agricultural diseases such as blight that must be quickly destroyed by fire to prevent the spread of the disease;
2. Burning a structure or the other use of fire for training purposes by a fire department in coordination with D.E.Q.

B. No permit will be issued where burning would violate Oregon Administrative Rules governing open burning in the Rogue Basin Open Control Area.

C. Each permit shall contain a written condition in bold-face type to the effect that the permittee shall contact the Fire Chief's office before each fire is started and ascertain that outside burning is approved, under subsection (D) and (E), by the Fire Chief or his designate for that day. No permit shall be valid as to any day on which the Fire Chief or his designate has ascertained that burning is not permitted under said subsections. In addition, the Fire Chief or his designate may condition any permit issued hereunder to exclude the burning of any particular material when he finds that the burning of such material would be unduly obnoxious in the locality of the proposed burning site.

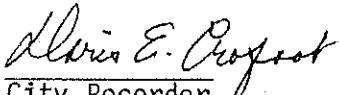
D. The Fire Chief or his designate shall not approve outside burning on any day if he determines that low humidity, high winds, drought, or other weather or other unusual conditions exist which make outside burning generally, or at the particular time and place proposed, unreasonably hazardous to the safety of persons or property. In no event shall the Fire Chief or his designate approve outside burning on a day when one or more of the following conditions exist, or in his determination will exist:

Jan. '02

and this Ordinance shall be in full force and effect immediately upon being passed by the City Council and approved by the Mayor.

Signed by me in open session in authentication of its passage this
21 day of April, 1992.


MAYOR


City Recorder

JACKSONVILLE : WOODSTOVES

Chapter 8.10

WOODHEATING

Sections:

- 8.10.010 Definitions.
- 8.10.020 Requirements for Solid Fuel Heating Device Installation.
- 8.10.030 Solid Fuel Burning Device Emission Standard.
- 8.10.040 Restriction of Woodburning and Emissions on High Pollution Days.
- 8.10.050 Exemption Application
- 8.10.060 Prohibited Materials

8.10.010 Definitions.

1. **High pollution period:** means a period of time commencing three hours after initial designation as a red or yellow day by the Oregon Department of Environmental Quality (hereinafter referred to as DEQ) or the Jackson County Department of Health and Human Services. In the event more than one consecutive days are designated as red or yellow, they shall be considered a part of the same period.
2. **Opacity:** means the degree to which emissions from a solid fuel burning device reduce the transmission of light and obscure the view of an object in the background. It is expressed as a percentage representing the extent to which an object viewed through the smoke is obscured.
3. **Oregon certified stove:** means a solid fuel burning device certified by DEQ as meeting the emission performance standards specified in Oregon Administrative Rules 340-34-045 through 340-34-115.
4. **PM₁₀:** means airborne particles ranging from .01 to 10 microns in size, the breathing of which can be harmful to the human respiratory system.
5. **Red day:** means a 24 hour period beginning at 7:00 a.m. when PM₁₀ levels are forecast by the DEQ or the Jackson County Department of Health and Human services to be 130 ug/m³ and above.
6. **Residence:** means a building containing one or more dwelling units used for habitation by one or more persons.
7. **Residential Woodburning:** means utilization of wood in a solid fuel heating device inside a residence.
8. **Sole source of heat:** means one or more solid fuel burning devices which constitute the only source of heating in a residence. No solid fuel burning

device or devices shall be considered to be the sole source of heat if the residence is equipped with a permanently installed furnace or heating system utilizing oil, natural gas, electricity, or propane.

9. Solid fuel burning device: means a device designed for solid fuel combustion so that usable heat is derived for the interior of a building, and includes, with limitation, solid fuel burning stoves, fireplaces, fireplace inserts, or woodstoves of any nature, combination fuel furnaces or boilers used for space heating which can burn solid fuel, or solid fuel burning cooking stoves. Solid fuel burning devices do not include barbecue devices, natural gas-fired artificial fireplace logs, DEQ approved pellet stoves, or Kachelofens.

10. Space Heating: means raising the interior temperature of a room.

11. Yellow day: means a 24 hour period beginning at 7:00 a.m. when the PM₁₀ levels are forecast by the DEQ or the Jackson County Department of Health and Human Services to be 91 ug/m³ and above but less than 130 ug/m³.

8.10.020 Requirements for Solid Fuel Heating Device Installation. The purpose of this section is to reduce the amount of particulate pollution resulting from woodburning for space heating.

(A) It shall be unlawful for any new or used solid fuel heating device to be installed in the City of Jacksonville after the effective date of this Ordinance, unless:

(1) The device is installed pursuant to the City Building Code and regulations of the Department of Planning and Development; and

(2) The solid fuel heating device complies with the Oregon Department of Environmental Quality Particulate Emission standards for certified woodstoves; and

(3) For all new construction, the structure contains an alternate form of space heating, including natural gas, propane, electric, oil, solar, or kerosene, sufficient to meet necessary space heating requirements, so that during episodes of high pollution levels, the occupant will be able to heat the home with other than a solid fuel heating device.

(B) If the conditions set forth in this subsection are not fulfilled, no person in possession of the premises shall cause or permit, and no public agency shall issue any permit for, the installation of the device.

8.10.030 Solid Fuel Burning Device Emission Standard. (A) Within the City of Jacksonville, no person owning or operating a solid fuel burning device shall at any time cause, allow, or discharge emissions from such device which are of an opacity greater than fifty (50) percent.

(B) The provisions of this subsection shall not apply to emissions during the starting or refueling of a new fire for a period to exceed 30 minutes in any four-hour period.

(C) For the purposes of this section opacity percentages shall be determined by a certified observer using the standard visual method listed in 40 CFR 60A, Method 9, or operation of equipment approved by the Jackson County Department of Health and Human Services that is known to produce equivalent or better accuracy.

8.10.040 Restriction of Woodburning and Emissions on High Pollution Days.

(A) Operation of Solid Fuel Burning Device Prohibition:

(1) The operation of a solid fuel burning device within the City of Jacksonville during a high pollution period shall be prohibited unless an exemption has been granted pursuant to Section 8.10.040 (B) of this Chapter. A presumption of a violation for which a citation shall be issued shall arise if smoke is being discharged through a flue or chimney after a time period of three hours has elapsed from the time of declaration of the high pollution period.

(2) Notwithstanding subsection (A)(1) of this section, the operation of an Oregon Certified solid fuel burning device shall be permitted during a high pollution period so long as no visible emissions of smoke are discharged through a flue or chimney after a time period of three hours has elapsed from the time of the declaration of the high pollution period. The provisions of this subsection shall not apply to emissions of smoke during the starting or refueling of a fire for a period not to exceed 30 minutes in any four-hour period.

(3) After two years from the effective date of this ordinance, no property owner within the City of Jacksonville shall rent or lease a residential unit that is not equipped with a secondary source of heat other than a solid fuel burning device, unless the landlord has a valid exemption under Section 8.10.040(B)(2) of this Chapter. Should a violation of this section occur, it shall be attributable to the property owner and not to the tenant or lessee.

(B) Exemptions: It is permissible for a household to operate a solid fuel burning device within the City of Jacksonville during a high pollution period when the head of that household has obtained one of the following exemptions. Exemptions granted under this section shall expire on September 1 of each year.

(1) Economic Need: An exemption for an economic need to burn solid fuel for residential space heating purposes may be issued to heads of households who can show their eligibility for energy assistance under the Federal Department of Energy Low-income Energy Assistance Program (hereinafter referred to as L.I.E.A.P.), as administered by ACCESS, Inc. or its successor.

(2) Sole Source: An exemption may be issued to the heads of households who sign a statement declaring their reliance on a solid fuel burning device as the sole source of heat for their residence. Sole source exemptions shall not be issued after two years from the effective date of this ordinance, unless the residence is approved for installation of an alternative heating source through the Jackson County Housing Authority woodstove replacement program guidelines or in the absence of such a program when the head of the household can show that the family income is less than 80% of the median income level for the Medford metropolitan area as established by the Federal Department of

Housing and Urban Development (HUD). Households that qualify for an exemption based on economic need, as defined in this Chapter, may continue to rely on a solid fuel burning device as the sole source of heat for the residence beyond two years from the effective date of this ordinance.

(3) Special Need: Upon a showing of special need, as further defined by administrative rule, a temporary exemption may be granted authorizing the burning of a solid fuel burning device notwithstanding Section 8.10.040(A)(1) of this ordinance. "Special need" shall include, but not be limited to, occasions when a furnace or central heating system is inoperable other than through the owner or operator's own actions or neglect.

8.10.050 Exemption Application. The head of household shall obtain an applicable exemption application form from the Jacksonville City Offices, 110 E. Main Street, Jacksonville, OR. The exemption application form shall be completed and signed by the agency as indicated on the form. These completed forms shall be returned to the Jacksonville City Administrator, or his designee, for final approval. Said forms shall be filed in the City Offices. There shall be no City fees for applying for an exemption.

For administrative clarification, the City will use the policies developed in the Jackson County Woodsmoke Manual.

8.10.060 Prohibited Materials. It shall be unlawful for a person to cause or allow any of the following materials to be burned in a solid fuel burning device: garbage, treated wood, plastic, wire insulation, automobile parts, asphalt, petroleum products, petroleum treated material, rubber products, animal remains, paint, animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or any other material which normally emits dense smoke or noxious odors.

TEMPORARY ECONOMIC NEED EXEMPTION AFFIDAVIT

CITY OF JACKSONVILLE WOODSMOKE PROGRAM

This application is for a TEMPORARY exemption from the City of Jacksonville woodsmoke curtailment program during high pollution periods (yellow and red days). The acceptance of this application is based upon the applicant:

1. Meeting the income guidelines attached to this form.
2. Contacting ACCESS at 779-9020 for a qualification interview.
3. Attending the qualification interview conducted by ACCESS.

ACCESS will notify the City Administrator's office if you meet their guidelines. If you do not qualify for their income guidelines, this temporary exemption will end. You must then follow the red, yellow, and green advisory, and cannot burn your woodstove (or fireplace) unless it is DEQ certified and you can burn it without producing smoke (except for start-up and refueling) on yellow and red days.

I hereby affirm that I am the head of household located at (street address):

_____ and, that my household

gross income falls within the Low Income Energy Assistance Program (L.I.E.A.P.) guidelines attached to this application.

Name of Head of Household _____

Address _____

City _____ Zip _____ Phone _____

Name of Applicant (Print Please) _____

Address _____

City _____ Zip _____

Signature of Applicant _____ Date _____

*****for office use*****

Signature of Staff _____ Date _____

Return form to: City of Jacksonville, 110 E. Main St., Jacksonville, OR 97530
Phone: 899-1231

RELEVANT INCOME LEVELS FOR
EXEMPTION FROM WOODSTOVE ORDINANCE

Size of Family Unit	Income Levels for Economic Need Exemption (L.I.E.A.P.)	
	Monthly	Yearly
1	\$709.38	\$8,512.50
2	957.29	11,487.50
3	1,205.21	14,462.50
4	1,453.13	17,437.50
5	1,701.04	20,412.50
6	1,948.96	23,387.50
7	2,196.88	26,362.50
8	2,444.79	29,337.50
For each additional person	\$247.92	\$2,975.00

Effective - February, 1992.

: sda
1080.92

SPECIAL EXEMPTION AFFIDAVIT

CITY OF JACKSONVILLE WOODSMOKE PROGRAM

This application is for an exemption from the City of Jacksonville woodsmoke curtailment program during high pollution periods (yellow and red days).

Alternate Heating Source is Inoperable:

I hereby affirm that I am the head of household located at (street address):

_____ and, that the alternate heating source at this residence is inoperable other than through my own actions. I understand this exemption *expires in 30 days*.

Nature condition: _____

Type of evidence attached (receipt, work order, etc. _____

Owner or Renter _____ If renter, Owner's name and address

Name of Applicant (Print Please) _____

Address _____

City _____ Zip _____

I certify that the information stated above is true and accurate and that making false statements which may provide me with an exemption for which I am not entitled is unlawful and punishable under City ordinance. I hereby consent to the release of this information for investigation to confirm the above information.

Signature of Applicant _____ Date _____

*****for office use*****

Signature of Staff _____ Date _____

Return form to: City of Jacksonville, 110 E. Main St., Jacksonville, OR 97530
Phone: 899-1231

SPECIAL EXEMPTION AFFIDAVIT

CITY OF JACKSONVILLE WOODSMOKE PROGRAM

This application is for an exemption from the City of Jacksonville woodsmoke curtailment program during high pollution periods (yellow and red days).

Medical Reason:

I hereby affirm that I am the head of household located at (street address):

_____ and that, due to medical reasons, a person residing full-time at my residence *requires* woodheat instead of an alternate heating source.

Nature of medical condition: _____

Physician's name, address & phone: _____

Doctor's signature or official stamp _____

Name of Applicant (Print Please) _____

Address _____

City _____ Zip _____

I certify that the information stated above is true and accurate and that making false statements which may provide me with an exemption for which I am not entitled is unlawful and punishable under City ordinance. I hereby consent to the release of this information for investigation to confirm the above information.

Signature of Applicant _____ Date _____

*****for office use*****

Signature of Staff _____ Date _____

Return form to: City of Jacksonville, 110 E. Main St., Jacksonville, OR 97530
Phone: 899-1231

EAGLE POINT: OPEN BURNING

8.08.100

8.08.100 Establishment of fire lines.

The fire chief or, in his or her absence, the chief of police shall have the authority to establish fire lines. It shall be unlawful for any unauthorized person, except the owner, lessee, or someone having some property rights or interest in the burning property or other property imperiled thereby, to enter the fire limits fixed by such lines. (Ord. 7-7 § 4, 1990)

Article III. Preventing and Abating Fire Hazards

8.08.110 Disposal of ashes.

It shall be unlawful for any person or persons to deposit any ashes or cause them to be deposited or permit or suffer the ashes to remain in any wooden vessel or other combustible receptacle. Ashes shall be placed in some safe depository or galvanized iron or other incombustible material not less than twelve (12) inches from any wooden wall, wooden fence, or other woodwork, and not less than twenty (20) feet from any wooden structure or building. (Ord. 7-7 § 5, 1990)

8.08.120 Disposal of combustible waste materials.

Any person using or having charge of or control over any shavings, hay, straw, litter, or other combustible waste material fragments shall cause them to be securely deposited or removed so as to be safe from fire. All receptacles for waste, rags, paper, and other substances liable to spontaneous combustion must be made of incombustible material. (Ord. 7-7 § 6, 1990)

8.08.130 Combustible material on roofs prohibited.

It shall be unlawful for any person to allow or permit to remain upon roofs in the city any accumulation of paper, hay moss, or other inflammable or combustible material. (Ord. 7-7 § 7, 1990)

8.08.140 Fires on public streets, alleys or highways prohibited.

It shall be unlawful for any person to kindle any fire or cause a fire to be kindled upon public streets, alleys, or highways within the city. This section shall not prohibit fires necessary for the heating of pitch or tar for roofing authorized buildings or street construction or repairs. (Ord. 7-7 § 8, 1990)

8.08.150 Accumulation of inflammable refuse or rubbish on premises prohibited.

It shall be unlawful for any person within the city to accumulate, to permit to accumulate, to deposit, or to cause to be deposited on any premises within the city any accumulation of inflammable refuse or rubbish in amount or quantity sufficient to constitute a fire hazard. (Ord. 7-7 § 9 (part), 1990)

Article IV. Open Burning

8.08.160 Outside burning of refuse or rubbish.

It shall be unlawful for any person within the city to engage in any outside burning of refuse or rubbish unless:

A. A written permit has been issued by the fire chief or designee to maintain such fire at that location and date; and

JAN '02

B. The fire is started and maintained in accordance with the terms of the permit and this chapter. (Editorially amended during 2000 codification; Ord. 7-7 § 10, 1990)

8.08.170 Open burning restricted.

A. No permit will be issued under any circumstances for outside burning during December or January. The purpose of this section is to minimize the accumulation of PM 10 air pollution resulting from open burning. The public should be aware that open burning may also be restricted during the fire season (typically June through October) by the fire districts or other fire regulating authorities.

B. Burn barrels, trash incinerators or similar devices and their locations shall be approved by the fire chief or designee prior to the issuance of a permit.

C. The fire chief or designee shall not approve outside burning on any day when it is determined that the ventilation index is less than DEQ recommendations during the day. (Ord. 7-7 § 11, 1990)

8.08.180 Purposes for open burning permit.

A permit may be issued only for the following purposes:

A. Controlling agricultural diseases such as blight that must be quickly destroyed by fire to prevent the spread of the disease;

B. Burning contaminated pesticide containers as prescribed by DEQ and manufacturer specifications;

C. Burning beehives and beekeeping paraphernalia to eradicate the spread of disease;

D. Burning a structure or the other use of fire for training purposes by a fire department in coordination with DEQ;

E. Field burning in agricultural areas;

F. The burning of vegetative material by the public-at-large from February 1st to beginning of fire season and from end of fire season to November 30th of each year, subject to all terms and conditions of the permit and the terms and conditions of the ordinance codified in this article.

G. The fire chief or designee may condition any permit issued hereunder to exclude the burning of any particular material upon a finding by the fire chief or designee that the burning of such material would be unduly obnoxious in the locality of the proposed burning site.

H. Open burning of any wet garbage, plastic, wire insulation, automobile part, asphalt, petroleum product, petroleum treated material, rubber product, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking or service of food or of any other material which normally emits dense smoke or noxious odors is prohibited throughout the city of Eagle Point. (Ord. 7-7 § 12, 1990)

8.08.190 Times when open burning fire allowed.

Fires which are the subject of this article shall be maintained during daylight hours only, and by a competent adult person, and shall be extinguished prior to darkness unless continued burning is specifically authorized in writing by the fire chief or designee. Additionally, the fire chief or designee, as a permit condition, may restrict fires to limited daylight hours which shall be specified on the permit. (Ord. 7-7 § 13, 1990)

8.08.200 Public nuisance.

Burning without a permit as prescribed by this article, or in violation of the terms of any permit, or any other act in violation of the ordinance codified in this article is declared to be a public nuisance and may be summarily abated by the fire chief or designee or the police department. (Ord. 7-7 § 14, 1990)

**8.08.210 Discarding lighted tobacco products prohibited—
Warning signs required.**

It shall be unlawful for any persons to throw away any lighted cigar, cigarette, or other tobacco within any sawmill, box factory, lumber yard, or any part of any public street within one hundred (100) feet of such sawmill, box factory, or lumber yard; warning signs shall be posted in conspicuous places in every sawmill, box factory, or lumber yard and along any street, sidewalk, or alley within one hundred (100) feet of such place. Such signs shall be erected by the owners of such sawmill, box factory, or lumber yard at their sole expense. (Ord. 7-7 § 15, 1990)

8.08.220 Notice to shut off water systems.

Upon notice of the fire chief or chief of police all consumers and users of water connected with the water systems now in use or hereafter installed in the city shall shut off all private systems, hydrants or appliances on their premises immediately. (Ord. 7-7 § 16, 1990)

8.08.230 Written notification that premises is a fire hazard.

The fire chief, or designee, the chief of police or any other police officer in the city of Eagle Point shall, upon determining that a fire

hazard exists as described in this article, notify the owner, occupant, agent, or other person in charge of property upon which such fire hazard exists. Such notice shall be delivered personally in writing or by registered mail to the last known address of such person and shall state specifically the condition which has caused the fire hazard. Such fire hazard shall be removed within twenty-four (24) hours after delivery of such notice. If removal is not completed within a reasonable time, the fire chief, his or her designee, the chief of police, or other police officer shall cause such fire hazard to be removed and the cost thereof shall become a lien upon the property on which the fire hazard exists or to which it is adjacent, in the same manner as other liens under the laws of the state of Oregon and the Charter of the city of Eagle Point. (Ord. 7-7 § 17, 1990)

8.08.240 Liens.

Any owner or occupant of any tract, piece, or parcel of land against which a lien has been entered under the provisions of this article who shall for any reason desire to dispute the lien, may file his or her protest with the city recorder and municipal judge within ten (10) days from the date of such docketing, which protest shall set forth the grounds for such protest. The protest shall be heard speedily and summarily, and the lien docketed as previously stated shall be confirmed, modified, or vacated, as may be warranted by the facts, or, if confirmed, the lien may thereafter be enforced by notice issued by the city recorder and municipal judge to the chief of police to sell said premises upon published notice of such proceeding as is otherwise required on sale of real property for the satisfaction of city liens. (Ord. 7-7 § 18, 1990)

Appendix A-5

Fruitgrowers League Emission Reduction Policy

FRUIT GROWERS LEAGUE

766 S. GRAPE ST. • P.O. BOX 27
MEDFORD, OREGON 97501
(503) 773-1060 or (503) 773-4088
FAX (503) 779-0465

January 22, 1998 - TRACK-ON POLICY

The Jackson County Fruit Growers League (FGL) is a grower organization formed to facilitate the production of pears in Jackson County. As members of this organization we enjoy and value a health environment. The (FGL) policy, using available resources, is to encourage our members and other agricultural producers to reduce particulate matter pollution.

It is our belief that this can be accomplished by regular reminders to all who engage in the production of pears and other agricultural commodities in the Rogue River Valley. Track-on dirt to public roadways must be prevented. We encourage the practises listed below:

1. Clean the wheels of equipment before entering public roadways from the orchard or field.
2. Remove mud and dirt that is accidentally tracked on to the public road.
3. Avoid driving on public roadways with field equipment when wet muddy conditions exist.
4. Use the shoulder of the road whenever possible for the movement of equipment.
5. Provide drives from the orchard that will not become dusty or muddy.

The directors of the (FGL) believe that track-on is preventable when growers are aware of the problem. The experience of growers using these methods has proven successful.

The above policy has been formally adopted at the regular January 22, 1998 meeting of the Jackson County Fruit Growers League Board of Directors.

Ric Reno, President

SOUTHERN OREGON RESEARCH AND EXTENSION CENTER
RESEARCH UNITOREGON STATE UNIVERSITY
569 Hanley Road, Medford Oregon 97502-1206
Telephone 541-772-5165 Fax 541-772-5110

February 20, 1998

Ric Reno, President
Fruit Growers League
766 S. Grape St.
Box 27
Medford, Oregon 97501

Dear Ric:

This is in reference to the proposed EPA "Track On" policy. Dan Hull has shared a copy of the policy adopted by the Fruit Growers League on January 22, 1998.

It appears that education of growers and others within the community is vital to maintain a practical approach to this situation. I would therefore offer our support to the League's policy and encourage you to consider using our March issue of the "Extender" to provide additional information and inform people of your policy.

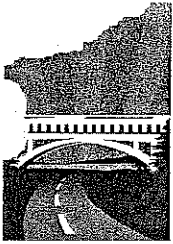
I will be glad to work with Dan Hull in facilitating the process. Please contact my office if you have additional questions.

Sincerely,

Michael E. Howell, Superintendent
Southern Oregon Research & Extension Center

Appendix A-6

Jackson County Letter Regarding Street Sweeping



JACKSON COUNTY

Roads

ROADS, PARKS AND PLANNING SERVICES

PAUL KORBULIC
DIRECTOR

White City Office
200 Antelope Road
White City, Oregon 97503
Phone: (541) 774-8184
Fax: (541) 774-6295

Planning Dept.
Medford Office
10 S. Oakdale Avenue
Medford, Oregon 97501
Phone: (541) 774-6900
Fax: (541) 774-6791

November 5, 2003

DEQ Air Quality Division
Attention: David Collier
811 SW 6th Avenue
Portland, OR 97204

Dear David:

Jackson County is using a Schwartz A-7000 sweeper in the White City Urban Containment Boundary. The streets within the White City area are swept no less than two times per month. The sweeper's extra time is used in cooperation with the City of Medford to sweep streets within their city limits. On average, it is used a minimum of 150 hours per month.

Please call me at 541-774-6202 if you need further information.

Sincerely,

Dale Petrasek, P.E.
County Engineer

FAXED
11-5-03

RECEIVED
NOV 10 2003

AIR QUALITY DIVISION
Dept. Environmental Quality

deq sweeper.org

REVISED

Attachment B

Proposed Rule Revisions
Supporting Oregon Administrative Rules

DIVISION 200

General Air Pollution Procedures

The Secretary of State will amend OAR 340-200-0040 to incorporate adoption of the Medford-Ashland PM₁₀ Plan as a revision to the State of Oregon Clean Air Act Implementation Plan (SIP)

DEPARTMENT OF ENVIRONMENTAL QUALITY

GENERAL AIR POLLUTION PROCEDURES AND DEFINITIONS

General

340-200-0010

Purpose and Application

(1) This division provides general air pollution procedures and definitions that apply to all air quality rules in divisions 200 through 268.

(2) Divisions 200 through 268 apply in addition to all other rules adopted by the Environmental Quality Commission. In cases of apparent conflict between rules within these divisions, the most stringent rule applies unless otherwise expressly stated.

(3) The Department administers divisions 200 through 268 in all areas of the State of Oregon except in Lane County where Lane Regional Air Pollution Authority administers the air pollution control regulations.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468 & ORS 468A

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-200-0020

General Air Quality Definitions

As used in divisions 200 through 268, unless specifically defined otherwise:

(1) "Act" or "FCAA" means the Federal Clean Air Act, 42 U.S.C.A. §§ 7401 to 7671q.

(2) "Activity" means any process, operation, action, or reaction (e.g., chemical) at a source that emits a regulated pollutant.

(3) "Actual emissions" means the mass emissions of a pollutant from an emissions source during a specified time period.

(a) For determining actual emissions as of the baseline period:

(A) Except as provided in paragraph (B), actual emissions equal the average rate at which the source actually emitted the pollutant during a baseline period and that represents normal source operation;

(B) The Department presumes that the source-specific mass emissions limit included in a source's permit that was effective on September 8, 1981 is equivalent to the source's actual emissions during the baseline period if it is within 10% of the actual emissions calculated under paragraph (A).

(C) For any source that had not begun normal operation, actual emissions equal the potential to emit of the source.

(b) For determining actual emissions for Emission Statements under OAR 340-214-0200 through 340-214-0220 and Oregon Title V Operating Permit Fees under OAR 340 division 220, actual emissions include, but are not limited to, routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities, except categorically insignificant activities and secondary emissions.

(c) For Oregon Title V Operating Permit Fees under OAR 340 division 220, actual emissions must be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor in combination with the source's actual operating hours, production rates, or types of materials processed, stored, or combusted during the specified time period.

(4) "Adjacent" means interdependent facilities that are nearby to each other.

(5) "Affected source" means a source that includes one or more affected units that are subject to emission reduction requirements or limitations under Title IV of the FCAA.

(6) "Affected states" means all states:

(a) Whose air quality may be affected by a proposed permit, permit modification, or permit renewal and that are contiguous to Oregon; or

(b) That are within 50 miles of the permitted source.

(7) "Aggregate insignificant emissions" means the annual actual emissions of any regulated air pollutant from one or more designated activities at a source that are less than or equal to the lowest applicable level specified in this section. The total emissions from each designated activity and the aggregate emissions from all designated activities must be less than or equal to the lowest applicable level specified.

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0003

340-200-0040

State of Oregon Clean Air Act Implementation Plan

(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, **42 U.S.C.A §§ 7401 to 7671q**.

(2) Except as provided in section (3), revisions to the SIP will be made pursuant to the Commission's rulemaking procedures in division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the United States Environmental Protection Agency for approval.

(3) Notwithstanding any other requirement contained in the SIP, the Department may:

(a) 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, 2002); and

(b) Approve the standards submitted by a regional authority if the regional authority adopts verbatim any standard that the Commission has adopted, and submit the standards to EPA for approval as a SIP revision.

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.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

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. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 17-1993, 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. & cert. ef. 3-21-94; DEQ 14-1994, f. & cert. ef. 5-31-94; DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 9-1995, f. & cert. ef. 5-1-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 19-1995, f. & cert. ef. 9-1-95; DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95; DEQ 8-1996(Temp), f. & cert. ef. 6-3-96; DEQ 15-1996, f. & cert. ef. 8-14-96; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 23-1996, f. & cert. ef. 11-4-96; DEQ 24-1996, f. & cert. ef. 11-26-96; DEQ 10-1998, f. & cert. ef. 6-22-98; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 17-1998, f. & cert. ef. 9-23-98; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 21-1998, f. & cert. ef. 10-12-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 5-1999, f. & cert. ef. 3-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 6-2000, f. & cert. ef. 5-22-00; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 13-2000, f. & cert. ef. 7-28-00; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 17-2000, f. & cert. ef. 10-25-00; DEQ 20-2000 f. & cert. ef. 12-15-00; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 16-2001, f. & cert. ef. 12-26-01; DEQ 17-2001, f. & cert. ef. 12-28-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2002, f. & cert. ef. 5-3-02; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 5-2003, f. & cert. ef. 2-6-03

340-200-0050

Compliance Schedules

(1) The Department's goal is to encourage voluntary cooperation of all persons responsible for an air contamination source. To facilitate this cooperation and provide for a progressive program of air pollution control, the Department may negotiate with such persons to establish a compliance schedule for meeting the requirements contained in the applicable air quality rules or statutes. The schedule will set forth the conditions with which the responsible person must comply.

(a) The schedule may be accepted in lieu of a hearing. It must be in writing and signed by the Director of the Department or his designated officer and an authorized agent of the

DIVISION 204

DESIGNATION OF AIR QUALITY AREAS

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 204

DESIGNATION OF AIR QUALITY AREAS

340-204-0010

Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020, the definition in this rule applies to this division. Definitions of boundaries in this rule also apply to OAR 340 Division 200 through 268 and throughout the State of Oregon Clean Air Act Implementation Plan adopted under OAR 340-200-0040.

- (1) "AQCR" means Air Quality Control Region.
- (2) "AQMA" means Air Quality Maintenance Area.
- (3) "CO" means Carbon Monoxide.
- (4) "CBD" means Central Business District.
- (5) "Criteria Pollutant" means any of the six pollutants set out by the Clean Air Act (sulfur oxides, particulate matter, ozone, carbon monoxide, nitrogen dioxide, and lead) for which the EPA has promulgated standards in 40 CFR 50.4 through 50.12 (July, 1993).
- (6) "Eugene-Springfield UGA" means the area within the bounds beginning at the Willamette River at a point due east from the intersection of East Beacon Road and River Loop No.1; thence southerly along the Willamette River to the intersection with Belt Line Road; thence easterly along Belt Line Road approximately one-half mile to the intersection with Delta Highway; thence northwesterly and then northerly along Delta Highway and on a line north from the Delta Highway to the intersection with the McKenzie River; thence generally southerly and easterly along the McKenzie River approximately eleven miles to the intersection with Marcola Road; thence southwesterly along Marcola Road to the intersection with 42nd Street; thence southerly along 42nd Street to the intersection with the northern branch of US Highway 126; thence easterly

along US Highway 126 to the intersection with 52nd Street; thence north along 52nd Street to the intersection with High Banks Road; thence easterly along High Banks Road to the intersection with 58th Street; thence south along 58th Street to the intersection with Thurston Road; thence easterly along Thurston Road to the intersection with the western boundary of Section 36, T17S, R2W; thence south to the southwest corner of Section 36, T17S, R2W; thence west to the Springfield City Limits; thence following the Springfield City Limits southwesterly to the intersection with the western boundary of Section 2, T18S, R2W; thence on a line southwest to the Private Logging Road approximately one-half mile away; thence southeasterly along the Private Logging Road to the intersection with Wallace Creek; thence southwesterly along Wallace Creek to the confluence with the Middle Fork of the Willamette River; thence generally northwesterly along the Middle Fork of the Willamette River approximately seven and one-half miles to the intersection with the northern boundary of Section 11, T18S, R3W; thence west to the northwest corner of Section 10, T18S, R3W; thence south to the intersection with 30th Avenue; thence westerly along 30th Avenue to the intersection with the Eugene City Limits; thence following the Eugene City Limits first southerly then westerly then northerly and finally westerly to the intersection with the northern boundary of Section 5, T18S, R4W; thence west to the intersection with Greenhill Road; thence north along Greenhill Road to the intersection with Barger Drive; thence east along Barger Drive to the intersection with the Eugene City Limits (Ohio Street); thence following the Eugene City Limits first north then east then north then east then south then east to the intersection with Jansen Drive; thence east along Jansen Drive to the intersection with Belt Line Road; thence northeasterly along Belt Line Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection with Clear Lake Road; thence west along Clear Lake Road to the intersection with the western boundary of Section 9, T17S, R4W; thence north to the intersection with Airport Road; thence east along Airport Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection East Enid Road; thence east along East Enid Road to the intersection with Prairie Road; thence southerly along Prairie Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with the Southern Pacific Railroad Line; thence southeasterly along the Southern Pacific Railroad Line to the intersection with Irving Road; thence east along Irving Road to the intersection with Kalmia Road; thence northerly along Kalmia Road to the intersection with Hyacinth Road; thence northerly along Hyacinth Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with Spring Creek; thence northerly along Spring Creek to the intersection with River Road; thence northerly along River Road to the intersection with East Beacon Drive; thence following East Beacon Drive first east then south then east to the intersection with River Loop No.1; thence on a line due east to the Willamette River and the point of beginning.

(7) "Grants Pass CBD" means the area within the City of Grants Pass enclosed by "B" Street on the north, 8th Street to the east, "M" Street on the south, and 5th Street to the west.

(8) Grants Pass Control Area means the area of the state beginning at the northeast corner of Section 35, T35S, R5W; thence south to the southeast corner of Section 11, T37S,

R5W; thence west to the southwest corner of Section 9, T37S, R6W; thence north to the northwest corner of Section 33, T35S, R6W; thence east to the point of beginning.

(9) "Grants Pass UGB" as shown on the Plan and Zoning maps for the City of Grants Pass as of Feb. 1, 1988 is the area within the bounds beginning at the NW corner of Sec. 7, T36S, R5W; thence south to the SW corner of Sec. 7; thence west along the southern boundary of Sec. 12, T36S, R5W approx. 2000 feet; thence south approx. 100 feet to the northern right of way of the Southern Pacific Railroad Line (SPRR Line); thence southeasterly along said right of way approx. 800 feet; thence south approx. 400 feet; thence west approx. 1100 feet; thence south approx. 700 feet to the intersection with the Hillside Canal; thence west approx. 100 feet; thence south approx. 550 feet to the intersection with Upper River Road; thence southeasterly along Upper River Road and continuing east along Old Upper River Road approx. 700 feet; thence south approx. 1550 feet; thence west approx. 350 feet; thence south approx. 250 feet; thence west approx. 1000 feet; thence south approx. 600 feet to the north end of Roguela Lane; thence east approx. 400 feet; thence south approx. 1400 feet to the intersection with Lower River Road; thence west along Lower River Road approx. 1400 feet; thence south approx. 1350 feet; thence west approx. 25 feet; thence south approx. 1200 feet to the south bank of the Rogue River; thence northwesterly along said bank approx. 2800 feet; thence on a line southwesterly and parallel to Parkhill Place approx. 600 feet; thence northwesterly at a 90 degree angle approximately 300 feet to the intersection with Parkhill Place; thence southwesterly along Parkhill Place approx. 250 feet; thence on a line southeasterly forming a 90 degree angle approximately 300 feet to a point even with Leonard Road; thence west approx. 1500 feet along Leonard Road; thence north approx. 200 feet; thence west to the west side of Schroeder Lane; thence north approx. 150 feet; thence west approx. 200 feet; thence south to the intersection with Leonard Road; thence west along Leonard Road approx. 450 feet; thence north approx. 300 feet; thence east approx. 150 feet; thence north approx. 400 feet; thence west approx. 500 feet; thence south approx. 300 feet; thence west to the intersection with Coutant Lane; thence south along Coutant Lane to the intersection with Leonard Road; thence west along Leonard Road to the intersection with Buena Vista Lane; thence north along the west side of Buena Vista Lane approx. 200 feet; thence west approx. 150 feet; thence north approx. 150 feet; thence west approx. 200 feet; thence north approx. 400 feet; thence west approx. 600 feet to the intersection with the western boundary of Sec. 23, T36S, R6W; thence south to the intersection with Leonard Road; thence west along Leonard Road approx. 300 feet; thence north approx. 600 feet to the intersection with Darneille Lane; thence northwesterly along Darneille Lane approx. 200 feet; thence west approx. 300 feet; thence south approx. 600 feet to the intersection with Leonard Road; thence west along Leonard Road approx. 700 feet; thence south approx. 1350 feet; thence east approx. 1400 feet to the intersection with Darneille Lane; thence south along Darneille Lane approx. 600 feet; thence west approx. 300 feet; thence south to the intersection with Redwood Avenue; thence east along Redwood Avenue to the intersection with Hubbard Lane and the western boundary of Sec. 23, T36S, R6W; thence south along Hubbard Lane approx. 1850 feet; thence west approx. 1350 feet; thence south to the south side of U.S. Highway 199; thence westerly along U.S. 199 approx. 1600 feet to the intersection with the north-south midpoint of Sec. 27, T36S, R6W; thence south approx. 2200 feet; thence east

approx. 1400 feet; thence north approx. 1000 feet; thence east approx. 300 feet; thence north approx. 250 feet to the intersection with the Highline Canal; thence northerly along the Highline Canal approx. 900 feet; thence east to the intersection with Hubbard Lane; thence north along Hubbard Lane approximately 600 feet; thence east approx. 200 feet; thence north approx. 400 feet to a point even with Canal Avenue; thence east approx. 550 feet; thence north to the south side of U.S. 199; thence easterly along the southern edge of U.S. 199 to the intersection with Willow Lane; thence south along Willow Lane to the intersection with Demaray Drive; thence easterly along Demaray Drive and continuing along the southern edge of U.S. 199 to the intersection with Dowell Road; thence south along Dowell Road approx. 550 feet; thence easterly approx. 750 feet; thence north to the intersection with the South Canal; thence easterly along the South Canal to the intersection with Schutzwahl Lane; thence south approx. 1300 feet to a point even with West Harbeck Road; thence east approx. 2000 feet to the intersection with Allen Creek; thence southerly along Allen Creek approx. 1400 feet to a point even with Denton Trail to the west; thence west to the intersection with Highline Canal; thence southerly along Highline Canal to the intersection with the southern boundary of Sec. 25, T36S, R6W; thence east to the intersection with Allen Creek; thence southerly along Allen Creek to the intersection with the western boundary of Sec. 31, T36S, R5W; thence south to the SW corner of Sec. 31; thence east to the intersection with Williams Highway; thence southeasterly along Williams Highway approx. 1300 feet; thence east approx. 200 feet; thence north approx. 400 feet; thence east approx. 700 feet; thence north to the intersection with Espey Road; thence west along Espey Road approx. 150 feet; thence north approx. 600 feet; thence east approx. 300 feet; thence north approx. 2000 feet; thence west approx. 2100 feet; thence north approx. 1350 feet; thence east approx. 800 feet; thence north approx. 2800 feet to the east-west midline of Sec. 30, T36S, R5W; thence on a line due NE approx. 600 feet; thence north approx. 100 feet; thence east approx. 600 feet; thence north approx. 100 feet to the intersection with Highline Canal; thence easterly along Highline Canal approx. 1300 feet; thence south approx. 100 feet; thence east to the intersection with Harbeck Road; thence north along Harbeck Road to the intersection with Highline Canal; thence easterly along Highline Canal to a point approx. 250 feet beyond Skyway Road; thence south to the intersection with Skyway Road; thence east to the intersection with Highline Canal; thence southeasterly along Highline Canal approx. 1200 feet; thence on a line due SW to the intersection with Bluebell Lane; thence southerly along Bluebell Lane approx. 150 feet; thence east to the intersection with Sky Crest Drive; thence southerly along Sky Crest Drive to the intersection with Harper Loop; thence southeasterly along Harper Loop to the intersection with the east-west midline of Sec. 29, T36S, R5W; thence east approx. 400 feet; thence south approx. 1300 feet to a point even with Troll View Road to the east; thence east to the intersection with Hamilton Lane; thence north along Hamilton Lane to the intersection with the Highline Canal; thence northeasterly along the Highline Canal to the northern boundary of Sec. 28, T36S, R5W; thence east approx. 1350 feet to the transmission line; thence north to the intersection with Fruitdale Drive; thence southwesterly along Fruitdale Drive approx. 700 feet; thence north to the northern edge of U.S. 199; thence easterly along the northern edge of U.S. 199 approx. 50 feet; thence north to the north bank of the Rogue River; thence northeasterly along the north bank of the Rogue River approx. 2100 feet to a point even with Ament Road; thence north to

Ament Road and following Ament Road to U.S. Interstate Highway 5 (U.S. I-5); thence continuing north to the 1200 foot contour line; thence following the 1200 foot contour line northwesterly approx. 7100 feet to the city limits and a point even with Savage Street to the west; thence north following the city limits approx. 400 feet; thence west to the intersection with Beacon Street; thence north along Beacon Street and the city limits approx. 250 feet; thence east along the city limits approx. 700 feet; thence north along the city limits approx. 2200 feet; thence southwesterly along the city limits approximately 800 feet to the intersection with the 1400 foot contour line; thence northerly and northwesterly along the 1400 foot contour line approx. 900 feet to the intersection with the northern boundary of Sec. 9, T36S, R5W; thence west along said boundary approx. 100 feet to the NW corner of Sec. 9; thence south along the western boundary of Sec. 9 approx. 700 feet; thence west approx. 1400 feet; thence north approx. 2400 feet; thence west approx. 1350 feet; thence north approx. 1100 feet to the city limits; thence following the city limits first west approx. 1550 feet, then south approx. 800 feet, then west approx. 200 feet, then south approx. 200 feet, then east approx. 200 feet, then south approx. 300 feet, and finally westerly approx. 1200 feet to the intersection with the western boundary of Sec. 5, T36S, R5W; thence south along said boundary to the northern side of Vine Avenue; thence northwesterly along the northern side of Vine Avenue approx. 3150 feet to the intersection with the west fork of Gilbert Creek; thence north to the intersection with the southern right of way of U.S. I-5; thence northwesterly along said right of way approx. 1600 feet; thence south to the intersection with Old Highland Avenue; thence northwesterly along Highland Avenue approx. 650 feet; thence west approx. 350 feet; thence south approx. 1400 feet; thence east approx. 700 feet; thence south approx. 1000 feet; thence on a line SW approx. 800 feet; thence south approx. 1400 feet to the intersection with the northern boundary of Sec. 7, T36S, R5W; thence west to the NW corner of Sec. 7, the point of beginning.

(10) Klamath Falls Control Area means the area of the state beginning at the northeast corner of Section 8, T38S, R10E, thence south to the southeast corner of Section 5, T40S, R10E; thence west to the southwest corner of Section 3, T40S, R8E; thence north to the northwest corner of Section 10, T38S, R8E; thence east to the point of beginning.

(11) "Klamath Falls UGB" means the area within the bounds beginning at the southeast corner of Section 36, Township 38 South, Range 9 East; thence northerly approximately 4500 feet; thence westerly approximately 1/4 mile; thence northerly approximately 3/4 mile into Section 25, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 24, T38S, R9E; thence westerly approximately 1/2 mile to the southeast corner of Section 23, T38S, R9E; thence northerly approximately 1/2 mile; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 14, T38S, R9E; thence generally northwesterly along the 5000 foot elevation contour line approximately 3/4 mile; thence westerly 1 mile; thence north to the intersection with the northern boundary of Section 15, T38S, R9E; thence west 1/4 mile along the northern boundary of Section 15, T38S, R9E; thence generally southeasterly following the 4800 foot elevation contour line around the old Oregon Institute of Technology Campus to meet with the westerly line of Old Fort Road in Section 22, T38S, R9E; thence southwesterly along the

westerly line of Old Fort Road approximately 1 and 1/4 miles to Section 27, T38S, R9E; thence west approximately 1/4 mile; thence southwesterly approximately 1/2 mile to the intersection with Section 27, T38S, R9E; thence westerly approximately 1/2 mile to intersect with the Klamath Falls City Limits at the northerly line of Loma Linda Drive in Section 28, T38S, R9E; thence northwesterly along Loma Linda Drive approximately 1/4 mile; thence southwesterly approximately 1/8 mile to the Klamath Falls City Limits; thence northerly along the Klamath Falls City Limits approximately 1 mile into Section 21, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1 mile into Section 17, T38S, R9E; thence westerly approximately 3/4 mile into Section 17, T38S, R9E; thence northerly approximately 1/4 mile; thence westerly approximately 1 mile to the west boundary of Highway 97 in Section 18, T38S, R9E; thence southeasterly along the western boundary of Highway 97 approximately 1/2 mile; thence southwesterly away from Highway 97; thence southeasterly to the intersection with Klamath Falls City Limits at Front Street; thence westerly approximately 1/4 mile to the western boundary of Section 19, T38S, R9E; thence southerly approximately 1 and 1/4 miles along the western boundary of Section 19, T38S, R9E and the Klamath Falls City Limits to the south shore line of Klamath Lake; thence northwesterly along the south shore line of Klamath Lake approximately 1 and 1/4 miles across Section 25, T38S, R9E and Section 26, T38S, R9E; thence westerly approximately 1/2 mile along Section 26, T38S, R9E; thence southerly approximately 1/2 mile to Section 27, T38S, R9E to the intersection with eastern boundary of Orindale Draw, thence southerly along the eastern boundary of Orindale Draw approximately 1 and 1/4 miles into Section 35, T38S, R9E; thence southerly approximately 1/2 mile into Section 2, T39S, R8E; thence easterly approximately 1/4 mile; thence northerly approximately 1/4 mile to the southeast corner of Section 35, T38S, R8E and the Klamath Falls City Limits; thence easterly approximately 1/2 mile to the northern boundary of Section 1, T38S, R8E; thence southeasterly approximately 1/2 mile to Orindale Road; thence north 500 feet along the west side of an easement; thence easterly approximately 1 and 1/4 miles through Section 1, T38S, R8E to the western boundary of Section 6, T39S, R9E; thence southerly approximately 3/4 mile to the southwest corner of Section 6, T39S, R9E; thence easterly approximately 1/8 mile to the western boundary of Highway 97; thence southwesterly along the Highway 97 right-of-way approximately 1/4 mile; thence westerly approximately 1/2 mile to Agate Street in Section 7, T39S, R8E; thence northerly approximately 1/4 mile; thence westerly approximately 3/4 mile to Orindale Road in Section 12, T39S, R8E; thence northerly approximately 1/4 mile into Section 1, T39S, R8E; thence westerly approximately 3/4 mile to the Section 2, T39S, R8E boundary line; thence southerly approximately 3/4 mile along the Section 2, T39S, R8E boundary line to the northwest corner of Section 12, T39S, R8E; thence westerly approximately 1/8 mile into Section 11, T39S, R8E; thence southerly approximately 1/8 mile; thence northeasterly approximately 3/4 mile to the southern boundary of Section 12, T39S, R8E at Balsam Drive; thence southerly approximately 1/4 mile into Section 12, T39S, R8E; thence easterly approximately 1/4 mile to Orindale Road; thence southeasterly approximately 500 feet to Highway 66; thence southwesterly approximately 1/2 mile along the boundary of Highway 66 to Holiday Road; thence southerly approximately 1/2 mile into Section 13, T39S, R8E; thence northeasterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/4 mile

along the eastern boundary of Section 13, T39S, R8E; thence westerly approximately 1/4 mile to Weyerhaeuser Road; thence northerly approximately 1/8 mile; thence easterly approximately 1/8 mile; thence northerly approximately 1/8 mile; thence westerly approximately 1/8 mile to Farrier Avenue; thence northerly approximately 1/4 mile; thence easterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/8 mile along the eastern boundary of Section 13, T39S, R8E; thence easterly approximately 1/4 mile along the northern section line of Section 18, T39S, R8E; thence southerly approximately 1/4 mile; thence easterly approximately 1/2 mile to the boundary of Highway 97; thence southerly approximately 1/3 mile to the Burlington Northern Right-of-Way; thence northeasterly approximately 1 and 1/3 miles along the high water line of the Klamath River to the Southside Bypass in Section 8, T39S, R9E; thence southeasterly along the Southside Bypass to the Southern Pacific Right-of-Way in Section 9, T39S, R9E; thence southerly approximately 1/2 mile along the Southern Pacific Right-of-Way; thence southwesterly approximately 1/4 mile along the Midland Highway; thence southeasterly approximately 1/4 mile to the old railroad spur; thence easterly 1/4 mile along the old railroad spur; thence southerly approximately 1/4 mile in Section 16, T39S, R9E; thence westerly approximately 1/3 mile; thence southerly approximately 1/4 mile; thence easterly approximately 1/16 mile in Section 21, T39S, R9E; thence southerly approximately 1/8 mile to the Lost River Diversion Channel; thence southeasterly approximately 1/4 mile along the northern boundary of the Lost River Diversion Channel; thence easterly approximately 3/4 mile along Joe Wright Road into Section 22, T39S, R9E; thence southeasterly approximately 1/8 mile on the eastern boundary of the Southern Pacific Right-of-Way; thence southeasterly approximately 1 mile along the western boundary of the Southern Pacific Right-of-Way across Section 22, T39S, R9E and Section 27, T39S, R9E to a point 440 yards south of the northern boundary of Section 27, T39S, R9E; thence easterly to Kingsley Field; thence southeasterly approximately 3/4 mile to the southern boundary of Section 26, T39S, R9E; thence east approximately 1/2 mile along the southern boundary of Section 26, T39S, R9E to a pond; thence north-northwesterly for 1/2 mile following the Klamath Falls City Limits; thence north 840 feet; thence east 1155 feet to Homedale Road; thence north along Homedale Road to a point 1/4 mile north of the southern boundary of Section 23, T39S, R9E; thence west 1/4 mile; thence north 1 mile to the Southside Bypass in Section 14, T39S, R9E; thence east 1/2 mile along the Southside Bypass to the eastern boundary of Section 14, T39S, R9E; thence north 1/2 mile; thence east 900 feet into Section 13, T39S, R9E; thence north 1320 feet along the USBR I-C 1-A to the southern boundary of Section 12, T39S, R9E; thence north 500 feet to the USBR A Canal; thence southeasterly 700 feet along the southern border of the USBR A Canal back into Section 13, T39S, R9E; thence southeast 1600 feet to the northwest parcel corner of an easement for the Enterprise Irrigation District; thence east-northeast 2200 feet to the eastern boundary of Section 13, T39S, R9E; thence north to the southeast corner of Section 12, T39S, R9E; thence along the Enterprise Irrigation Canal approximately 1/2 mile to Booth Road; thence east 1/2 mile to Vale Road; thence north 1 mile to a point in Section 6, T39S, R10E that is approximately 1700 feet north of the southern boundary of Section 6, T39S, R10E; thence west approximately 500 feet; thence south approximately 850 feet; thence west approximately 200 feet; thence north approximately 900 feet; thence west approximately 1600 feet to the western boundary of Section 6, T39S, R10E; thence north

approximately 1/2 mile to the southeast corner of Section 36, T38S, R9E, the point of beginning.

(12) "LaGrande UGB" means the area within the bounds beginning at the point where U.S. Interstate 84 (I-84) intersects Section 31, Township 2 South, Range 38 East; thence east along I-84 to the Union County Fairgrounds; thence north and then east on a line encompassing the Union County Fairgrounds to the intersection with Cedar Street; thence further east approximately 500 feet, encompassing two (2) residential properties; thence on a line south to the intersection with the northern bank of the Grande Ronde River; thence westerly along the northern bank of the Grande Ronde River to the intersection with the western edge of Mount Glenn Road and Riverside Park; thence north along the western edge of Mount Glenn Road and Riverside Park to the intersection with Fruitdale Road; thence east along Fruitdale Road and the northern boundary of Riverside Park to the eastern boundary of Riverside Park; thence south along the eastern boundary of Riverside Park to the north bank of the Grande Ronde River; thence on a line southeast to the intersection with the northern edge of I-84; thence easterly along the northern edge of I-84 to May Street; thence easterly along May Street to the intersection with State Highway 82; thence northeasterly along State Highway 82 to the a point approximately 1/4 mile from the eastern edge of Section 4, T3S, R38E; thence south to the intersection with Section 9, T3S, R38E, and the southern edge of Buchanan Avenue; thence west along the southern edge of Buchanan Avenue to the intersection with the northern edge of I-84; thence on a line south to the southern edge of I-84; thence southeasterly along the southern edge of I-84 approximately 2500 feet; thence on a line due west approximately 1400 feet; thence on a line due south to the intersection with the Union Pacific Railroad Line; thence southeasterly along the Union Pacific Railroad Line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with U.S. Highway 30; thence southeast along U.S. Highway 30 to the intersection with the western boundary of Section 15, T3S, R38E; thence on a line west following existing property boundaries approximately 2900 feet; thence on a line north following existing property boundaries approximately 250 feet; thence on a line east following existing property boundaries approximately 650 feet; thence north on a line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with 20th Avenue; thence south along 20th Avenue to the intersection with Foothill Road; thence southeasterly along Foothill Road approximately 2900 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line south following existing property boundaries approximately 1250 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north following existing property boundaries approximately 450 feet to the intersection with the southernmost part of the La Grande City Limits; thence westerly and northwesterly along the southernmost part of the La Grande City Limits approximately 1100 feet to the intersection with the 3000 foot elevation contour line; thence westerly following the 3000 foot elevation contour line and existing property boundaries approximately 2200 feet; thence on a line north following existing property boundaries approximately 1900 feet; thence on a line west following existing property boundaries approximately 500 feet; thence on a line north to the La Grande City Limits; thence west along the La Grande City Limits and following existing property boundaries approximately 650 feet; thence on a line south following existing

property boundaries approximately 900 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north to the intersection with the La Grande City Limits; thence west along the southern boundary of the La Grande City Limits to the intersection with the western boundary of the La Grande City Limits; thence north along the western boundary of the La Grande City Limits and following existing property lines approximately 500 feet; thence on a line west following existing property boundaries approximately 200 feet; thence on a line north following existing property boundaries approximately 700 feet; thence east to the first 3000 foot elevation contour line west of the La Grande City Limits; thence northerly following that 3000 foot elevation contour line to the intersection with Deal Canyon Road; thence easterly along Deal Canyon Road to the intersection with the western boundary of the La Grande City Limits; thence northerly along the western boundary of the La Grande City Limits to the intersection with U.S. Highway 30; thence northwesterly along U.S. Highway 30 and following existing property boundaries approximately 1400 feet; thence on a line west to the intersection with the western boundary of Section 6, T3S, R38E; thence north along the western boundaries of Section 6, T3S, R38E and Section 31, T2S, R38E to the point of beginning.

(13) "Lakeview UGB" means the area beginning at the corner common to sections 21, 22, 27, and 28, T39S, R20E; thence north on the section line between section 21 and 22 to the section corner common to section 15, 16, 21, and 22; thence west along the section line between section 21 and 16 to the section corner common to sections 16, 17, 20, and 21; thence north along the section line between section 16 and 17 approximately 3550 feet to the east branch of Thomas Creek; thence northwesterly along the east branch of Thomas Creek to the center line of Highway 140; thence east along the center line of Highway 140 to the section corner common to sections 8, 9, 16, and 17, T39S, R20E; thence north along the section line between sections 8 and 9 to the section corner common to sections 4, 5, 8, and 9, T39S, R20E; thence north along the section line between section 4 and 5 to the section corner common to section 4 and 5, T39S, R20E and sections 32 and 33, T38S, R20E; thence east along the section line between sections 4 and 33 to the section corner common to sections 3 and 4, T39S, R20E and sections 33 and 34, T38S, R20E; thence south along the eastern boundary of section 4 approximately 4,1318.6 feet; thence S 89 degrees, 11 minutes W 288.28 feet to the east right of way line of the old Paisley/Lakeview Highway; thence S 21 degrees, 53 minutes E along the eastern right of way of the old Paisley/Lakeview Highway 288.4 feet; thence S 78 degrees, 45 minutes W 1375 feet; thence S 3 degrees, 6 minutes, and 30 seconds W 200 feet; thence S 77 degrees, 45 minutes W 136 feet to the east right of way line of U.S. Highway 395; thence southeasterly along the east right of way line of U.S. Highway 395 53.5 feet; thence N 77 degrees, 45 minutes E 195.6 feet; thence S 38 degrees, 45 minutes E 56.8 feet; thence S 51 degrees, 15 minutes W 186.1 feet to the east right of way of U.S. Highway 395; thence southeast along the eastern right of way line of U.S. Highway 395 2310 feet; thence N 76 degrees, 19 minutes 544.7 feet; thence S 13 degrees, 23 minutes, 21 seconds E 400 feet; thence N 63 degrees, 13 minutes E 243.6 feet to the western line of the old American Forest Products Logging Road; thence southeast along the old American Forest Products Logging Road to the western line of the northeast quadrant of the northwest quadrant of section 10, T39S, R20E; thence southeast to a point on the

south line of the northeast quadrant of the northwest quadrant of Section 10, T39S, R20E (this point also bears N 89 degrees, 33 minutes E 230 feet from the center line of U.S. Highway 395); thence south on a line parallel to the east right of way line of U.S. Highway 395 to the south line of the northwest quadrant of section 10, T39S, R20E; thence south 491 feet to the east right of way of U.S. Highway 395; thence southeasterly following the east right of way of U.S. Highway 395 255 feet to the south line of the northeast quadrant of the northeast quadrant of the southwest quadrant of section 10, T39S, R20E; thence east along that south line to the center line of section 10, T39S, R20E; thence continuing east along the same south line to the eastern boundary of section 10, T39S, R20E; thence south along the eastern boundary of section 10 to the section corner common to sections 10, 11, 14, and 15, T39S, R20E; thence south along the section line between section 14 and 15 to the section corner common to sections 14, 15, 22, and 23, T39S, R20E; thence west along the section line between sections 15 and 22 to the northwest corner of the northeast quadrant of the northeast quadrant of section 22, T39S, R20E; thence south along the eastern line of the western half of the eastern half of section 22 to the southern boundary of section 22, T39S, R20E; thence west along the southern boundary of section 22 to the point of beginning.

(14) "Maintenance Area" means any area that was formerly nonattainment for a criteria pollutant but has since met EPA promulgated standards and has had a maintenance plan to stay within the standards approved by the EPA pursuant to **40 CFR 51.110** (July, 1993).

(15) "Medford-Ashland Air Quality Maintenance Area" (AQMA) means the area defined as beginning at a point approximately two and quarter miles northeast of the town of Eagle Point, Jackson County, Oregon at the northeast corner of Section 36, Township 35 South, Range 1 West (T35S, R1W); thence South along the Willamette Meridian to the southeast corner of Section 25, T37S, R1W; thence southeast along a line to the southeast corner of Section 9, T39S, R2E; thence south-southeast along line to the southeast corner of Section 22, T39S, R2E; thence South to the southeast corner of Section 27, T39S, R2E; thence southwest along a line to the southeast corner of Section 33, T39S, R2E; thence West to the southwest corner of Section 31, T39S, R2E; thence northwest along a line to the northwest corner of Section 36, T39S, R1E; thence West to the southwest corner of Section 26, T39S, R1E; thence northwest along a line to the southeast corner of Section 7, T39S, R1E; thence West to the southwest corner of Section 12, T39S, R1W, T39S, R1W; thence northwest along a line to southwest corner of Section 20, T38S, R1W; thence West to the southwest corner of Section 24, T38S, R2W; thence northwest along a line to the southwest corner of Section 4, T38S, R2W; thence West to the southwest corner of Section 6, T38S, R2W; thence northwest along a line to the southwest corner of Section 31, T37S, R2W; thence North and East along the Rogue River to the north boundary of Section 32, T35S, R1W; thence East along a line to the point of beginning.

Deleted: (15) "Medford-Ashland AQMA" means the area defined as beginning at a point approximately one mile northeast of the town of Eagle Point, Jackson County, Oregon at the northeast corner of Section 36, Township 35 South, Range 1 West; thence southeast along the Willamette Meridian to the southeast corner of Section 25, Township 37 South, Range 1 West; thence southeast along a line to the southeast corner of Section 9, Township 39 South, Range 2 East; thence south-southeast to the corner of Section 27, Township 39 South, Range 2 East; thence southwest to the southeast corner of Section 33, Township 39 South, Range 2 East; thence west to the southwest corner of Section 31, Township 39 South, Range 2 East; thence northwest to the northwest corner of Section 36, Township 39 South, Range 1 East; thence west to the southwest corner of Section 26, Township 39 South, Range 1 East; thence northwest along a line to the southeast corner of Section 7, Township 39 South, Range 1 East; thence west to the southwest corner of Section 12, Township 39 South, Range 1 West; thence northwest along a line to the southwest corner of Section 20, Township 38 South, Range 1 West; thence west to the southwest corner of Section 24, Township 38 South, Range 2 West; thence northwest along a line to the southwest corner of Section 4, Township 38 South, Range 2 West; thence west to the southwest corner of Section 5, Township 38 South, Range 2 West; thence northwest along a line to the southwest corner of Section 31, Township 37 South, Range 2 West; thence north along a line to the Rouge River, thence north and east along the Rouge River to the north boundary of Section 32, Township 35 South, Range 1 West; thence east along a line to the point of beginning. ¶

(16) "Medford-Ashland CBD" means the area beginning at the intersection of Crater Lake Highway (Highway 62) south on Biddle Road to the intersection of Fourth Street, west on Fourth Street to the intersection with Riverside Avenue (Highway 99), south on Riverside Avenue to the intersection with Tenth Street, west on Tenth Street to the intersection with Oakdale Avenue, north on Oakdale Avenue to the intersection with Fourth Street, east on Fourth Street to the intersection with Central Avenue, north on Central Avenue to the intersection with Court Street, north on Court Street to the intersection with Crater Lake Highway (Highway 62) and east on Crater Lake Highway to the point of beginning, with extensions along McAndrews Road east from Biddle Road to Crater Lake Avenue, and along Jackson Street east from Biddle Road to Crater Lake Avenue.

NOTE: This definition also marks the area where indirect sources are required to have indirect source construction permits in the Medford area. See OAR 340-254-0040.

(17) "Medford UGB" means the area beginning at the line separating Range 1 West and Range 2 West at a point approximately 1/4 mile south of the northwest corner of Section 31, T36S, R1W; thence west approximately 1/2 mile; thence south to the north bank of Bear Creek; thence west to the south bank of Bear Creek; thence south to the intersection with the Medford Corporate Boundary; thence following the Medford Corporate Boundary west and southwesterly to the intersection with Merriman Road; thence northwesterly along Merriman Road to the intersection with the eastern boundary of Section 10, T36S, R2W; thence south along said boundary line approximately 3/4 mile; thence west approximately 1/3 mile; thence south to the intersection with the Hopkins Canal; thence east along the Hopkins Canal approximately 200 feet; thence south to Rossanley Drive; thence east along Rossanley Drive approximately 200 feet; thence south approximately 1200 feet; thence west approximately 700 feet; thence south approximately 1400 feet; thence east approximately 1400 feet; thence north approximately 100 feet; thence east approximately 700 feet; thence south to Finley Lane; thence west to the end of Finley Lane; thence approximately 1200 feet; thence west approximately 1300 feet; thence north approximately 150 feet; thence west approximately 500 feet; thence south to Highway 238; thence west along Highway 238 approximately 250 feet; thence south approximately 1250 feet to a point even with the end of Renault Avenue to the east; thence east approximately 2200 feet; thence south approximately 1100 feet to a point even with Sunset Court to the east; thence east to and along Sunset Court to the first (nameless) road to the south; thence approximately 850 feet; thence west approximately 600 feet; thence south to Stewart Avenue; thence west along Stewart Avenue approximately 750 feet; thence south approximately 1100 feet; thence west approximately 100 feet; thence south approximately 800 feet; thence east approximately 800 feet; thence south approximately 1000 feet; thence west approximately 350 feet to a point even with the north-south connector street between Sunset Drive and South Stage Road; thence south to and along said connecting road and continuing along South Stage Road to Fairlane Road; thence south to the end of Fairlane Road and extending beyond it approximately 250 feet; thence east approximately 250 feet; thence south approximately 250 feet to the intersection with Judy Way; thence east on Judy Way to Griffin Creek Road; thence north on Griffin Creek Road to South Stage

Road; thence east on South Stage Road to Orchard Home Drive; thence north on Orchard Home Drive approximately 800 feet; thence east to Columbus Avenue; thence south along Columbus Avenue to South Stage Road; thence east along South Stage Road to the first road to the north after Sunnyview Lane; thence north approximately 300 feet; thence east approximately 300 feet; thence north approximately 700 feet; thence east to King's Highway; thence north along King's Highway to Experiment Station Road; thence east along Experiment Station Road to Marsh Lane; thence east along Marsh Lane to the northern boundary of Section 6, T38S, R1W; thence east along said boundary approximately 1100 feet; thence north approximately 1200 feet; thence east approximately 1/3 mile; thence north approximately 400 feet; thence east approximately 1000 feet to a drainage ditch; thence following the drainage ditch southeasterly approximately 500 feet; thence east to the eastern boundary of Section 31, T37S, R1W; thence south along said boundary approximately 1900 feet; thence east to and along the loop off of Rogue Valley Boulevard, following that loop to the Southern Pacific Railroad Line (SPRR); thence following SPRR approximately 500 feet; thence south to South Stage Road; thence east along South Stage Road to SPRR; thence southeasterly along SPRR to the intersection with the west fork of Bear Creek; thence northeasterly along the west fork of Bear Creek to the intersection with U.S. Highway 99; thence southeasterly along U.S. Highway 99 approximately 250 feet; thence east approximately 1600 feet; thence south to East Glenwood Road; thence east along East Glenwood Road approximately 1250 feet; thence north approximately 1/2 mile; thence west approximately 250 feet; thence north approximately 1/2 mile to the Medford City Limits; thence east along the city limits to Phoenix Road; thence south along Phoenix Road to Coal Mine Road; thence east along Coal Mine Road approximately 9/10 mile to the western boundary of Section 35, T37S, R1W; thence north to the midpoint of the western boundary of Section 35, T37S, R1W; thence west approximately 800 feet; thence north approximately 1700 feet to the intersection with Barnett Road; thence easterly along Barnett Road to the southeast corner of Section 27, T37S, R1W; thence north along the eastern boundary line of said section approximately 1/2 mile to the intersection with the 1800 foot contour line; thence east to the intersection with Cherry Lane; thence following Cherry Lane southeasterly and then northerly to the intersection with Hillcrest Road; thence east along Hillcrest Road to the southeast corner of Section 23, T37S, R1W; thence north to the northeast corner of Section 23, T37S, R1W; thence west to the midpoint of the northern boundary of Section 22, T37S, R1W; thence north to the midpoint of Section 15, T37S, R1W; thence west to the midpoint of the western boundary of Section 15, T37S, R1W; thence south along said boundary approximately 600 feet; thence west approximately 1200 feet; thence north approximately 600 feet; thence west to Foothill Road; thence north along Foothill Road to a point approximately 500 feet north of Butte Road; thence west approximately 300 feet; thence south approximately 250 feet; thence west on a line parallel to and approximately 250 feet north of Butte Road to the eastern boundary of Section 8, T37S, R1W; thence north approximately 2200 feet; thence west approximately 1800 feet; thence north approximately 2000 feet; thence west approximately 500 feet; thence north to Coker Butte Road; thence east along Coker Butte Road approximately 550 feet; thence north approximately 1250 feet; thence west to U.S. Highway 62; thence north approximately 3000 feet; thence east approximately 400 feet to the 1340 foot contour line; thence north approximately 800 feet; thence west

approximately 200 feet; thence north approximately 250 feet to East Vilas Road; thence east along East Vilas Road approximately 450 feet; thence north approximately 2000 feet to a point approximately 150 feet north of Swanson Creek; thence east approximately 600 feet; thence north approximately 850 feet; thence west approximately 750 feet; thence north approximately 650 feet; thence west approximately 2100 feet; thence on a line southeast approximately 600 feet; thence east approximately 450 feet; thence south approximately 1600 feet; thence west approximately 2000 feet to the continuance of the private logging road north of East Vilas Road; thence south along said logging road approximately 850 feet; thence west approximately 750 feet; thence south approximately 150 feet; thence west approximately 550 feet to Peace Lane; thence north along Peace Lane approximately 100 feet; thence west approximately 350 feet; thence north approximately 950 feet; thence west approximately 1000 feet to the western boundary of Section 31, T36S, R1W; thence north approximately 1300 feet along said boundary to the point of beginning.

(18) "Nonattainment Area" means any area that has been designated as not meeting the standards established by the U.S. Environmental Protection Agency (EPA) pursuant to **40 CFR 51.52** (July, 1993) for any criteria pollutant.

(19) "O₃" means Ozone.

(20) "Oakridge UGB" means the area enclosed by the following: Beginning at the northwest corner of Section 17, T21S, R3E and the city limits; thence south along the western boundary of Section 17, T21S, R3E along the city limits approximately 800 feet; thence southwesterly following the city limits approximately 750 feet; thence west along the city limits approximately 450 feet; thence northwesterly along the city limits approximately 450 feet; thence on a line south along the city limits approximately 250 feet; thence on a line east along the city limits approximately 100 feet; thence southwesterly along the city limits approximately 200 feet; thence on a line east along the city limits approximately 400 feet; thence on a line south along the city limits to the channel of the Willamette River Middle Fork; thence south-easterly up the Willamette River Middle Fork along the city limits approximately 7200 feet; thence exiting the Willamette River Middle Fork with the city limits in a northerly manner and forming a rough semicircle with a diameter of approximately one-half mile before rejoining the Willamette River Middle Fork; thence diverging from the city limits upon rejoining the Willamette River Middle Fork and moving southeasterly approximately 5600 feet up the Willamette River Middle Fork to a point on the river even with the point where Salmon Creek Road intersects with U.S. Highway 58; thence on a line east from the channel of the Willamette River Middle Fork across the intersection of Salmon Creek Road and U.S. Highway 58 to the intersection with the Southern Pacific Railroad Line; thence northerly along the Southern Pacific Railroad Line to the intersection with the northern boundary of Section 22, T21S, R3E; thence west along the northern boundary of Section 22, T21S, R3E to the intersection with Salmon Creek Road; thence on a line north to the intersection with the Southern Pacific Railroad Line; thence east along the Southern Pacific Railroad Line approximately 600 feet; thence on a line north to the intersection with High Prairie Road; thence on a line west approximately 400 feet; thence on a line

north to the intersection with the northern boundary of Section 15, T21S, R3E; thence west along the northern boundary of Section 15, T21S, R3E to the intersection with the southeastern corner of Section 9, T21S, R3E; thence north along the eastern boundary of Section 9, T21S, R3E approximately 1300 feet; thence on a line west approximately 1100 feet; thence on a line south to the intersection with West Oak Road; thence northwesterly along West Oak Road approximately 2000 feet; thence on a line south to the intersection with the northern boundary line of the city limits; thence westerly and northwesterly approximately 8000 feet along the city limits to the point of beginning.

(21) "Particulate Matter" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method with the **Department's Source Sampling Manual**, (January, 1992).

(22) PM₁₀:

(a) When used in the context of emissions, means finely divided solid or liquid material, including condensable water, other than combined water, with an aerodynamic diameter less than or equal to a nominal 10 microns, emitted to the ambient air as measured by as applicable reference method in accordance with the **Department's Source Sampling Manual** (January, 1992);

(b) When used in the context of ambient concentration, means airborne finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 microns as measured in accordance with **40 CFR Part 50, Appendix J** (July, 1993).

(23) "Portland AQMA" means the area within the bounds beginning at the point starting on the Oregon-Washington state line in the Columbia River at the confluence with the Willamette River, thence east up the Columbia River to the confluence with the Sandy River, thence southerly and easterly up the Sandy River to the point where the Sandy River intersects the Clackamas County-Multnomah County line, thence west along the Clackamas County-Multnomah County line to the point where the Clackamas County-Multnomah County line is intersected by H. Johnson Road (242nd), thence south along H. Johnson Road to the intersection with Kelso Road (Boring Highway), thence west along Kelso Road to the intersection with Deep Creek Road (232nd), thence south along Deep Creek Road to the point of intersection with Deep Creek, thence southeasterly along Deep Creek to the confluence with Clackamas River, thence easterly along the Clackamas River to the confluence with Clear Creek, thence southerly along Clear Creek to the point where Clear Creek intersects Springwater Road then to Forsythe Road, thence easterly along Forsythe Road to the intersection with Bradley Road, thence south along Bradley Road to the intersection with Redland Road, thence west along Redland Road to the intersection with Ferguson Road, thence south along Ferguson Road to the intersection with Thayler Road, thence west along Thayler Road to the intersection with Beaver Creek Road, thence southeast along Beaver Creek Road to the intersection with Henrici Road, thence west along Henrici Road to the intersection with State Highway 213 (Mollala Avenue), thence southeast along State Highway 213 to the point of intersection

with Beaver Creek, thence westerly down Beaver Creek to the confluence with the Willamette River, thence southerly and westerly up the Willamette River to the point where the Willamette River intersects the Clackamas County-Yamhill County line, thence north along the Clackamas County-Yamhill County line to the point where it intersects the Washington County-Yamhill County line, thence west and north along the Washington County-Yamhill County line to the point where it is intersected by Mount Richmond Road, thence northeast along Mount Richmond Road to the intersection with Patton Valley Road, thence easterly and northerly along Patton Valley Road to the intersection with Tualatin Valley State Highway, thence northerly along Tualatin Valley State Highway to the intersection with State Highway 47, thence northerly along State Highway 47 to the intersection with Dilley Road, thence northwesterly and northerly along Dilley Road to the intersection with Stringtown Road, thence westerly and northwesterly along Stringtown Road to the intersection with Gales Creek Road, thence northwesterly along Gales Creek Road to the intersection with Timmmerman Road, thence northerly along Timmmerman Road to the intersection with Wilson River Highway, thence west and southwest along Wilson River Highway to the intersection with Narup Road, thence north along Narup Road to the intersection with Cedar Canyon Road, thence westerly and northerly along Cedar Canyon Road to the intersection with Banks Road, thence west along Banks Road to the intersection with Hahn Road, thence northerly and westerly along Hahn Road to the intersection with Mountaindale Road, thence southeasterly along Mountaindale Road to the intersection with Glencoe Road, thence east-southeasterly along Glencoe Road to the intersection with Jackson Quarry Road, thence north-northeasterly along Jackson Quarry Road to the intersection with Helvetia Road, thence easterly and southerly along Helvetia Road to the intersection with Bishop Road, thence southerly along Bishop Road to the intersection with Phillips Road, thence easterly along Phillips Road to the intersection with the Burlington Northern Railroad Track, thence northeasterly along the Burlington Northern Railroad Line to the intersection with Rock Creek Road, thence east-southeasterly along Rock Creek Road to the intersection with Old Cornelius Pass Road, thence northeasterly along Old Cornelius Pass Road to the intersection with Skyline Boulevard, thence easterly and southerly along Skyline Boulevard to the intersection with Newberry Road, thence northeasterly along Newberry Road to the intersection with State Highway 30 (St. Helens Road), thence northeast on a line over land across State Highway 30 to the Multnomah Channel, thence east-southeasterly up the Multnomah Channel to the diffluence with the Willamette River, thence north-northeasterly down the Willamette River to the confluence with the Columbia River and the Oregon-Washington state line (the point of beginning).

(24) "Portland Metropolitan Service District Boundary" or "Portland Metro" means the boundary surrounding the urban growth boundaries of the cities within the Greater Portland Metropolitan Area. It is defined in the **Oregon Revised Statutes (ORS) 268.125** (1989).

(25) "Portland Vehicle Inspection Area" means the area of the state included within the following census tracts, block groups, and blocks as used in the 1990 Federal Census. In Multnomah County, the following tracts, block groups, and blocks are included: Tracts 1, 2, 3.01, 3.02, 4.01, 4.02, 5.01, 5.02, 6.01, 6.02, 7.01, 7.02, 8.01, 8.02, 9.01, 9.02, 10,

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11.01, 11.02, 12.01, 12.02, 13.01, 13.02, 14, 15, 16.01, 16.02, 17.01, 17.02, 18.01, 18.02, 19, 20, 21, 22.01, 22.02, 23.01, 23.02, 24.01, 24.02, 25.01, 25.02, 26, 27.01, 27.02, 28.01, 28.02, 29.01, 29.02, 29.03, 30, 31, 32, 33.01, 33.02, 34.01, 34.02, 35.01, 35.02, 36.01, 36.02, 36.03, 37.01, 37.02, 38.01, 38.02, 38.03, 39.01, 39.02, 40.01, 40.02, 41.01, 41.02, 42, 43, 44, 45, 46.01, 46.02, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.01, 60.02, 61, 62, 63, 64.01, 64.02, 65.01, 65.02, 66.01, 66.02, 67.01, 67.02, 68.01, 68.02, 69, 70, 71, 72.01, 72.02, 73, 74, 75, 76, 77, 78, 79, 80.01, 80.02, 81, 82.01, 82.02, 83.01, 83.02, 84, 85, 86, 87, 88, 89, 90, 91, 92.01, 92.02, 93, 94, 95, 96.01, 96.02, 97.01, 97.02, 98.01, 98.02, 99.01, 99.02, 99.03, 100, 101, 102, 103.01, 103.02, 104.02, 104.04, 104.05, 104.06, 104.07; Block Groups 1, 2 of Tract 105; Blocks 360, 361, 362 of Tract 105; that portion of Blocks 357, 399 of Tract 105 beginning at the intersection of the Oregon-Washington State Line ("State Line") and the northeast corner of Block Group 1 of Tract 105, thence east along the State Line to the intersection of the State Line and the eastern edge of Section 26, Township 1 North, Range 4 East, thence south along the section line to the centerline of State Highway 100 to the intersection of State Highway 100 and the western edge of Block Group 2 of Tract 105. In Clackamas County, the following tracts, block groups, and blocks are included: Tracts 201, 202, 203.01, 203.02, 204.01, 204.02, 205.01, 205.02, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216.01, 216.02, 217, 218, 219, 220, 221.01, 221.02, 222.02, 223, 224, 225, 226, 227.01, 227.02, 228, 229, 230, 231, 232, 233, 234.01, 234.02, , 235, 236, 237; Block Groups 1, 2 of Tract 241; Block Groups 1, 2, 3, 4 of Tract 242; Block Groups 1, 2 of Tract 243.02. In Yamhill County, the following tract is included: Tract 301, except those areas in Tract 301 that lie within the Newberg City Limits defined as of July 12, 1996, and the following blocks within Tract 301: 102B, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121D, 122B, 122C, 123, 126, and 127B. In Washington County the following tracts, block groups, and blocks are included: Tracts 301, 302, 303, 304.01, 304.02, 305.01, 305.02, 306, 307, 308.01, 308.02, 309, 310.03, 310.04, 310.05, 310.06, 311, 312, 313, 314.01, 314.02, 315.01, 315.04, 315.05, 315.06, 315.07, 315.08, 316.03, 316.04, 316.05, 316.06, 316.07, 317.02, 317.03, 317.04, 318.01, 318.02, 318.03, 319.01, 319.03, 319.04, 320, 321.01, 321.02, 322, 323, 324.02, 324.03, 324.04, 325, 326.01, 326.02, 328, 329, 330, 331, 332, 333; Block Groups 1, 2 of Tract 327; Block Group 1 of Tract 334; Block Group 2 of Tract 335; Block Group 1 of Tract 336. In Columbia County the following tracts, block groups, and blocks are included: Tract 9710.98; Block Groups 2, 3 of Tract 9709.98; Blocks 146B, 148, 152 of Tract 9709.98.

(26) "Rogue Basin" means the area bounded by the following line: Beginning at the NE corner of T32S, R2E, W.M., thence south along range line 2E to the SE corner of T39S; thence west along township line 39S to the NE corner of T40S, R7W; thence south to the SE corner of T40S, R7W; thence west to the SE corner of T40S, R9W; thence north on range line 9W to the NE corner of T39S, R9W; thence east to the NE corner of T39S, R8W; thence north on range line 8W to the SE corner of Section 1, T33S, R8W on the Josephine-Douglas County line; thence east on the Josephine-Douglas and Jackson-Douglas County lines to the NE corner of T32S, R1W; thence east along township line 32S to the NE corner of T32S, R2E to the point of beginning.

(27) "Salem-Kaiser Area Transportation Study" or "SKATS" means the area within the bounds beginning at the intersection of U.S. Interstate Highway 5 (I-5) with Battle Creek Road SE and Wiltsey Road, south along I-5 to the intersection with the western boundary of Section 24, T8S, R3W; thence due south on a line to the intersection with Delaney Road; thence easterly along Delaney Road to the intersection with Sunnyside Road; thence north along Sunnyside Road to the intersection with Hylo Road SE; thence west along Hylo Road SE to the intersection with Liberty Road; thence north along Liberty Road to the intersection with Cole Road; thence west along Cole Road to the intersection with Bates Road; thence northerly and easterly along Bates Road to the intersection with Jory Hill Road; thence west along Jory Hill Road to the intersection with Stone Hill Avenue; thence north along Stone Hill Avenue to the intersection with Vita Springs Road; thence westerly along Vita Springs Road to the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where the western boundary of Section 30, T7S, R3W intersects the Southern Pacific Railroad Line; thence westerly along the Southern Pacific Railroad Line to the intersection with State Highway 51; thence northeasterly along State Highway 51 to the intersection with Oak Grove Road; thence northerly along Oak Grove Road to the intersection with State Highway 22; thence west on State Highway 22 to the intersection with Oak Grove Road; thence north along Oak Grove Road to the intersection with Orchard Heights Road; thence east and north along Orchard Heights Road to the intersection with Eagle Crest Drive; thence northerly along Eagle Crest Drive to the intersection with Hunt Road; thence north along Hunt Road to the intersection with Fourth Road; thence east along Fourth Road to the intersection with Spring Valley Road; thence north along Spring Valley to the intersection with Oak Knoll Road; thence east along Oak Knoll Road to the intersection with Wallace Road; thence south along Wallace Road to the intersection with Lincoln Road; thence east along Lincoln Road on a line to the intersection with the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where Simon Street starts on the East Bank; thence east and south along Simon Street to the intersection with Salmon; thence east along Salmon to the intersection with Ravena Drive; thence southerly and easterly along Ravena Drive to the intersection with Wheatland Road; thence northerly along Wheatland Road to the intersection with Brooklake Road; thence southeast along Brooklake Road to the intersection with 65th Avenue; thence south along 65th Avenue to the intersection with Labish Road; thence east along Labish Road to the intersection with the West Branch of the Little Pudding River; thence southerly along the West Branch of the Little Pudding River to the intersection with Sunnyview Road; thence east along Sunnyview Road to the intersection with 63rd Avenue; thence south along 63rd Avenue to the intersection with State Street; thence east along State Street to the intersection with 62nd Avenue; thence south along 62nd Avenue to the intersection with Deer Park Drive; thence southwest along Deer Park Drive to the intersection with Santiam Highway 22; thence southeast along Santiam Highway 22 to the point where it intersects the Salem Urban Growth Boundary (SUGB); thence following the southeast boundary of the SUGB generally southerly and westerly to the intersection with Wiltsey Road; thence west along Wiltsey Road to the intersection with I-5 (the point of beginning).

(28) "UGA" means Urban Growth Area.

(29) "UGB" means Urban Growth Boundary.

(30) "Umpqua Basin" means the area bounded by the following line: Beginning at the SW corner of Section 2, T19S, R9W, on the Douglas-Lane County lines and extending due south to the SW corner of Section 14, T32S, R9W, on the Douglas-Curry County lines, thence easterly on the Douglas-Curry and Douglas-Josephine County lines to the intersection of the Douglas, Josephine, and Jackson County lines; thence easterly on the Douglas-Jackson County line to the intersection of the Umpqua National Forest boundary on the NW corner of Section 32, T32S, R3W; thence northerly on the Umpqua National Forest boundary to the NE corner of Section 36, T25S, R2W; thence west to the NW corner of Section 36, T25S, R4W; thence north to the Douglas-Lane County line; thence westerly on the Douglas-Lane County line to the starting point.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0500

340-204-0020

Designation of Air Quality Control Regions

Oregon's thirty-six counties are divided into five AQCRs. The AQCR boundaries follow county lines, and there are no counties that belong to more than one AQCR. The five AQCRs are as follows:

(1) **Portland Interstate AQCR**, containing ten counties:

- (a) Benton County;
- (b) Clackamas County;
- (c) Columbia County;
- (d) Lane County;
- (e) Linn County;
- (f) Marion County;
- (g) Multnomah County;

- (h) Polk County;
 - (i) Washington County;
 - (j) Yamhill County.
- (2) **Northwest Oregon AQCR**, containing three counties:
- (a) Clatsop County;
 - (b) Lincoln County;
 - (c) Tillamook County.
- (3) **Southwest Oregon AQCR**, containing five counties:
- (a) Coos County;
 - (b) Curry County;
 - (c) Douglas County;
 - (d) Jackson County;
 - (e) Josephine County.
- (4) **Central Oregon AQCR**, containing eight counties:
- (a) Crook County;
 - (b) Deschutes County;
 - (c) Hood River County;
 - (d) Jefferson County;
 - (e) Klamath County;
 - (f) Lake County;
 - (g) Sherman County;
 - (h) Wasco County.
- (5) **Eastern Oregon AQCR**, containing ten counties:

- (a) Baker County;
- (b) Gilliam County;
- (c) Grant County;
- (d) Harney County;
- (e) Malheur County;
- (f) Morrow County;
- (g) Umatilla County;
- (h) Union County;
- (i) Wallowa County;
- (j) Wheel County.

NOTE: The AQCRs should not be confused with the recent DEQ reorganization that split the state into three DEQ regions: Northwest, West and East.

[**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99,

Renumbered from 340-031-0510

340-204-0030

Designation of Nonattainment Areas

The following areas are designated as Nonattainment Areas:

(1) Carbon Monoxide Nonattainment Areas: The Salem Nonattainment Area for Carbon Monoxide is the Salem-Kaiser Area Transportation Study as defined in OAR 340-204-0010.

(2) PM10 Nonattainment Areas:

(a) The Eugene Nonattainment Area for PM10 is the Eugene-Springfield UGB as defined in OAR 340-204-0010.

(b) The LaGrande Nonattainment Area for PM10 is the LaGrande UGB as defined in OAR 340-204-0010.

(c) The Lakeview Nonattainment Area for PM10 is the Lakeview UGB as defined in OAR 340-204-0010.

~~(d) The Oakridge Nonattainment Area for PM10 is the Oakridge UGB as defined in OAR 340-204-0010.~~

Deleted: (d) The Medford Nonattainment Area for PM10 is the Medford-Ashland AQMA as defined in OAR 340-204-0010. ¶

Deleted: (e)

(3) Ozone Nonattainment Areas: The Salem Nonattainment Area for Ozone is the Salem-Kaiser Area Transportation Study as defined in OAR 340-204-0010.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0520; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02

340-204-0040

Designation of Maintenance Areas

The following areas are designated as Maintenance Areas:

(1) Carbon Monoxide Maintenance Areas:

(a) The Eugene Maintenance Area for Carbon Monoxide is the Eugene-Springfield AQMA as defined in OAR 340-204-0010.

(b) The Portland Maintenance Area for Carbon Monoxide is the Portland Metropolitan Service District as referenced in OAR 340-204-0010.

(c) The Medford Carbon Monoxide Maintenance Area is the Medford UGB as defined in OAR 340-204-0010.

[NOTE: EPA maintenance plan approval and redesignation pending]

(d) The Grants Pass Carbon Monoxide Maintenance Area is the Grants Pass CBD as defined in OAR 340-204-0010.

(e) The Klamath Falls Carbon Monoxide Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010.

(2) Ozone Maintenance Areas:

(a) The Medford Maintenance Area for Ozone is the Medford-Ashland AQMA as defined in OAR 340-204-0010.

(b) The Oregon portion of the Portland - Vancouver Interstate Maintenance Area for Ozone is the Portland AQMA, as defined in OAR 340-204-0010.

(3) PM10 Maintenance Areas:

(a) The Grants Pass PM10 Maintenance Area is the Grants Pass UGB as defined in OAR 340-204-0010.

~~(b) The Klamath Falls PM10 Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010.~~

Deleted: [NOTE: EPA maintenance plan approval and redesignation pending] ¶

~~(c) The Medford-Ashland PM10 Maintenance Area is the Medford-Ashland AQMA as defined in OAR 340-204-0010.~~

Deleted: [NOTE: EPA maintenance plan approval and redesignation pending] ¶

[NOTE: EPA maintenance plan approval and redesignation pending], [NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040]

Inserted: ¶
(c) The Medford-Ashland PM10 Maintenance Area is the Medford-Ashland AQMA as defined in OAR 340-204-0010.¶
[NOTE: EPA maintenance plan approval and redesignation pending]

Deleted: ¶

Stat. Auth.: ORS 468.020

Stat. Implemented: ORS 468A.025

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0530; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 11-2002, f. & cert. ef. 10-8-02

340-204-0050

Designation of Prevention of Significant Deterioration Areas

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I Areas and may not be redesignated:

(a) Mt. Hood Wilderness, as established by Public Law 88-577;

(b) Eagle Cap Wilderness, as established by Public Law 88-577;

(c) Hells Canyon Wilderness, as established by Public Law 94-199;

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- (d) Mt. Jefferson Wilderness, as established by Public Law 90-548;
 - (e) Mt. Washington Wilderness, as established by Public Law 88-577;
 - (f) Three Sisters Wilderness, as established by Public Law 88-577;
 - (g) Strawberry Mountain Wilderness, as established by Public Law 88-577;
 - (h) Diamond Peak Wilderness, as established by Public Law 88-577;
 - (i) Crater Lake National Park, as established by Public Law 88-577 and expanded in the 1990 Clean Air Act Amendments;
 - (j) Kalmiopsis Wilderness, as established by Public Law 88-577;
 - (k) Mountain Lake Wilderness, as established by Public Law 88-577;
 - (l) Gearhart Mountain Wilderness, as established by Public Law 88-577.
- (2) All other areas, in Oregon are initially designated Class II, but may be redesignated as provided in OAR 340-204-0060.
- (3) The following areas may be redesignated only as Class I or II:
- (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
 - (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- (4) The extent of the areas referred to in section (1) and (3) of this rule shall conform to any changes in the boundaries of such areas which occurred between August 7, 1977, and November 15, 1990.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0120

340-204-0060

Redesignation of Prevention of Significant Deterioration Areas

- (1)(a) All areas in Oregon, except as otherwise provided under OAR 340-204-0050, are designated Class II as of December 5, 1974;
- (b) Redesignation, except as otherwise precluded by OAR 340-204-0050, may be proposed by the Department or Indian Governing Bodies, as provided below, subject to approval by the EPA Administrator as a revision to the State Implementation Plan.
- (2) The Department may submit to the EPA Administrator a proposal to redesignate areas of the state Class I or II provided that:
- (a) At least one public hearing has been held in accordance with procedures established in the Plan;
- (b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;
- (c) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;
- (d) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the Department has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity, not in excess of 60 days to confer with the Department respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the Department shall have published a list of any inconsistency between such redesignation and such comments and recommendations together with the reasons for making such redesignation against the recommendation of the Federal Land Manager; and
- (e) The Department has proposed the redesignation after consultation with the elected leadership of local general purpose governments in the area covered by the proposed redesignation.
- (3) Any area other than an area to which OAR 340-204-0050 refers may be redesignated as Class III if:
- (a) The redesignation would meet the requirements of section (2) of this rule;

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(b) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session, unless state law provides that the redesignation must be specifically approved by state legislation, and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(c) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(d) Any permit application for any major stationary source or major modification, subject to review under section (1) of this rule, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the EPA Administrator a proposal to redesignate areas Class I, II, or III; provided that:

(a) The Indian Governing Body has followed procedures equivalent to those required of the Department under section (2) and subsections (3)(c) and (d) of this rule; and

(b) Such redesignation is proposed after consultation with the state(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The EPA Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with OAR 340-204-0050. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the EPA Administrator disapproves any proposed redesignation, the Department or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the EPA Administrator.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A
Stats. Implemented: ORS 468A.025

Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0130

340-204-0070

Special Control Areas

The following areas are designated as Special Control Areas:

(1) The counties within the Willamette Valley, including Benton, Clackamas, Columbia, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill Counties;

(2) Umpqua Basin;

(3) Rogue Basin;

(4) Within incorporated cities having a population of 4,000 or more, and within three miles of the corporate limits of any such city.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0010

340-204-0080

Motor Vehicle Inspection Boundary Designations

In addition to the area specified in ORS 815.300, pursuant to ORS 468A.390, the following geographical areas are designated as areas within which motor vehicles are subject to the requirement under ORS 815.300 to have a Certificate of Compliance issued pursuant to ORS 468A.380 to be registered or have the registration of the vehicle renewed.

(1) Portland Vehicle Inspection Area;

(2) Medford-Ashland AQMA.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.390

Hist.: DEQ 11-1985, f. 9-30-85, ef. 1-1-86; DEQ 21-1988, f. & cert. ef. 9-12-88; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 1-1995, f. & cert. ef. 1-10-95; DEQ 13-1996, f. & cert. ef. 8-12-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-024-0301

340-204-0090

Oxygenated Gasoline Control Areas

(1) The following are oxygenated gasoline control areas: Clackamas, Multnomah, Washington and Yamhill Counties.

(2) The oxygenated fuel requirement also applies to any area formerly listed as nonattainment for carbon monoxide in 340-204-0030 and classified by EPA as moderate or worse, until EPA redesignates the area to attainment and repeals the oxygenated fuel requirement.

[NOTE: The department has submitted a request to the Environmental Protection Agency asking that the oxygenated fuel requirement be repealed in the Grants Pass Control Area and Klamath Falls Control Area. These areas remain Oxygenated Gasoline Control Areas and oxygenated fuel requirements continue to apply until such time as EPA approves the request for repeal. Contact the Air Quality Division's State Implementation Plan Coordinator for current information].

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.420

Hist.: DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0470; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 4-2001, f. & cert. ef. 3-27-01

Division 224

New Source Review

Attachment B-2(D)
OREGON ADMINISTRATIVE RULES
Chapter 340, Division 224 - Department of Environmental Quality
DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 224

MAJOR NEW SOURCE REVIEW

340-224-0010

Applicability and General Prohibitions

- (1) Within designated Nonattainment and Maintenance areas, this division applies to owners and operators of proposed major sources and major modifications of air contaminant sources. Within attainment and unclassifiable areas, this division applies to owners and operators of proposed Federal Major sources and major modifications at Federal Major sources. This division does not apply to owners or operators of proposed non-major sources or non-major modifications. Such owners or operators are subject to other Department rules, including Highest and Best Practicable Treatment and Control Required (OAR 340-226-0100 through 340-226-0140), Notice of Construction and Approval of Plans (OAR 340-210-0205 through 340-210-0250), ACDPs (OAR 340 division 216), Emission Standards for Hazardous Air Contaminants (OAR 340 division 244), and Standards of Performance for New Stationary Sources (OAR 340 division 238).
- (2) No owner or operator may begin construction of a major source or a major modification of an air contaminant source without having received an air contaminant discharge permit (ACDP) from the Department and having satisfied the requirements of this division.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0220; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1900; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-224-0020

Definitions

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-0010, the definition in this rule applies to this division.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

340-224-0030

Procedural Requirements

- (1) Information Required. The owner or operator of a proposed major source or major modification must submit all information the Department needs to perform any analysis or make any determination required under this division and OAR 340 division 225. The information must be in writing on forms supplied by the Department and include the information for a Standard ACDP as detailed in OAR 340 division 216.
- (2) Other Obligations:
 - (a) Approval to construct becomes invalid if construction is not commenced within 18 months after the Department issues such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within 18 months of the scheduled time. The Department may extend the 18-month period for good cause. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date;
 - (b) Approval to construct does not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, state or federal law;
 - (c) Approval to construct a source under an ACDP issued under paragraph (3)(b) of this rule authorizes construction and operation of the source, except as prohibited in subsection (d) of this rule, until the later of:
 - (A) One year from the date of initial startup of operation of the major source or major modification; or
 - (B) If a timely and complete application for an Oregon Title V Operating Permit is submitted, the date of final action by the Department on the Oregon Title V Operating Permit application.
 - (d) Where an existing Oregon Title V Operating Permit would prohibit construction or change in operation, the owner or operator must obtain a permit revision before commencing construction or operation.

(3) Application Processing:

- (a) Within 30 days after receiving an application to construct, or any addition to such application, the Department will advise the applicant of any deficiency in the application or in the information submitted. For purposes of this section, the date the Department received a complete application is the date on which the Department received all required information;
- (b) Notwithstanding the requirements of OAR 340-216-0040 or OAR 340-218-0040, concerning permit application requirements, the Department will make a final determination on the application within six months after receiving a complete application. This involves performing the following actions in a timely manner:
 - (A) Making a preliminary determination whether construction should be approved, approved with conditions, or disapproved;
 - (B) Making the proposed permit available in accordance with the public participation procedures required by OAR 340 division 209 for Category IV. Extension of Construction Permits beyond the 18-month time period in paragraph (2)(a) of this rule are available in accordance with the public participation procedures required by Category II in lieu of Category IV.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 18-1984, f. & ef. 10-16-84; DEQ 13-1988, f. & cert. ef. 6-17-88; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0230; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 24-1994, f. & cert. ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1910; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-224-0040

Review of New Sources and Modifications for Compliance With Regulations

The owner or operator of a proposed major source or major modification must demonstrate the ability of the proposed source or modification to comply with all applicable air quality requirements of the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-

24-93; Renumbered from 340-020-0235; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1920; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-224-0050

Requirements for Sources in Nonattainment Areas

Proposed major sources and major modifications that would emit a nonattainment pollutant within a designated nonattainment area, including VOC or NO_x in a designated Ozone Nonattainment Area must meet the requirements listed below:

- (1) Lowest Achievable Emission Rate (LAER). The owner or operator must demonstrate that the source or modification will comply with the LAER for each nonattainment pollutant emitted at or above the significant emission rate (SER).
 - (a) For a major modification, the requirement for LAER applies only to each emissions unit that emits the pollutant in question and was installed since the baseline period or the most recent New Source Review construction approval for that pollutant, and to each modified emission unit that increases actual emissions of the pollutant in question above the netting basis.
 - (b) For phased construction projects, the LAER determination must be reviewed at the latest reasonable time before commencing construction of each independent phase.
 - (c) When determining LAER for a change that was made at a source before the current NSR application, the Department will consider technical feasibility of retrofitting required controls provided:
 - (A) the change was made in compliance with NSR requirements in effect when the change was made, and
 - (B) no limit will be relaxed that was previously relied on to avoid NSR.
 - (d) Individual modifications with potential to emit less than 10 percent of the SER are exempt from this section unless:
 - (A) they are not constructed yet;
 - (B) they are part of a discrete, identifiable, larger project that was constructed within the previous 5 years and is equal to or greater than 10 percent of the SER; or
 - (C) they were constructed without, or in violation of, the Department's approval.
- (2) Offsets and Net Air Quality Benefit. The owner or operator must obtain offsets and demonstrate that a net air quality benefit will be achieved as specified in OAR 340-225-0090.
- (3) Additional Requirements for Federal Major Sources:

- (a) The owner or operator of a source that emits or has the potential to emit 100 tons per year of any regulated NSR pollutant must evaluate alternative sites, sizes, production processes, and environmental control techniques for the proposed source or modification and demonstrate that benefits of the proposed source or modification will significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.
- (b) The owner or operator of a source that emits or has the potential to emit 100 tons per year of any regulated NSR pollutant must demonstrate that all major sources owned or operated by such person (or by an entity controlling, controlled by, or under common control with such person) in the state are in compliance, or are on a schedule for compliance, with all applicable emission limitations and standards under the Act.
- (c) The owner or operator of a federal major source must meet the visibility impact requirements in OAR 340-225-0070.
- (4) Special Exemption for the Salem Ozone Nonattainment area. Proposed major sources and major modifications located in or that impact the Salem Ozone Nonattainment Area are exempt from OAR 340-225-0090 and section (2) of this rule for VOC and NO_x emissions with respect to ozone formation in the Salem Ozone Nonattainment area.

[NOTE: this rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0240; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1930; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-224-0060

Requirements for Sources in Maintenance Areas

Proposed major sources and major modifications that would emit a maintenance pollutant within a designated maintenance area, including VOC or NO_x in a designated ozone maintenance area, must meet the requirements listed below:

- (1) Best Available Control Technology (BACT). Except as provided in section (5) and (6) of this rule, the owner or operator must apply BACT for each maintenance pollutant emitted at a SER.
- (a) For a major modification, the requirement for BACT applies only to:

- (A) Each new emissions unit that emits the pollutant in question and was installed since the baseline period or the most recent New Source Review construction approval for that pollutant; and
 - (B) Each modified emissions unit that increases the actual emissions of the pollutant in question above the netting basis.
- (b) For phased construction projects, the BACT determination must be reviewed at the latest reasonable time before commencement of construction of each independent phase.
- (c) When determining BACT for a change that was made at a source before the current NSR application, the technical and economic feasibility of retrofitting required controls may be considered, provided:
- (A) The change was made in compliance with NSR requirements in effect when the change was made; and
 - (B) No limit is being relaxed that was previously relied on to avoid NSR.
- (d) Individual modifications with potential to emit less than 10 percent of the significant emission rate are exempt from this section unless:
- (A) They are not constructed yet;
 - (B) They are part of a discrete, identifiable larger project that was constructed within the previous 5 years and that is equal to or greater than 10 percent of the significant emission rate; or
 - (C) They were constructed without, or in violation of, the Department's approval.
- (2) Air Quality Protection:
- (a) Offsets and Net Air Quality Benefit. Except as provided in subsections (b), (c) and (d) of this section, the owner or operator must obtain offsets and demonstrate that a net air quality benefit will be achieved in the area as specified in OAR 340-225-0090.
 - (b) Growth Allowance. The requirements of this section may be met in whole or in part in an ozone or carbon monoxide maintenance area with an allocation by the Department from a growth allowance, if available, in accordance with the applicable maintenance plan in the SIP adopted by the Commission and approved by EPA. An allocation from a growth allowance used to meet the requirements of this section is not subject to OAR 340-225-0090. Procedures for allocating the growth allowances for the Oregon portion of the Portland-Vancouver Interstate Maintenance Area for Ozone and the Portland Maintenance Area for Carbon Monoxide are contained in OAR 340-242-0430 and 340-242-0440.

- (c) In a carbon monoxide maintenance area, a proposed carbon monoxide major source or major modification is exempt from subsections (a) and (b) of this section if the owner or operator can demonstrate that the source or modification will not cause or contribute to an air quality impact equal to or greater than 0.5 mg/m³ (8 hour average) and 2 mg/m³ (1-hour average). The demonstration must comply with the requirements of OAR 340-225-0045.
- (d) In a PM₁₀ maintenance area, a proposed PM₁₀ major source or major modification is exempt from subsection (a) of this section if the owner or operator can demonstrate that the source or modification will not cause or contribute to an air quality impact in excess of:
- (A) 120 µg/m³ (24-hour average) or 40 µg/m³ (annual average) in the Grants Pass PM₁₀ maintenance area, or
- (B) 140 µg/m³ (24-hour average) or 47 µg/m³ (annual average) in the Klamath Falls PM₁₀ maintenance area. The demonstration must comply with the requirements of OAR 340-225-0045.
- (3) The owner or operator of a source subject to this rule must provide an air quality analysis in accordance with OAR 340-225-0050(1) and (2), and 340-225-0060.
- (4) Additional Requirements for Federal Major Sources: The owner or operator of a federal major source subject to this rule must provide an analysis of the air quality impacts for the proposed source or modification in accordance with OAR 340-225-0050(3) and 340-225-0070. In addition to the provisions of this section, provisions of section 340-224-0070 also apply to federal major sources.
- (5) Contingency Plan Requirements. If the contingency plan in an applicable maintenance plan is implemented due to a violation of an ambient air quality standard, this section applies in addition to other requirements of this rule until the Commission adopts a revised maintenance plan and EPA approves it as a SIP revision.
- (a) The requirement for BACT in section (1) of this rule is replaced by the requirement for LAER contained in OAR 340-224-0050(1).
- (b) An allocation from a growth allowance may not be used to meet the requirement for offsets in section (2) of this rule.
- (c) The exemption provided in subsection (2)(c) and (2)(d) of this rule for major sources or major modifications within a carbon monoxide or PM₁₀ maintenance area no longer applies.
- (6) Medford-Ashland AQMA: Proposed major sources and major modifications that would emit PM₁₀ within the Medford-Ashland AQMA must meet the LAER emission control technology requirements in OAR 340-224-0050.
- (7) Pending Redesignation Requests. This rule does not apply to a proposed major source or major modification for which a complete application to construct was submitted to the Department before the maintenance area was redesignated from nonattainment to attainment by EPA. Such a source is subject to OAR 340-224-0050.

Deleted: (6)

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040]

[Publications: Publications referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1935; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02

340-224-0070

Prevention of Significant Deterioration Requirements for Sources in Attainment or Unclassified Areas

Proposed new federal major sources or major modifications at federal major sources locating in areas designated attainment or unclassifiable must meet the following requirements:

(1) Best Available Control Technology (BACT). The owner or operator of the proposed major source or major modification must apply BACT for each pollutant emitted at a SER over the netting basis. In the Medford-Ashland AQMA, the owner or operator of any proposed new Federal Major PM10 source, or proposed major modification of a Federal Major PM10 source must comply with the LAER emission control technology requirement in 340-224-0050(1), and is exempt from the BACT provision of this section.

(a) For a major modification, the requirement for BACT applies only to:

(A) Each new emissions unit that emits the pollutant in question and was installed since the baseline period or the most recent New Source Review construction approval for that pollutant and

(B) Each modified emissions unit that increases the actual emissions of the pollutant in question above the netting basis.

(b) For phased construction projects, the BACT determination must be reviewed at the latest reasonable time before commencement of construction of each independent phase.

(c) When determining BACT for a change that was made at a source before the current NSR application, any additional cost of retrofitting required controls may be considered provided:

(A) The change was made in compliance with NSR requirements in effect at the time the change was made, and

(B) No limit is being relaxed that was previously relied on to avoid NSR.

- (d) Individual modifications with potential to emit less than 10 percent of the significant emission rate are exempt from this section unless:
- (A) They are not constructed yet;
 - (B) They are part of a discrete, identifiable larger project that was constructed within the previous 5 years and that is equal to or greater than 10 percent of the significant emission rate; or
 - (C) They were constructed without, or in violation of, the Department's approval.
- (2) Air Quality Analysis: The owner or operator of a source subject to this rule must provide an analysis of the air quality impacts for the proposed source or modification in accordance with OAR 340-225-0050 through 340-225-0070. The owner or operator of any source subject to this rule that significantly affects air quality in a designated nonattainment or maintenance area must meet the requirements of net air quality benefit in OAR 340-225-0090.
- (3) Air Quality Monitoring: The owner or operator of a source subject to this rule must conduct ambient air quality monitoring in accordance with the requirements in OAR 340-225-0050.
- (4) The owner or operator of a source subject to this rule and significantly impacting a PM10 maintenance area (significant air quality impact is defined in OAR 340-200-0020), must comply with the requirements of OAR 340-224-0060(2).

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040]

[Publications: Publications referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: 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 14-1985, f. & ef. 10-16-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 27-1992, f. & cert. ef. 11-12-92; Section (8) Renumbered from 340-020-0241; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0245; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1940; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02

340-224-0080

Exemptions

Temporary emission sources that would be in operation at a site for less than two years, such as pilot plants and portable facilities, and emissions resulting from the construction phase of a new source or modification must comply with OAR 340-224-0050(1), OAR 340-224-0060(1) or OAR 340-224-

0070(1), whichever is applicable, but are exempt from the remaining requirements of OAR 340-224-0050, OAR 340-224-0060 and OAR 340-224-0070 provided that the source or modification would not impact a Class I area or an area with a known violation of a National Ambient Air Quality Standard (NAAQS) or an applicable increment as defined in OAR 340 division 202.

[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 468 & ORS 468A

Stats. Implemented: ORS 468 & ORS 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0250; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1950; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-224-0090 [Renumbered to 340-225-0090]

340-224-0100

Fugitive and Secondary Emissions

Fugitive emissions are included in the calculation of emission rates of all air contaminants. Fugitive emissions are subject to the same control requirements and analyses required for emissions from identifiable stacks or vents. Secondary emissions are not included in calculations of potential emissions that are made to determine if a proposed source or modification is major. Once a source or modification is identified as being major, secondary emissions are added to the primary emissions and become subject to the air quality impact analysis requirements in this division and OAR 340 division 225.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468 & ORS 468

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0270; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1990; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-224-0110 [Renumbered to 340-225-0070]

DIVISION 225

AIR QUALITY ANALYSIS REQUIREMENTS

Attachment B-2(E)
OREGON ADMINISTRATIVE RULES
Chapter 340, Division 225 - Department of Environmental Quality
DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 225

AIR QUALITY ANALYSIS REQUIREMENTS

340-225-0010

Purpose

This division contains the definitions and requirements for air quality analysis referred to in OAR 340 divisions 200 through 268. It does not apply unless a rule in another division refers the reader here. For example, divisions 222 (Stationary Source Plant Site Emissions Limits) and 224 (Major New Source Review) refer the reader to provisions in this division for specific air quality analysis requirements.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-225-0020

Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and OAR-340-200-0020, the definition in this rule applies to this division.

- (1) "Allowable Emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
 - (a) The applicable standards as set forth in 40 CFR parts 60, 61 and 63;
 - (b) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or
 - (c) The emissions rate specified as a federally enforceable permit condition.
- (2) "Background Light Extinction" means the reference levels (Mm-1) shown in the estimates of natural conditions as referenced in the FLAG to be representative of the PSD Class I or Class II area being evaluated.

- (3) "Baseline Concentration" means:
- (a) Except as provided in subsection (c), the ambient concentration level for sulfur dioxide and PM10 that existed in an area during the calendar year 1978. If no ambient air quality data is available in an area, the baseline concentration may be estimated using modeling based on actual emissions for 1978. Actual emission increases or decreases occurring before January 1, 1978 must be included in the baseline calculation, except that actual emission increases from any source or modification on which construction commenced after January 6, 1975 must not be included in the baseline calculation;
 - (b) The ambient concentration level for nitrogen oxides that existed in an area during the calendar year 1988.
 - (c) For the area of northeastern Oregon within the boundaries of the Umatilla, Wallowa-Whitman, Ochoco, and Malheur National Forests, the ambient concentration level for PM10 that existed during the calendar year 1993. The Department may allow the source to use an earlier time period if the Department determines that it is more representative of normal emissions.
 - (d) For PM10 in the Medford-Ashland AQMA: the ambient PM10 concentration levels that existed during the year that EPA redesignates the AQMA to attainment for PM10.
- (4) "Competing PSD Increment Consuming Source Impacts" means the total modeled concentration above the modeled Baseline Concentration resulting from increased emissions of all other sources since the baseline concentration year that are within the Range of Influence of the source in question. Allowable Emissions may be used as a conservative estimate, in lieu of Actual Emissions, in this analysis.
- (5) "Competing NAAQS Source Impacts" means total modeled concentration resulting from allowable emissions of all other sources that are within the Range of Influence of the source in question.
- (6) "FLAG " refers to the Federal Land Managers' Air Quality Related Values Work Group Phase I Report. See 66 Federal Register 2, January 3, 2001 at 382 to 383.
- (7) "General Background Concentration" means impacts from natural sources and unidentified sources that were not explicitly modeled. The Department may determine this as site-specific ambient monitoring or representative ambient monitoring from another location.
- (8) "Predicted Maintenance Area Concentration" means the future year ambient concentration predicted in the applicable maintenance plan. The future year (2015) concentrations to be used for Grants Pass UGB are 89 $\mu\text{g}/\text{m}^3$ (24-hour average) and 21 $\mu\text{g}/\text{m}^3$ (annual average). Future year (2015) concentrations to be used for Klamath Falls UGB are 114 $\mu\text{g}/\text{m}^3$ (24-hour average) and 25 $\mu\text{g}/\text{m}^3$ (annual average).
- (9) "Nitrogen Deposition" means the sum of anion and cation nitrogen deposition expressed in terms of the mass of total elemental nitrogen being deposited. As an example, Nitrogen Deposition for NH_4NO_3 is 0.3500 times the weight of NH_4NO_3 being deposited.

(10) "Ozone Precursor Distance" means the distance in kilometers from the nearest boundary of a designated ozone nonattainment or maintenance area within which a major new or modified source of VOC or NO_x is considered to significantly affect that designated area. The determination of significance is made by either the formula method or the demonstration method.

(a) The Formula Method.

(A) For sources with complete permit applications submitted before January 1, 2003:

$$D = 30 \text{ km}$$

(B) For sources with complete permit applications submitted on or after January 1, 2003:

$$D = (Q/40) \times 30 \text{ km}$$

(C) D is the Ozone Precursor Distance in kilometers. The value for D is 100 kilometers when D is calculated to exceed 100 kilometers. Q is the larger of the NO_x or VOC emissions increase from the source being evaluated in tons/year, and is quantified relative to the netting basis.

(D) If a source is located at a distance less than D from the designated area, the source is considered to have a significant effect on the designated area. If the source is located at a distance equal to or greater than D, it is not considered to have a significant effect.

(b) The Demonstration Method.

An applicant may demonstrate to the Department that the source or proposed source would not significantly impact a nonattainment area or maintenance area. This demonstration may be based on an analysis of major topographic features, dispersion modeling, meteorological conditions, or other factors. If the Department determines that the source or proposed source would not significantly impact the nonattainment area or maintenance area under high ozone conditions, the Ozone Precursor Distance is zero kilometers.

(11) "Ozone Precursor Offsets" means the emission reductions required to offset emission increases from a major new or modified source located inside the designated nonattainment or maintenance area or within the Ozone Precursor Distance. Emission reductions must come from within the designated area or from within the Ozone Precursor Distance of the offsetting source as described in OAR 340-225-0090. The offsets determination is made by either the formula method or the demonstration method.

(a) The Formula Method.

(A) Required offsets (RO) for new or modified sources are determined as follows:

(i) For sources with complete permit applications submitted before January 1, 2003:

$$RO = SQ$$

(ii) For sources with complete permit applications submitted on or after January 1, 2003:

$$RO = (SQ \text{ minus } (40/30 * SD))$$

(B) Contributing sources may provide offsets (PO) calculated as follows:

$$PO = CQ \text{ minus } (40/30 * CD)$$

(C) Multiple sources may contribute to the required offsets of a new source. For the formula method to be satisfied, total provided offsets (PO) must equal or exceed the required offset (RO).

(D) Definitions of factors used in paragraphs (A) (B) and (C) of this subsection:

(i) RO is the required offset of NO_x or VOC in tons per year as a result of the source emissions increase. If RO is calculated to be negative, RO is set to zero;

(ii) SQ is the source emissions increase of NO_x or VOC in tons per year above the netting basis;

- (iii) SD is the source distance in kilometers to the nonattainment or maintenance area. SD is zero for sources located within the nonattainment or maintenance area.
- (iv) PO is the provided offset from a contributing source and must be equal to or greater than zero;
- (v) CQ is the contributing emissions reduction in tons per year quantified relative to contemporaneous pre-reduction actual emissions (OAR 340-268-0030(1)(b)).
- (vi) CD is the contributing source distance in kilometers to the nonattainment or maintenance area. For a contributing source located within the nonattainment or maintenance area, CD equals zero.

(b) The Demonstration Method.

An applicant may demonstrate to the Department using dispersion modeling or other analyses the level and location of offsets that would be sufficient to provide actual reductions in concentrations of VOC or NOx in the designated area during high ozone conditions. The modeled reductions of ambient VOC or NOx concentrations resulting from the emissions offset must be demonstrated over a greater area and over a greater period of time within the designated area as compared to the modeled ambient VOC or NOx concentrations resulting from the emissions increase from the source subject to this rule. If the Department determines that the demonstration is acceptable, then the Department will approve the offsets proposed by the applicant. The demonstration method does not apply to sources located inside an ozone nonattainment area.

(12) "Range of Influence (ROI)" means:

(a) For PSD Class II and Class III areas, the Range of Influence of a competing source (in kilometers) is defined by:

(A) $ROI (km) = Q (tons/year) / K (tons/year km)$.

(B) Definition of factors used in paragraph (A) of this subsection:

(i) ROI is the distance a source has an effect on an area and is compared to the distance from a potential competing source to the Significant Impact Area of a proposed new source. Maximum ROI is 50 km, however the Department may request that sources at a distance greater than 50 km be included in a competing source analysis.

(ii) Q is the emission rate of the potential competing source in tons per year.

(iii) K (tons/year km) is a pollutant specific constant as defined in the table below:

Pollutant	PM10	SOx	NOx	CO	Lead
K	5	5	10	40	0.15

(b) For PSD Class I areas, the Range of Influence of a competing source includes emissions from all sources that occur within the modeling domain of the source being evaluated. The Department determines the modeling domain on a case-by-case basis.

(13) "Source Impact Area" means a circular area with a radius extending from the source to the largest distance to where predicted impacts from the source or modification equal or exceed the Significant Air Quality Impact levels set out in Table 1 of OAR 340 division 200. This definition only applies to PSD Class II areas and is not intended to limit the distance for PSD Class I modeling.

(14) "Sulfur Deposition" means the sum of anion and cation sulfur deposition expressed in terms of the total mass of elemental sulfur being deposited. As an example, sulfur deposition for $(\text{NH}_4)_2\text{SO}_4$ is 0.2427 times the weight of $(\text{NH}_4)_2\text{SO}_4$ being deposited.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 12-2002(Temp), f. & cert. ef. 10-8-02 thru 4-6-03

340-225-0030

Procedural Requirements

Information Required. In addition to the requirements defined in OAR 340-216-0040, the owner or operator of a source (where required by divisions 222 or 224) must submit all information necessary to perform any analysis or make any determination required under these rules. Such information must include, but is not limited to:

- (1) Emissions data for all existing and proposed emission points from the source or modification. This data must represent maximum emissions for the following averaging times by pollutant: [Table not included. See ED. NOTE.]
- (2) Stack parameter data (height above ground, exit diameter, exit velocity, and exit temperature data for all existing and proposed emission points from the source or modification;
- (3) An analysis of the air quality and visibility impact of the source or modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts; and
- (4) An analysis of the air quality and visibility impacts, and the nature and extent of all commercial, residential, industrial, and other source emission growth, that has occurred since January 1, 1978, in the area the source or modification would significantly affect.

[ED. NOTE: The Table referenced in this rule is not printed in the OAR Compilation. Copies are available from the agency.]

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A
Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-225-0040

Air Quality Models

All modeled estimates of ambient concentrations required under this rule must be based on the applicable air quality models, data bases, and other requirements specified in 40 CFR Part 51, Appendix W, "Guidelines on Air Quality Models (Revised)" (July 1, 2000). Where an air quality impact model specified in 40 CFR Part 51, Appendix W is inappropriate, the methods published in the FLAG are generally preferred for analyses in PSD Class I areas. Where an air quality impact model specified in 40 CFR Part 51, Appendix W is inappropriate in PSD Class II and III areas, the model may be modified or another model substituted. Any change or substitution from models specified in 40 CFR Part 51, Appendix W is subject to notice and opportunity for public comment and must receive prior written approval from the Department and the EPA. Where necessary, methods like those outlined in the "Interim Procedures for Evaluating Air Quality Models (Revised)" (U.S. Environmental Protection Agency, 1984) provide guidance in determining the comparability of models.

[Publications: The publications referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A
Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-225-0045

Requirements for Analysis in Maintenance Areas

Modeling: For determining compliance with the limits established in OAR 340-224-0060(2)(c) and (2)(d), NAAQS, and PSD Increments, the following methods must be used:

- (1) A single source impact analysis is sufficient to show compliance with standards, PSD increments, and limits if modeled impacts from the source being evaluated are less than the Significant Air Quality Impact levels specified in OAR 340-200-0020, Table 1 for all maintenance pollutants.
- (2) If the above requirement is not satisfied, the owner or operator of a proposed source or modification being evaluated must perform competing source modeling as follows:
 - (a) For demonstrating compliance with the maintenance area limits established in OAR 340-224-0060(2)(c) and (2)(d), the owner or operator of a proposed source or modification must show that modeled impacts from the proposed increased emissions plus Competing Source Impacts, plus predicted maintenance area concentration are less than the limits for all averaging times.

- (b) For demonstrating compliance with the NAAQS, the owner or operator of a proposed source or modification must show that the total modeled impacts plus total Competing NAAQS Source Impacts plus General Background Concentrations are less than the NAAQS for all averaging
- (c) For demonstrating compliance with the PSD Increments (as defined in OAR 340-202-0210, Table 1), the owner or operator of a proposed source or modification must show that modeled impacts from the proposed increased emissions (above the baseline concentration) plus competing PSD Increment Consuming Source Impacts (above the baseline concentration) are less than the PSD increments for all averaging times.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A, 468A.025, 468A.035

Hist.: DEQ 11-2002, f. & cert. ef. 10-8-02

340-225-0050

Requirements for Analysis in PSD Class II and Class III Areas

Modeling: For determining compliance with the NAAQS and PSD Increments in PSD Class II and Class III areas, the following methods must be used:

- (1) A single source impact analysis is sufficient to show compliance with standards and increments if modeled impacts from the source being evaluated are less than the Significant Air Quality Impact levels specified in OAR 340-200-0020, Table 1 for all pollutants.
- (2) If the above requirement is not satisfied, the owner or operator of a proposed source or modification being evaluated must perform competing source modeling as follows:
 - (a) For demonstrating compliance with the PSD Increments (as defined in OAR 340-202-0210, Table 1), the owner or operator of a proposed source or modification must show that modeled impacts from the proposed increased emissions (above the modeled Baseline Concentration) plus Competing PSD Increment Consuming Source Impacts (above the modeled Baseline Concentration) are less than the PSD increments for all averaging times.
 - (b) For demonstrating compliance with the NAAQS, the owner or operator of a proposed source must show that the total modeled impacts plus total Competing NAAQS Source Impacts plus General Background Concentrations are less than the NAAQS for all averaging times.
- (3) Additional Impact Modeling:
 - (a) When referred to this rule by divisions 222 or 224, the owner or operator of a source must provide an analysis of the impairment to visibility; soils and vegetation that would occur as a result of the source or modification, and general commercial, residential, industrial and other growth associated with the source or modification. As a part of this analysis, deposition

modeling analysis is required for sources emitting heavy metals above the significant emission rates as defined in OAR 340-200-0020, Table 2. Concentration and deposition modeling may also be required for sources emitting other compounds on a case-by-case basis;

- (b) The owner or operator must provide an analysis of the air quality concentration projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(4) Air Quality Monitoring:

(a)(A) When referred to this rule by division 224, the owner or operator of a source must submit with the application an analysis of ambient air quality in the area impacted by the proposed project. This analysis, which is subject to the Department's approval, must be conducted for each pollutant potentially emitted at a significant emission rate by the proposed source or modification. The analysis must include continuous air quality monitoring data for any pollutant that may be emitted by the source or modification, except for volatile organic compounds. The data must relate to the year preceding receipt of the complete application and must have been gathered over the same time period. The Department may allow the owner or operator to demonstrate that data gathered over some other time period would be adequate to determine that the source or modification would not cause or contribute to a violation of an ambient air quality standard or any applicable pollutant increment. Pursuant to the requirements of these rules, the owner or operator must submit for the Department's approval, a preconstruction air quality monitoring plan. This plan must be submitted in writing at least 60 days prior to the planned beginning of monitoring and approved in writing by the Department before monitoring begins.

(B) Required air quality monitoring must be conducted in accordance with 40 CFR 58 Appendix B, "Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring" (July 1, 2000) and with other methods on file with the Department.

(C) The Department may exempt the owner or operator of a proposed source or modification from preconstruction monitoring for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would be less than the amounts listed below or that modeled competing source concentration (plus General Background Concentration) of the pollutant within the Source Impact Area are less than the following significant monitoring concentrations:

(i) Carbon monoxide; 575 ug/m³, 8 hour average;

(ii) Nitrogen dioxide; 14 ug/m³, annual average;

(iii) PM₁₀; 10 ug/m³, 24 hour average.

(iv) Sulfur dioxide; 13 ug/m³, 24 hour average;

(v) Ozone; Any net increase of 100 tons/year or more of VOCs from a source or modification subject to PSD requires an ambient impact analysis, including the gathering of ambient

air quality data. However, requirement for ambient air monitoring may be exempted if existing representative monitoring data shows maximum ozone concentrations are less than 50% of the ozone NAAQS based on a full season of monitoring;

- (vi) Lead; 0.1 ug/m³, 24 hour average;
- (vii) Fluorides; 0.25 ug/m³, 24 hour average;
- (viii) Total reduced sulfur; 10 ug/m³, 1 hour average;
- (ix) Hydrogen sulfide; 0.04 ug/m³, 1 hour average;
- (x) Reduced sulfur compounds; 10 ug/m³, 1 hour average.

(D) The Department may allow the owner or operator of a source (where required by divisions 222 or 224) to substitute post construction monitoring for the requirements of (4)(a)(A) for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would not cause or contribute to an exceedance of any air quality standard. This analysis must meet the requirements of 340-225-0050(2)(b) and must use representative or conservative General Background Concentration data.

(E) When PM₁₀ preconstruction monitoring is required by this section, at least four months of data must be collected, including the season(s) the Department judges to have the highest PM₁₀ levels. PM₁₀ must be measured in accordance with 40 CFR part 50, Appendix J (July 1, 1999). In some cases, a full year of data will be required.

(b) After construction has been completed, the Department may require ambient air quality monitoring as a permit condition to establish the effect of emissions, other than volatile organic compounds, on the air quality of any area that such emissions could affect.

[ED. NOTE: Tables referenced in this rule are available from the agency.] [Publications: Publications referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02

340-225-0060

Requirements for Demonstrating Compliance with Standards and Increments in PSD Class I Areas

For determining compliance with standards and increments in PSD Class I areas, the following methods must be used:

- (1) Before January 1, 2003, the owner or operator of a source (where required by divisions 222 or 224) must model impacts and demonstrate compliance with standards and increments on all PSD Class I areas that may be affected by the source or modification.
- (2) On or after January 1, 2003, the owner or operator of a source (where required by divisions 222 or 224) must meet the following requirements:
 - (a) A single source impact analysis will be sufficient to show compliance with increments if modeled impacts from the source being evaluated are demonstrated to be less than the impact levels specified in Table I below. [Table not printed. See Ed. Note.]
 - (b) If the above requirement is not satisfied, the owner or operator must also show that the increased source impacts (above Baseline Concentration) plus Competing PSD Increment Consuming Source Impacts are less than the PSD increments for all averaging times
 - (c) A single source impact analysis will be sufficient to show compliance with standards if modeled impacts from the source being evaluated are demonstrated to be less than the impact levels specified in OAR 340-200-0020, Table 1 for all pollutants.
 - (d) If the requirement of (2)(a) is not satisfied, and background monitoring data for each PSD Class I area shows that the NAAQS is more controlling than the PSD increment then the source must also demonstrate compliance with the NAAQS by showing that their total modeled impacts plus total modeled Competing NAAQS Source Impacts plus General Background Concentrations are less than the NAAQS for all averaging times.

[ED. NOTE: Table referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02

340-225-0070

Requirements for Demonstrating Compliance with AQRV Protection

- (1) Sources that are not Federal Major Sources are exempt from the requirements of the remainder of this rule.
- (2) Notice of permit application for actions subject to the requirements of divisions 222 and 224:
 - (a) If a proposed major source or major modification could impact air quality related values (including visibility) within a Class I area, the Department will provide written notice to the EPA and to the appropriate Federal Land Manager within 30 days of receiving such permit application. The notice will include a copy of all information relevant to the permit application, including analysis of anticipated impacts on Class I area air quality related values (including visibility). The Department will also provide at least 30 days notice to EPA and the appropriate

Federal Land Manager of any scheduled public hearings and preliminary and final actions taken on the application;

- (b) If the Department receives advance notice of a permit application for a source that may affect Class I area visibility, the Department will notify all affected Federal Land Managers within 30 days of receiving the advance notice;
 - (c) During its review of source impacts on Class I area air quality related values (including visibility) pursuant to this rule, the Department will consider any analysis performed by the Federal Land Manager that is received by the Department within 30 days of the notice required by subsection (a). If the Department disagrees with the Federal Land Manager's demonstration, the Department will include a discussion of the disagreement in the Notice of Public Hearing;
 - (d) As a part of the notification required in OAR 340-209-0060, the Department will provide the Federal Land Manager an opportunity to demonstrate that the emissions from the proposed source or modification would have an adverse impact on air quality related values (including visibility) of any federal mandatory Class I area. This adverse impact determination may be made even if there is no demonstration that a Class I maximum allowable increment has been exceeded. If the Department agrees with the demonstration, it will not issue the permit.
- (3) Visibility impact analysis requirements:
- (a) If divisions 222 or 224 require a visibility impact analysis, the owner or operator must demonstrate that the potential to emit any pollutant at a significant emission rate in conjunction with all other applicable emission increases or decreases, including secondary emissions, permitted since January 1, 1984 and other increases or decreases in emissions, will not cause or contribute to significant impairment of visibility on any Class I area. The Department also encourages the owner or operator to demonstrate that these same emission increases or decreases will not cause or contribute to significant impairment of visibility on the Columbia River Gorge National Scenic Area (if it is affected by the source);
 - (b) The owner or operator must submit all information necessary to perform any analysis or demonstration required by these rules pursuant to OAR 340-224-0030(1).
 - (c) Determination of significant impairment: The results of the modeling must be sent to the affected Federal Land Managers and the Department. The land managers may, within 30 days following receipt of the source's visibility impact analysis, determine whether or not significant impairment of visibility in a Class I area would result. The Department will consider the comments of the Federal Land Manager in its consideration of whether significant impairment will result. If the Department determines that impairment would result, it will not issue a permit for the proposed source.
- (4) Types of visibility modeling required. For receptors in PSD Class I areas within the PSD Class I Range of Influence, a plume blight analysis or regional haze analysis is required.

- (5) Criteria for visibility impacts:

Attachment B-2(E)
OREGON ADMINISTRATIVE RULES
Chapter 340, Division 225 - Department of Environmental Quality

- (a) The owner or operator of a source (where required by divisions 222 or 224) is encouraged to demonstrate that their impacts on visibility satisfy the guidance criteria as referenced in the FLAG.
 - (b) If visibility impacts are a concern, the Department will consider comments from the Federal Land Manager when deciding whether significant impairment will result. Emission offsets may also be considered. If the Department determines that impairment would result, it will not issue a permit for the proposed source.
- (6) Deposition modeling may be required for receptors in PSD Class I areas where visibility modeling is required. This may include, but is not limited to an analysis of Nitrogen Deposition and Sulfur Deposition.
- (7) Visibility monitoring:
- (a) If divisions 222 or 224 require visibility monitoring data, the owner or operator must use existing data to establish existing visibility conditions within Class I areas as summarized in the FLAG Report.
 - (b) After construction has been completed the owner or operator must conduct such visibility monitoring as the Department requires as a permit condition to establish the effect of the pollutant on visibility conditions within the impacted Class I area.
- (8) Additional impact analysis: the owner or operator subject to OAR 340-224-0060(3) or OAR 340-224-0070(2) must provide an analysis of the impact to visibility that would occur as a result of the proposed source or modification and general commercial, residential, industrial, and other growth associated with the source or major modification.
- (9) If the Federal Land Manager recommends and the Department agrees, the Department may require the owner or operator to analyze the potential impacts on other Air Quality Related Values and how to protect them. Procedures from the FLAG report should be used in this recommendation. Emission offsets may also be used. If the Federal Land Manager finds that significant impairment would result from the proposed activities and Department agrees, the Department will not issue a permit for the proposed source.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A

Hist.: DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0276; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2000; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-224-0110

340-225-0090

Requirements for Demonstrating a Net Air Quality Benefit

Demonstrations of net air quality benefit for offsets must include the following:

- (1) Ozone areas (VOC and NO_x emissions). For sources capable of impacting a designated ozone nonattainment or maintenance area;
 - (a) Offsets for VOC and NO_x are required if the source will be located within the designated area or within the Ozone Precursor Distance.
 - (b) The amount and location of offsets must be determined in accordance with this subsection:
 - (i) For new or modified sources locating within a designated nonattainment area, the offset ratio is 1.1:1. These offsets must come from within either the same designated nonattainment area as the new or modified source or another ozone nonattainment area (with equal or higher nonattainment classification) that contributes to a violation of the NAAQS in the same designated nonattainment area as the new or modified source.
 - (ii) For new or modified sources locating within a designated maintenance area, the offset ratio is 1.1:1. These offsets may come from within either the designated area or the ozone precursor distance.
 - (iii) For new or modified sources locating outside the designated area, but within the ozone precursor distance, the offset ratio is 1:1. These offsets may come from within either the designated area or the ozone precursor distance.
 - (iv) Offsets from outside the designated area but within the Ozone Precursor Distance must be from sources affecting the designated area in a comparable manner to the proposed emissions increase. Methods for determining offsets are described in the Ozone Precursor Offsets definition (OAR 340-225-0020(11)).
 - (c) In lieu of obtaining offsets, the owner or operator may obtain an allocation at the rate of 1:1 from a growth allowance, if available, in an applicable maintenance plan.
 - (d) Sources within or affecting the Medford Ozone Maintenance Area are exempt from the requirement for NO_x offsets relating to ozone formation.
 - (e) Sources within or affecting the Salem Ozone Nonattainment Area are exempt from the requirement for VOC and NO_x offsets relating to ozone formation.
- (2) Non-Ozone areas (PM₁₀, SO₂, CO, NO_x, and Lead emissions)
 - (a) For a source locating within a designated nonattainment area, the owner or operator must:
 - (A) obtain offsets from within the same designated nonattainment area;
 - (B) provide a minimum of 1:1 offsets for emission increases over the Netting Basis;
 - (C) provide a net air quality benefit within the designated nonattainment area. "Net Air Quality Benefit" means a reduction in concentration at a majority of the modeled receptors and less than a significant impact level increase at all modeled receptors;
 - (D) provide offsets sufficient to demonstrate reasonable further progress toward achieving the NAAQS.
 - (b) For a source locating outside a designated nonattainment area but causing a significant air quality impact on the area, the owner or operator must provide offsets sufficient to reduce the modeled impacts below the significant air quality impact level (OAR 340-200-0020) at all receptors

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within the designated nonattainment area. These offsets may come from within or outside the designated nonattainment area.

- (c) For a source locating inside or causing a significant air quality impact on a designated maintenance area, the owner or operator must either provide offsets sufficient to reduce modeled impacts below the significant air quality impact level (OAR 240-200-0020) at all receptors within the designated maintenance area or obtain an allocation from an available growth allowance as allowed by an applicable maintenance plan. These offsets may come from within or outside the designated maintenance area.

(A) Medford-Ashland AQMA: Proposed new major PM10 sources or major PM10 modifications locating within the AQMA that are required to provide emission offsets under OAR 340-224-0060(2)(a) must provide reductions in PM10 emissions equal to 1.2 times the emissions increase over the netting basis from the new or modified source, and must provide a net air quality benefit within the AQMA. "Net Air Quality Benefit" means a reduction in concentration at a majority of the modeled receptors and less than a significant impact level increase at all modeled receptors.

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(B) Medford-Ashland AQMA: Proposed new major PM10 sources or major PM10 modifications located outside the Medford-Ashland AQMA that cause a significant air quality impact on the AQMA must provide reductions in PM10 emissions sufficient to reduce modeled impacts below the significant air quality impact level (OAR 240-200-0020) at all receptors within the AQMA.

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- (3) The emission reductions used as offsets must be of the same type of pollutant as the emissions from the new source or modification. Sources of PM10 must be offset with particulate in the same size range.
- (4) The emission reductions used as offsets must be contemporaneous, that is, the reductions must take effect before the time of startup but not more than two years before the submittal of a complete permit application for the new source or modification. This time limitation may be extended through banking, as provided for in OAR 340 division 268, Emission Reduction Credit Banking. In the case of replacement facilities, the Department may allow simultaneous operation of the old and new facilities during the startup period of the new facility, if net emissions are not increased during that time period. Any emission reductions must be federally enforceable at the time of the issuance of the permit.
- (5) Offsets required under this rule must meet the requirements of Emissions Reduction Credits in OAR 340 division 268.
- (6) Emission reductions used as offsets must be equivalent in terms of short term, seasonal, and yearly time periods to mitigate the effects of the proposed emissions.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Attachment B-2(E)
OREGON ADMINISTRATIVE RULES

Chapter 340, Division 225 - Department of Environmental Quality

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0260; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1970; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0111; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-224-0090 & 340-240-0260; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 12-2002(Temp), f. & cert. ef. 10-8-02 thru 4-6-03

DIVISION 240

**RULES FOR AREAS WITH UNIQUE
AIR QUALITY NEEDS**

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 240

**RULES FOR AREAS WITH UNIQUE
AIR QUALITY NEEDS**

340-240-0010

Purpose

The purpose of this Division is to deal specifically with the unique air quality control needs of the Medford-Ashland AQMA and Grants Pass UGB (OAR 340-240-0100 through 340-240-0270), the La Grande UGB (340-240-0300 through 340-240-0360, and the Lakeview UGB (OAR 340-240-0400 through 340-240-0440).

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0005

340-240-0020

Emission Limitations

Emission limitations established herein and stated in terms of pounds per 1,000 square feet of production are to be computed on an hourly basis using the maximum 8 hour production capacity of the plant.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025

Hist.: DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0007; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0030

Definitions

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-0010, the definition in this rule applies to this division.

- (1) "Air contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter, or any combination thereof.
- (2) "Air Conveying System" means an air moving device, such as a fan or blower, associated ductwork, and a cyclone or other collection device, the purpose of which is to move material from one point to another by entrainment in a moving airstream.
- (3) "Average Operating Opacity" means the opacity of emissions determined using EPA Method 9 on any three days within a 12-month period which are separated from each other by at least 30 days; a violation of the average operating opacity limitation is judged to have occurred if the opacity of emissions on each of the three days is greater than the specified average operating opacity limitation.
- (4) "Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of wood to obtain the fixed carbon in the wood.
- (5) "Collection Efficiency" means the overall performance of the air cleaning device in terms of ratio of weight of material collected to total weight of input to the collector.
- (6) "Department" means Department of Environmental Quality.
- (7) "Design Criteria" means the numerical as well as verbal description of the basis of design, including but not necessarily limited to design flow rates, temperatures, humidities, contaminant descriptions in terms of types and chemical species, mass emission rates, concentrations, and specification of desired results in terms of final emission rates and concentrations, and scopes of vendor supplies and owner-supplied equipment and utilities, and a description of any operational controls.
- (8) "Domestic Waste" means combustible household waste, other than wet garbage, such as paper, cardboard, leaves, yard clippings, wood, or similar materials generated in a dwelling housing four (4) families or less, or on the real property on which the dwelling is situated.
- (9) "Dry Standard Cubic Foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions.
- (10) "Emission" means a release into the outdoor atmosphere of air contaminants.

(11) "EPA Method 9" means the method for Visual Determination of the Opacity of Emissions From Stationary Sources described as Method (average of 24 consecutive observations) in the Department Source Sampling Manual (January, 1992).

(12) "Facility" means an identifiable piece of process equipment. A stationary source may be comprised of one or more pollutant-emitting facilities.

~~(13) "Fuel Burning Equipment" means a device which burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat, except marine installations and internal combustion engines that are not stationary gas turbines.~~ Fuel Burning Equipment" means a device that burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat or power by indirect heat transfer. All stationary gas turbines are considered Fuel Burning Equipment. Marine installations and internal combustion engines are not considered Fuel Burning Equipment. (14) "Fuel Moisture Content By Weight Greater Than 20 Percent" means bark, hogged wood waste, or other wood with an average moisture content of more than 20 percent by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing.

(15) "Fuel Moisture Content By Weight Less Than 20 Percent" means pulverized ply trim, sanderdust, or other wood with an average moisture content of 20 percent or less by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing.

(16) "Fugitive Emissions" means dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof not easily given to measurement, collection and treatment by conventional pollution control methods.

~~(17)~~, "Grants Pass Urban Growth Area" and "Grants Pass Area" means the area within the Grants Pass Urban Growth Boundary as shown on the Plan and Zoning Maps for the City of Grants Pass as of 1 February 1988.

(18), "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.

(19), "La Grande Urban Growth Area" means the area within the La Grande Urban Growth Boundary as shown on the Plan and Zoning Maps for the City of La Grande as of 1 October 1991.

(20), "Lakeview Urban Growth Area" means the area within the Lakeview Urban Growth Boundary as shown on the Plan and Zoning Maps for the Town of Lakeview as of 25 October 1993.

(21), "Liquefied petroleum gas" has the meaning given by the American Society for Testing and Materials in ASTM D1835-82, "Standard Specification for Liquid Petroleum Gases."

(22), "Lowest Achievable Emission Rate" or "LAER" is defined in OAR 340-200-0020.

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Deleted: 17) "General Arrangement", in the context of the compliance schedule requirements in section 340-240-0200(1)(b) 340-002-0045(2), means drawings or reproductions which show as a minimum the size and location of the control equipment on a source plot plan, the location of equipment served by the emission-control system, and the location, diameter, and elevation above grade of the ultimate point of discharging contaminants to the atmosphere.¶

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(23) "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).

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(24) "Medford-Ashland Air Quality Maintenance Area" (AQMA) means the area defined as beginning at a point approximately two and quarter miles northeast of the town of Eagle Point, Jackson County, Oregon at the northeast corner of Section 36, Township 35 South, Range 1 West (T35S, R1W); thence South along the Willamette Meridian to the southeast corner of Section 25, T37S, R1W; thence southeast along a line to the southeast corner of Section 9, T39S, R2E; thence south-southeast along line to the southeast corner of Section 22, T39S, R2E; thence South to the southeast corner of Section 27, T39S, R2E; thence southwest along a line to the southeast corner of Section 33, T39S, R2E; thence West to the southwest corner of Section 31, T39S, R2E; thence northwest along a line to the northwest corner of Section 36, T39S, R1E; thence West to the southwest corner of Section 26, T39S, R1E; thence northwest along a line to the southeast corner of Section 7, T39S, R1E; thence West to the southwest corner of Section 12, T39S, R1W, T39S, R1W; thence northwest along a line to southwest corner of Section 20, T38S, R1W; thence West to the southwest corner of Section 24, T38S, R2W; thence northwest along a line to the southwest corner of Section 4, T38S, R2W; thence West to the southwest corner of Section 6, T38S, R2W; thence northwest along a line to the southwest corner of Section 31, T37S, R2W; thence North and East along the Rogue River to the north boundary of Section 32, T35S, R1W; thence East along a line to the point of beginning.

Deleted: (25) "Medford-Ashland Air Quality Maintenance Area" and "Medford-Ashland AQMA" is defined as beginning at a point approximately one mile NE of the town of Eagle Point, Jackson County, Oregon, at the NE corner of Section 36, T35S, R1W; thence south along the Willamette Meridian to the SE corner of Section 25, T37S, R1W; thence SE along a line to the SE corner of Section 9, T39S, R2E; thence SSE to the corner of Section 22, T39S, R2E; thence south to the SE corner of Section 27, T39S, R2E; thence SW to the SE corner of Section 33, T39S, R2E; thence NW to the NW corner of Section 36, T39S, R1E; thence west to the SW corner of Section 26, T39S, R1E; thence west to the SW corner of Section 12, T39S, R1W; thence NW along a line to the SW corner of Section 20, T38S, R1W; thence west to the SW corner of Section 24, T38S, R2W; thence NW along a line to the SW corner of Section 4, T38S, R2W; thence west to the SW corner of Section 5, T38S, R2W; thence NW along a line to the SW corner of Section 31, T37S, R2W; thence north along a line to the Rogue River, thence north and east along the Rogue River to the north boundary of Section 32, T35S, R1W; thence east along a line to the point of beginning.¶

(25) "Modified Source" means any source with a major modification as defined in OAR 340-200-0020.

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(26) "Natural gas" means a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal component is methane.

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(27) "New Source" means any source not in existence prior to April 7, 1978 or any source not having a Permit as of April 7, 1978.

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(28) "Odor" means that property of an air contaminant that affects the sense of smell.

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(29) "Offset" is defined in OAR 340-200-0020.

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(30) "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background as measured in accordance with the Department's Source Sampling Manual (January, 1992). Unless otherwise specified by rule, opacity must be measured in accordance with EPA Method 9. For all standards, the minimum observation period must be six minutes, though longer periods may be required by a specific rule or permit condition. Aggregate times (e.g. 3 minutes in any one hour) consist of the total duration of all readings during the observation period that exceed the opacity percentage in the standard, whether or not the readings are consecutive. Alternatives to EPA Method 9, such as a continuous opacity monitoring system (COMS),

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alternate Method 1 (LIDAR), or EPA Methods 22, or 203, may be used if approved in advance by the Department, in accordance with the Source Sampling Manual.

(31). "Open Burning" means burning conducted in such a manner that combustion air and combustion products may not be effectively controlled including, but not limited to, burning conducted in open outdoor fires, burn barrels, and backyard incinerators.

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(32). "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binders.

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(33). "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured in accordance with the Department Source Sampling Manual. Particulate matter emission determinations must consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run must have a minimum sampling time of one hour, a maximum sampling time of eight hours, and a minimum sampling volume of 31.8 dscf. For sources tested using DEQ Method 8, each run must have a minimum sampling time of 15 minutes and must collect a minimum particulate sample of 100 mg. Wood waste boilers and charcoal producing plants must be tested with DEQ Method 5; veneer dryers, wood particle dryers, fiber dryers and press/cooling vents must be tested with DEQ Method 7; and air conveying systems must be tested with DEQ Method 8 (January, 1992).

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(34). "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.

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(35). "Press/Cooling Vent" means any opening through which particulate and gaseous emissions from plywood, particleboard, or hardboard manufacturing are exhausted, either by natural draft or powered fan, from the building housing the process. Such openings are generally located immediately above the board press, board unloader, or board cooling area.

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(36). "Rebuilt Boiler" means a physical change after April 29, 1988, to a wood-waste boiler or its air-contaminant emission control system which is not considered a "modified source" and for which the fixed, depreciable capital cost of added or replacement components equals or exceeds fifty percent of the fixed depreciable cost of a new component which has the same productive capacity.

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(37). "Source" means any structure, building, facility, equipment, installation or operation, or combination thereof, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person, or by persons under common control.

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(38). "Standard Conditions" means a temperature of 60° Fahrenheit (15.6° Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 Kilograms per square centimeter).

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(39). "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

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Attachment B-2(F)
OREGON ADMINISTRATIVE RULES
Chapter 340, Division 240 - Department of Environmental Quality

(40) "Veneer Dryer" means equipment in which veneer is dried.

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(41) "Wood-fired Veneer Dryer" means a veneer dryer which is directly heated by the products of combustion of wood fuel in addition to or exclusive of steam or natural gas or propane combustion.

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(42) "Wigwam Fired Burner" means a burner which consists of a single combustion chamber, has the general features of a truncated cone, and is used for the incineration of wastes.

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(43) "Wood Waste Boiler" means equipment which uses indirect heat transfer from the products of combustion of wood waste to provide heat or power.

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[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

[Publications: The Publication(s) referenced in this rule is available from the office of the agency.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 9-1979, f. & ef. 5-3-79; DEQ 3-1980, f. & ef. 1-28-80; DEQ 14-1981, f. & ef. 5-6-81; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0010; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

**The Medford-Ashland Air Quality Maintenance
Area and the Grants Pass Urban Growth Area**

340-240-0100

Applicability

OAR 340-240-0100 through 340-240-~~0250~~ ~~0110~~ apply in the Medford-Ashland Air Quality Maintenance Area (AQMA) and the Grants Pass Urban Growth Area (Area), except that OAR 340-240-0130, 340-240-0180, and 340-240-0190 apply only in the Medford-Ashland AQMA.

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[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0012

340-240-0110

Wood Waste Boilers

~~(1) No person may 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.~~

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~~(2) No person owning or controlling any wood waste boiler with a heat input capacity greater than 35 million BTU/hour may 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 emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits will be included in the Permit for each affected source.~~

~~(3) In accordance with the compliance schedule in 340-240-0200(2), a~~

~~(1) No person may 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:~~

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(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 emissions equal or exceed 10% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits will be included in the Permit for each affected source.

(2) For boilers existing in the Baseline Period with a heat input capacity greater than 35 million Btu/hour, boiler mass emission limits for the purpose of establishing the facility's netting basis under OAR 340-200-0020 will be based on particulate matter emissions of 0.030 grains per dry standard cubic foot, corrected to 12% CO₂.

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(3) Rebuilt Boilers are subject to OAR 340-240-0110(1). Boiler mass emissions for purposes of OAR 340-222-0041 will be based on LAER at the time the Department approves the rebuilt boiler. [NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

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Deleted: c) For purposes of OAR 340-222-0040 and 340-268-0030, the boiler mass emission limits must be based on particulate matter emissions of 0.030 grains per standard dry cubic foot, corrected to 12% CO₂.¶

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 29-1980, f. & ef. 10-29-80; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 22-1996, f.

& cert. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0015; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0120

Veneer Dryer Emission Limitations

(1) No person is allowed to operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed the opacity limits specified in subsections (a) and (b) of this section or such that emissions of particulate matter exceed the mass emission limits of subsections (c) through (g) of this section:

(a) An average operating opacity of five percent; and

(b) A maximum opacity of ten percent, unless the permittee demonstrates by source test that the emission limits in subsections (c) through (g) of this section can be achieved at higher visible emissions than specified in subsections (a) and (b) of this section, but in no case ~~may~~ ~~are~~ emissions exceed the visible air contaminant limitations of OAR 340-234-0510 ~~0420(1)(b)~~. Specific opacity limits will be included in the Permit for each affected source;

(c) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct natural gas or propane fired veneer dryers;

(d) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for steam heated veneer dryers;

(e) 0.40 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct wood fired veneer dryers using fuel which has a moisture content by weight less than 20 percent;

(f) 0.45 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct wood fired veneer dryers using fuel which has a moisture content by weight greater than 20 percent;

(g) In addition to subsections (e) and (f) of this section, 0.20 pounds per 1,000 pounds of steam generated in boilers which exhaust combustion gases to the veneer dryer.

(2) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from OAR 340-228-0210.

(3) No person is allowed to operate a veneer dryer unless:

(a) The owner or operator has submitted a program and time schedule for installing an emission-control system which has been approved in writing by the Department as being capable of complying with subsections (1)(a) through (g) of this rule;

(b) The veneer dryer is equipped with an emission-control system which has been approved in writing by the Department and is capable of complying with subsections (1)(a) through (g) of this rule; or

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(c) The owner or operator has demonstrated and the Department has agreed in writing that the dryer is capable of being operated and is operated in continuous compliance with subsections (1)(a) through (g) of this rule.

(4) Each veneer dryer must be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment are at full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable levels.

(5) No person is allowed to willfully cause or permit the installation or use of any means, such as dilution, which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission which would otherwise violate this rule.

(6) Where effective measures are not taken to minimize fugitive emissions, the Department may require that the equipment or structures in which processing, handling and storage are done, be tightly closed, modified, or operated in such a way that air contaminants are minimized, controlled, or removed before discharge to the open air.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0021; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0130

Air Conveying Systems (Medford-Ashland AQMA Only)

All air conveying systems emitting greater than ten tons per year of particulate matter to the atmosphere ~~at the time of adoption of this rule must, with the prior written approval~~ of the Department, be equipped with a control system with collection efficiency of at least 98.5 percent.

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[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0025; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0140

Wood Particle Dryers at Particleboard Plants

(1) No person is allowed to cause or permit the total emission of particulate matter from all wood particle dryers at a particleboard plant site to exceed 0.40 pounds per 1,000 square feet of board produced by the plant on a 3/4" basis of finished product equivalent.

(2) No person is allowed to cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed ten percent opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) of this rule can be achieved at higher visible emissions. ~~In no case are emissions allowed to equal or exceed 20 percent opacity. Specific opacity limits will be included in the Permit for each affected source.~~

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[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 14-1981, f. & ef. 5-6-81; DEQ 14-1986, f. & ef. 6-20-86; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0030; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0150

Hardboard Manufacturing Plants

(1) Emissions from Hardboard plants excluding press vents. No person is allowed to cause or permit the total emissions of particulate matter from a hardboard plant, excluding press/cooling vents, to exceed 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

(2) Emissions from Hardboard plants including press vents. No person is allowed to cause or permit the total emissions of particulate matter from a hardboard plant, including press/cooling vents, to exceed 0.55 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

(3) When calculating emissions for this rule, ~~emissions from truck dump and storage areas, fuel burning equipment, and refuse burning equipment are not included.~~

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[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025

Hist.: DEQ 14-1981, f. & ef. 5-6-81; DEQ 14-1986, f. & ef. 6-20-86; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 2-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0031; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0160

Wigwam Waste Burners

No person owning or controlling any wigwam burner is allowed to cause or permit the operation of the wigwam burner.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 29-1980, f. & ef. 10-29-80; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0035; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0170

Charcoal Producing Plants

(1) No person is allowed to cause or permit the emission of particulate matter from charcoal producing plant sources including, but not limited to, charcoal furnaces, heat recovery boilers, and wood dryers using any portion of the charcoal furnace off-gases as a heat source, in excess of a total from all sources within the plant site of 10.0 pounds per ton of char produced (5.0 grams per Kilogram of char produced).

(2) Emissions from char storage, briquette making, boilers not using charcoal furnace off-gases, and fugitive sources are excluded in determining compliance with section (1) of this rule.

(3) Charcoal producing plants as described in section (1) of this rule are exempt from the limitations of OAR 340-226-0210 sections (1) and (2), and 340-226-0310 which concern particulate emission concentrations and process weight.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0040; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0180

Control of Fugitive Emissions (Medford-Ashland AQMA Only)

(1) All sawmills, all plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, asphalt plants, rock crushers, animal

feed manufacturers, and other major industrial facilities as identified by the Department, must prepare and implement site-specific plans for the control of fugitive emissions.

Deleted: and sources subject to OAR
340-240-0360

(2) Fugitive emission-control plans must identify reasonable measures to prevent particulate matter from becoming airborne. Special care will be taken by the facility to avoid the migration of material onto the public road system. Such reasonable measures include, but are not limited to the following:

- (a) The systematic paving of all unpaved roads and areas on which vehicular traffic occurs. Until an area is paved, subsection (2)(b) applies;
 - (b) Scheduled application of asphalt, oil, water, or other suitable chemicals on unpaved roads, log storage or sorting yards, materials stockpiles, and other surfaces which can create airborne dust. Dust suppressant material must not adversely affect water quality;
 - (c) Periodic sweeping or cleaning of paved roads and other areas as necessary to prevent migration of material onto the public road system;
 - (d) Full or partial enclosure of materials stockpiled in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;
 - (e) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
 - (f) Adequate containment during sandblasting or other similar operations;
 - (g) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and
 - (h) Procedures for the prompt removal of earth or other material from paved streets.
- (3) Reasonable measures may include landscaping and using vegetation to reduce the migration of material onto public and private roadways.
- (4) The facility owner or operator must supervise and control fugitive emissions and material that may become airborne caused by the activity of outside contractors delivering or removing materials at the site.
- (5) The site-specific fugitive dust emissions control plan must be submitted to the Department prior to or within 60 days of permit issuance or renewal. The Department will approve or deny the plan within 30 days.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-

17-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ16-1998, f. & cert. ef. 9-23-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0043; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0190

Requirement for Operation and Maintenance Plans (Medford-Ashland AQMA Only)

(1) Operation and Maintenance Plans must be prepared by all holders of Permits other than a ~~Basic Regulated Source~~ ACDP. All sources subject to regular permit requirements are subject to operation and maintenance requirements.

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(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 the permit;
- (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 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025

Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 22-1996, f. & cert. 10-22-96; DEQ 14-

1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0044; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

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~~340-240-0200~~

~~Emission-Limits Compliance Schedules~~

~~(1) Compliance with the emission limits for wood waste boilers in the Grants Pass area and veneer dryers established in OAR 340-240-0110(1) and (2) and 340-240-0120 must be provided according to the following schedules:~~

~~(a) By December 25, 1989, submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval;~~

~~(b) Within three months of receiving the Department's approval of the Design Criteria, submit a General Arrangement and copies of purchase orders for the emission control devices;~~

~~(c) Within two months of placing purchase orders for emission control devices, submit vendor drawings as approved for construction of the emission control devices and specifications of other major equipment in the emission control system (such as fans, scrubber medium recirculation and make up systems) in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;~~

~~(d) Within one year of receiving the Department's approval of Design Criteria, complete construction;~~

~~(e) Within 15 months of receiving the Department's approval of Design Criteria, but no later than June 30, 1991, demonstrate compliance.~~

~~(2) Compliance with the emission limits for wood waste boilers in OAR 340-240-0110(3) must be provided according to OAR 340-240-0240 or the following schedule, whichever occurs first:~~

~~(a) By no later than September 1, 1993, submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval;~~

~~(b) Within three months of receiving the Department's approval of the Design Criteria, submit a General Arrangement and copies of purchase orders for the emission control devices;~~

~~(c) Within two months of placing purchase orders for emission control devices, submit vendor drawings as approved for construction of the emission control devices and specifications of other major equipment in the emission control system (such as fans, scrubber medium recirculation and make up systems) in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;~~

~~(d) Within one year of receiving the Department's approval of Design Criteria, complete construction;~~

(e) Within 15 months of receiving the Department's approval of Design Criteria, but no later than December 31, 1994, demonstrate compliance.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0046; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0210

Continuous Monitoring

(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 must be periodically calibrated. The method and frequency of calibration must be approved in writing by the Department. Continuous monitoring equipment and operation must be in accordance with continuous emission monitoring systems guidance provided by the Department and must 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 must be kept for a period of at least one year and must be made available to the Department upon request. ~~The selection, installation, and use of the instrumentation must be done according to the following schedule:~~

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(a) ~~By March 27, 1990, the persons responsible for the affected facilities must 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 340-240-0100 through 340-240-0110;~~

(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 must 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.~~

Attachment B-2(F)
OREGON ADMINISTRATIVE RULES
Chapter 340, Division 240 - Department of Environmental Quality

(2) At a minimum, the monitoring ~~required plan submitted~~ under paragraph (1)(a) of this section must include:

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(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 or other parameters deemed by the Department to be equal to or better indicators of proper operation of the wet scrubber used as pollution control equipment for any wood-waste fired boiler, veneer dryer, particle dryer, or fiber dryer, ~~using a wet scrubber as pollution control equipment;~~

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(c) Continuous monitoring and monthly reporting of opacity for any wood-waste fired boiler not controlled by a wet scrubber,

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~~(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 340-240-0270.~~

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[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

[Publications: The publication(s) referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0050; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0220

Source Testing

(1) The person responsible for the following sources of particulate emissions must 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 must 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 will 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 must not be performed during periods of soot blowing, grate cleaning, or other abnormal operating conditions. The maximum steaming rate for the boiler may not exceed the average steam production rate measured during the source test by more than ten percent (10%).

(5) Source tests must 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 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025

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; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0055; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0230

New Sources

New sources are required to comply with OAR 340-240-0110(1) and 340-240-0120 through 340-240-0250 immediately upon initiation of operation.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1988, f. & cert. ef. 9-26-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0065; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

~~340-240-0240~~

~~Rebuilt Boilers~~

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Rebuilt boilers must immediately comply with the requirements of OAR 340-240-0110(3) except that in the Grants Pass Urban Growth Area this provision will apply to sources that are rebuilt after they have complied with OAR 340-240-0110(1).

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 22-1988, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0067; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-240-0250

Open Burning

No open burning of domestic waste is allowed on any day or at any time when the Department advises fire permit issuing agencies that open burning is not allowed because of adverse meteorological or air quality conditions.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0070; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

~~340-240-0270~~

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~~Dual-Fueling Feasibility Study for Wood-Waste Boilers~~

~~(1) On or before July 1, 1994, the owner or operator of a plant site in the Medford-Ashland AQMA where the total heat input capacity from all wood-waste boilers is greater than 35 million Btu/hr must submit to the Department the results of a dual-fueling feasibility study conducted in accordance with a study protocol submitted under section (2) of this rule which has been approved by the Department.~~

~~(2) On or before January 1, 1993, a person subject to section (1) of this rule must submit to the Department for approval a study protocol to evaluate the feasibility, costs and benefits of implementing a program to provide alternate fueling capability after December 31, 1994, for wood-waste boilers during periods of actual, anticipated or potential exceedance of the ambient air quality standard for PM₁₀. The protocol must identify the methodology and schedule for evaluating the adequacy of supply of natural gas and other alternate fuels during the winter months, the cost and technical feasibility of modifying existing wood-waste boilers, the air quality benefits and costs of fuel~~

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switching prior to or during periods of poor air quality, and relevant maintenance and operational concerns including start-up and shut-down impacts.

(3) ~~One or more persons subject to section (1) of this rule may submit a combined study protocol to the Department, conduct a combined study and submit combined results to the Department. Such a combined study must evaluate the cost and technical feasibility of modifying existing wood waste boilers at the plant site of each participating person. The combined study may jointly evaluate fuel supply, air quality, and maintenance and operational concerns applicable to all participating persons. A combined study must be conducted by an independent contractor hired by the participating persons and approved by the Department.~~

[~~NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.~~]

Stat. Auth.: ~~ORS 468 & ORS 468A~~

Stats. Implemented: ~~ORS 468A.025~~

Hist.: ~~DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0115; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01~~

Attachment C

Presiding Officer's Report Public Hearings

**State of Oregon
Department of Environmental Quality**

Memorandum

Date: August 25, 2004

To: Environmental Quality Commission
From: David Collier
Subject: Report for Rulemaking Hearing
Title of Proposal: Medford-Ashland PM₁₀ Attainment and Maintenance Plan

DEQ held the following public hearings.

December 16, 2003
South Medford High School Auditorium (Medford)
6:00 to 11:00 pm
Hearing Officer: David Collier
36 people testified. 37 people signed up to testify. Several hundred people attended.

January 21, 2004
South Medford High School Auditorium (Medford)
5:30 to 11:00 pm
Hearing Officers: Robert Durham, Steve Croucher
56 people testified. 88 people signed up to testify. Several hundred people attended.

The hearings were convened at approximately 6:00 pm and closed at approximately 11:00 pm on December 16th and 9:00 pm on January 21st. People were asked to sign registration forms if they wished to present comments. People were also advised that the hearing was being recorded.

Before taking comments, DEQ staff briefly explained the rulemaking proposal and procedures for the hearing.

A summary of written and oral comments received at the hearing has been included in the Summary of Comments and Agency Responses for this rulemaking.

Attachment D

Summary of Public Comment and Department Response

Comments and Response

Summary of public comment received
on the proposed Medford-Ashland PM₁₀
attainment and maintenance plan
and the Department's response.

Prepared by: David Collier

Date: September 20, 2004

Comment Period:	The comment period opened on November 14, 2003 and closed at 5:00 p.m. on January 29, 2004.
Public Hearings:	<p>DEQ held the following public hearings.</p> <p>December 16, 2003 South Medford High School Auditorium (Medford) 6:00 to 11:00 pm Hearing Officer: David Collier 36 people testified. 37 people signed up to testify. Several hundred people attended.</p> <p>January 21, 2004 South Medford High School Auditorium (Medford) 5:30 to 11:00 pm Hearing Officers: Robert Durham, Steve Croucher 56 people testified. 88 people signed up to testify. Several hundred people attended.</p>
Organization of comments and responses:	Summaries of individual comments and the Department's response are provided below. Comments are summarized by issue category. The full public record is available for review by the public at the Portland DEQ office (811 SW 6th Ave.) and the Medford DEQ office (221 Stewart Ave, Suite 201). Copies are available upon request.

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Overview of Public Comment Process

DEQ presented the initial PM₁₀ plan proposal for public comment on November 14, 2003. Below is a summary of public comment received by the Department. Comments were received via email, in writing, and orally. DEQ received the following types of comments:

- 747 emails (see full record A-1)
- 151 phone calls (see full record A-2)
- 4,143 petition signatures and mail-in cards (see full record A-3)
- 194 letters (see full record A-4)
- 92 persons provided oral testimony during the public hearings. Each hearing was attended by several hundred people. (see full record A-5)

Overall, the Department received comments from **4,697 people** (about 12% of commenters provided multiple comments via letter, email, oral testimony, etc.).

This document summarizes the comments and issues expressed in public comment. Most commenters were opposed to any relaxation in the current requirements. Several commenters supported the proposed plan, and several commenters offered suggestions for various compromise positions. All comments received have been made part of the public record and have been reviewed by the Department. In addition to this summary, the full record of individual comments will be made available to the Environmental Quality Commission. A copy of the full public comment record is available for viewing at the Medford DEQ office, 221 Stewart Ave., Suite 201, Medford and at the Portland DEQ office, 811 SW 6th Ave. Portland. Photocopies of the record are available for a fee. This summary is also available on the agency website: www.deq.state.or.us/aq/aqplanning/medford.htm

SUMMARY OF PUBLIC COMMENT

The summary of comments below is broadly organized as follows:

- Comments related to the growth allowance concept (general comments and new medical evidence on particulate pollution).
- Scope of the PM₁₀ plan.
- Miscellaneous issues raised in comment.

While comments have not been attributed to specific commenters¹ in the summary, DEQ estimates that over 99 percent of the comments received were not in favor of the growth allowance concept.

¹ Given the extremely large volume of comments, it was not a cost effective use of staff resources to attribute comments to individual commenters. Staff have accurately summarized the key issues raised through the comment process.

Issue Topics Raised in Comment

1. Proposed change in requirements for new and expanding major industry: Emission Offsets, PM₁₀ Safety-Margin, and Industrial Growth Allowance.

1A: General Comments on the growth allowance concept

COMMENTS NOT IN FAVOR OF GROWTH ALLOWANCE:

The vast majority of commenters were strongly opposed to any relaxation of air quality requirements for new and expanding major industry, and therefore opposed to DEQ's proposal to replace the emission offset requirement with an industrial growth allowance and PM₁₀ safety-margin. Several commenters believed that using the proposed growth allowance to its full potential would cause unacceptably high PM₁₀ levels in and near the industrialized areas of North Medford and White City, and would likely have adverse health effects on the public. Some commenters felt that DEQ's proposal would allow dirty, "smoke stack" industry into the Rogue Valley, and cause a return to the high pollution levels of 20 years ago. Commenters thought that local economic development should focus on recruiting smaller, cleaner industry.

Many commenters believed that the proposal to allow more industrial pollution will have a substantial negative impact on tourism and the local economy, and would deter people from moving to the Valley, especially for retirement. These commenters argued that: a) the Rogue Valley economy can grow at a very healthy and robust rate and still continue to improve air quality; b) that clean water and air are amenities that will attract "clean" businesses to the Valley; and c) that maintaining strict air quality requirements in the Valley will help lead to sustainable economic health.

COMMENTS SUPPORTING THE GROWTH ALLOWANCE:

Some commenters supported DEQ's initial proposal to eliminate the emission offset requirement, yet retain other very strict requirements for new and expanding industries (such as state-of-the-art emission control). These commenters said that the proposal offered a good balance between environmental protection and economic opportunity.

Another commenter said that the proposed plan recognized that the Valley has met federal standards for over ten years and that the emission offset requirement should be replaced by a growth allowance. The commenter argued that in recent years, about \$400 million dollars in manufacturing investment has bypassed Jackson County, representing as many as 550 jobs that would have paid about \$15/hour with benefits. The commenter argued that additional economic flexibility is needed, noting that Governor Kulongoski and the Oregon Economic and Community Develop Department has identified several sites in the White City, Central Point, Medford areas to be marketed as "shovel-ready" to help bring jobs to Oregon. The commenter thought that DEQ's proposed industrial permitting requirements would protect public health and provide additional economic opportunity, consistent with the governor's economic recovery efforts.

One commenter supported the elimination of the emission offset requirement, but did not support the inclusion of a PM₁₀ safety-margin for several reasons: a) it is not required by state or federal law, and is more stringent than the federal standard; b) the proposed safety-margin is arbitrary; c) the safety-margin is mostly symbolic, and would only be meaningful in a relatively small area of the Valley. The commenter noted that the areas most affected by the safety-margin are the current industrial areas. These are the areas with the greatest potential for new and expanding industry and therefore need the maximum amount of flexibility to

increase emissions within legal (federal) limits. The commenter did not believe that DEQ established a rational basis for the proposed safety-margin.

COMMENTS SUPPORTING A COMPROMISE POSITION:

Several commenters supported the overall plan in general, but suggested various compromise options that would make industrial permitting requirements stricter than the Department's initial proposal, but still offer some economic opportunity for bringing new manufacturing employment to the Valley. These potential compromise options included a more protective PM₁₀ safety-margin and a reduction in the growth allowance available to new and expanding major industry.

1B. New Health Effects Information: The Potential for Changing Particulate Standards.

Many commenters were concerned about the adequacy of the PM₁₀ plan given the potential for EPA to make particulate standards more protective in the future (i.e. lower the particulate standards). Commenters noted that EPA and the Clean Air Act Science Advisory Committee (CASAC) are currently reviewing the adequacy of federal particulate standards. The latest health effects research on particulate pollution suggests that adverse health effects can occur at levels below current federal standards. Many commenters believed that DEQ should anticipate a lowering of federal particulate standards and design the PM₁₀ plan to address the lower particulate thresholds being discussed by EPA. Another commenter felt that the Department did not provide adequate information to the committee on the health effects of particulate pollution.

DEPARTMENT RESPONSE:

DEQ's recommendation to retain the current requirements for new and expanding major industry responds most directly to those commenters arguing that given the emerging medical research on the health effects of particulate pollution, now is not the time to lessen air quality requirements. The key issue for DEQ was balancing important environmental and economic priorities within the Rogue Valley. DEQ views this balance as largely a community choice once standards are met. DEQ relied on the recommendation of its advisory committee and on the public comment process to better understand the priorities in the Rogue Valley for balancing these goals.

As for the issue of new particulate standards, DEQ agrees that a potential lowering of standards is an important possibility to consider. However, the weighing of new medical evidence related to fine particulate (known as PM_{2.5}) is more difficult for the Department to assess. EPA and the Clean Air Act Science Advisory Committee (CASAC) are currently reviewing the latest medical research and evaluating whether to lower federal particulate standards to better protect public health. There is a great deal of uncertainty regarding EPA's potential actions on particulate standards. EPA has not proposed new particulate standards, and is not scheduled to finalize their recommendation on the adequacy of current standards until late 2005 or early 2006².

If EPA does lower federal particulate standards, DEQ will evaluate air quality in all Oregon communities and take action as necessary to meet standards and protect public health. In the interim, the PM₁₀ plan will retain measures that

² The Clean Air Act requires EPA to set national ambient air quality standards at a level necessary to protect public health, including sensitive populations, with a reasonable margin of safety. The Clean Air Act also recognizes that federal standards do not guarantee "zero risk".

minimize PM₁₀ emissions. The majority of these PM₁₀ reduction strategies also significantly reduce PM_{2.5} emissions. DEQ will also track PM₁₀ and PM_{2.5} levels in the Rogue Valley through the air quality monitoring network.

2. Scope of the PM₁₀ Plan

Comprehensive protection of particulate standards: PM₁₀ and PM_{2.5}

Many commenters felt that the Department's plan is flawed because it only addressed the federal PM₁₀ standards, and not the other federal fine particulate standards (PM_{2.5}). Several commenters were critical that DEQ's air quality modeling did not specifically account for PM_{2.5}, noting that the latest medical research suggests that PM_{2.5} is most detrimental to public health. Several commenters asked DEQ to expand the scope of the PM₁₀ plan to include a separate analysis and plan for PM_{2.5}.³

DEPARTMENT RESPONSE:

DEQ disagrees that the plan is flawed because it does not specifically address PM_{2.5}. The PM₁₀ plan is required by EPA expressly to address PM₁₀ pollution and compliance with PM₁₀ standards. Air quality in the Rogue Valley meets both the PM₁₀ and PM_{2.5} standards, and there is no requirement to develop a PM_{2.5} plan.

DEQ recognizes the desire of many commenters for a comprehensive particulate plan addressing both the PM₁₀ and PM_{2.5} standards. However, there are several reasons why the Department can not accommodate this request. The Department does not have the resources, emission estimates, or modeling capability needed to incorporate an accurate PM_{2.5} evaluation into the PM₁₀ plan.

3. How Good is Good Enough?

Disagreement over "acceptable" air quality level.

Many people commented that DEQ's proposal was flawed because it did not improve air quality. They believe that air quality should be kept as far below federal standards as possible, stating that DEQ should strive for excellent air quality, not just "good enough". These commenters viewed DEQ's initial proposal as a backsliding of the hard earned air quality progress made over the last twenty years. These commenters believed that any changes should be more stringent than current requirements. These commenters wish DEQ to continue requiring emission reductions in the Valley, and to ensure that air pollution is kept as low as possible. They see anything less as inconsistent with the agency's mission.

Alternatively, some in the community view compliance with federal standards as successfully meeting the legal test for public health protection. These commenters viewed the Department's initial proposal as an appropriate balancing of environmental and economic goals and a sustainable approach to achieving the agency's mission.

DEPARTMENT RESPONSE:

DEQ's primary responsibility is to ensure that federal air quality standards are met. There are wide differences of opinion within the community over the level of "acceptable" air quality now that particulate standards have been met. DEQ's recommendation responds to those commenters that argued that new and expanding major industry should not be allowed to increase particulate

³ There are two federal air quality health standards for particulate, PM₁₀ and PM_{2.5}. PM_{2.5} is a subset of PM₁₀, and reflects a smaller size (fine) particulate. PM₁₀ includes PM_{2.5}, and larger particles as well.

emissions in the Valley and that DEQ should not allow “backsliding” of air quality progress. It does not respond to those who asked for additional emission reduction strategies.

4. Economic Health of the Rogue Valley

Many commenters felt that the Rogue Valley economy can grow at a very healthy and robust rate even as air quality continues to improve, and that continuing strict limits on particulate producing industry, while limiting that sector, will not harm the economy as a whole. These commenters believed that local economic development should focus on recruiting smaller, cleaner industry, and that the quality of the environment should not be jeopardized for possible economic expansion. These commenters believed that keeping air quality as clean as possible can attract clean industries that want to move to the Valley because of the high quality of life and the environment, and that the health of citizens and the economy is best served by working to reduce pollution. Many who envision the Valley as a retirement center and tourist destination opposed DEQ’s proposal to remove the emission offset requirement, because this could help facilitate industrial development.

Other commenters believe that air quality is just one factor in overall community health, and that family wage jobs with good insurance benefits also contribute significantly to good community health. These commenters argued that industrial jobs typically provide higher wages and better benefits for working class citizens than many other business sectors, and that the time has come to provide greater opportunity for industrial growth while still protecting air quality. Several commenters believed that DEQ’s initial proposal created a fair balance between enabling economic development opportunities and protecting air quality.

Another commenter noted that in recent years, local economic development agencies have worked with three companies that wanted to locate in Southern Oregon, but were unable to do so; primarily because they were unable to find emission offsets and because of the extremely high cost of purchasing emission control technology. This commenter urged DEQ to eliminate the emission offset requirement to gain greater flexibility to maintain and attract higher wage/benefit manufacturing jobs. Another commenter argued that it is not fair to single out and limit new industrial growth, noting that even if there were no new industry, growth in population and motor vehicle travel will still increase air pollution. The commenter argued that without new industry, low paying service jobs will replace (higher wage) industrial jobs, and that DEQ’s (initial) proposal strikes a reasonable balance for priorities within the community.

RESPONSE:

DEQ’s recommendation reflects the community’s priorities (as expressed through public comment) for balancing air quality protection and economic flexibility in the permitting of new and expanding major industry. DEQ neither agrees nor disagrees with the comments provided. There is no common vision within the community regarding the economic future of the Rogue Valley. The future direction of economic development in the Valley will be addressed by local government, citizens, and stakeholder groups through the local economic development and land use planning processes

Retaining the strictest air quality requirements for new and expanding major industry (i.e. emission offsets) means that it will continue to be difficult for the Rogue Valley to accommodate new and expanding industrial facilities that produce particulate pollution. The requirement will have no effect on other sectors of the local economy.

5. No specifics regarding economic benefit.

Several commenters were critical that the Department presented no analysis of the specific economic benefits of eliminating the offset requirement (i.e. how many jobs would be created in exchange for accepting how many tons of pollution?)

RESPONSE:

DEQ acknowledges that no specific economic analysis was provided. The regulations in question deal with future new or expanding industry. No one knows today what, if any, new industries may want to locate in the Valley if new flexibility was offered, or what, if any, industries may choose to bypass the Valley if the offset requirement is retained.

Because the DEQ does not know the future of economic development, it is not possible to definitively evaluate the cost to the Valley of jobs gained, jobs lost, or the air quality-economic tradeoffs that would occur as a result of the proposal. DEQ acknowledges that this lack of economic detail was disappointing for the public.

6. DEQ's proposal is in conflict with its mission to protect and enhance air quality.

Several people commented on the agency's stated mission to be a leader in restoring, enhancing, and maintaining, the quality of Oregon's air, land, and water; and asked why, given the agency's mission, would DEQ propose relaxing air quality regulations? Commenters said that DEQ has an important role as a public health steward, and that nowhere in DEQ's mission statement does it say that DEQ must protect, promote, and/or provide for the benefit and welfare of business and industry in Oregon.

RESPONSE:

DEQ acknowledges that there can be a perceived contradiction between the agency's mission statement and its initial proposal. DEQ's primary duty is to ensure that air quality standards are met. Once air quality standards are met, the Clean Air Act offers communities such as the Rogue Valley an opportunity to regain some economic opportunity by allowing limited emission increases from new and expanding industry. The choices involved in the Medford plan involved finding an equitable balance between environmental and economic goals-both of which are needed for a sustainable community.

7. Investments in Clean Air: Past Emission Reductions

Several commenters stated that southern Oregonians have made great sacrifices to get air quality as clean as it currently is (e.g. oxygenated gas, vehicle testing, wood burning curtailment, etc). The commenters wondered if people would be willing to make similar sacrifices in the future if they felt their efforts had been wasted by allowing some increase in industrial emissions.

RESPONSE:

DEQ's recommendation responds to those commenters asking that DEQ continue to require the same level of investment from new and expanding industry, and not allow a "backsliding" of air quality progress made in the community.

The public has made many sacrifices to meet air quality standards, and has contributed greatly by participating in the motor vehicle inspection program,

woodstove curtailment, open burning restrictions and other efforts. Local industry has also contributed significantly by investing millions of dollars in air pollution control technology to reduce emissions.

Under DEQ's recommendation, new and expanding major industry must continue their investment in environmental protection if they wish to locate in the Rogue Valley.

8. Emission control technology requirement for new and expanding industry.

One commenter felt that the proposed requirement for state-of-the-art emission control technology did not really require state-of-the-art control, because the requirement is based on old equipment standards and allows emission levels that were set over a decade ago.

RESPONSE:

DEQ disagrees. The industrial permitting rules will continue to require that new and expanding industry install the most up to date (state-of-the-art) emission control technology. Past PM₁₀ strategies required many older existing industries in the Rogue Valley to install emission control technology. Those emission control s were state-of-the-art technology at that time. Much of this technology would still be considered state-of-the-art today.

9. Advisory Committee Representation

Some commenters felt that there were financial conflicts of interest among some advisory committee members, and that the committee was not fairly balanced or representative of the community.

RESPONSE:

DEQ disagrees. The Medford-Ashland air quality advisory committee was balanced fairly, and included representation from each city in the Valley as well as county government, citizen advocate groups, environmental groups, the County Health Department, local business organizations, and local industry. DEQ relies on advice and recommendations from both the advisory committee and public comment processes to obtain guidance on its proposals. When forming any advisory committee, DEQ tries to assemble a balance of community view points, especially from those that might be directly affected by the recommendation. It is fair and necessary that such groups have representation in the decision-making process. The air quality committee reached consensus on most issues. Where there was disagreement, all views were documented so that they could be considered by the Department. DEQ appreciates very much the years of service given by each committee member to some very complex and difficult issues.

10. Local Control of Industrial Permitting

One commenter felt that this proposal will no longer allow the local DEQ office to control industrial pollution because it relies on monitoring and not on permits. The commenter said that the proposal would allow air pollution in the Valley to get so bad that it would approach federal standards before any enforcement begins against polluters.

RESPONSE:

DEQ disagrees. The Medford DEQ office will continue to issue permits to new sources that meet strict air quality requirements. Compliance with established limits will be monitored and enforced by DEQ.

11. Significant Emission Sources

Several commenters felt that the Department presented misleading information by saying that motor vehicles were the primary source of harmful particulate.

RESPONSE:

DEQ disagrees. Agency staff provided information to the committee and public on the contribution of various emission sources in the Valley, including the role of motor vehicles and major industry. The significance of various emission sources in the Valley varies by location. Overall, motor vehicles are the largest source of PM₁₀ emissions in the Valley. Industrial emissions are the dominant source of PM₁₀ emissions in the Medford and White City industrial areas, but have a very small impact on PM₁₀ levels throughout the majority of the Valley.

12. A two-fold Increase in Air Pollution

Several commenters stated that air pollution in the Valley would double as a result of this proposal.

RESPONSE:

DEQ disagrees. Air pollution would not have doubled as a result of the initial proposal. The proposal would have allowed a limited increase in particulate pollution, and only within a relatively small geographic area (primarily within industrially zoned lands). Regardless of possible new industries, future PM₁₀ emissions in the Valley are expected to increase somewhat as a result of increased population, home and infrastructure construction, new employment, and increased motor vehicle travel.

DEQ's recommendation addresses the general public concern over increased air pollution from major industry by continuing to require new and expanding industry to obtain emission offsets and provide a net air quality improvement.

13. New Emission Reduction Efforts

Several commenters felt that DEQ should look for more and new ways to reduce existing emission sources, and that new air quality goals should consider PM_{2.5}.

RESPONSE:

A distinction must be made here between mandatory emission reduction measures (i.e. regulation) and voluntary emission reduction measures that could be pursued as part of a community air quality goal. There is no need at this time to develop more mandatory PM₁₀ emission reduction strategies in the Rogue Valley. The PM₁₀ plan imposes all the emission reduction strategies needed to ensure compliance with PM₁₀ standards. However, as resources allow, DEQ would support Rogue Valley communities in developing new voluntary emission reduction measures to further improve air quality.

14. Cap & Trade Programs

One commenter thought that DEQ should investigate the use of a Cap & Trade program for particulate, and explore new definitions for "emission offset credits".

RESPONSE:

DEQ will not explore a cap & trade program for particulate at this time. When needed, Cap & Trade programs can work well as an air quality management tool for pollutants such as volatile organic compounds (VOC), where the specific geographic locations of the emission increase and reduction (offset) are not important. PM₁₀ impacts and offsets are much more location dependant, and a cap & trade program is generally not a viable approach.

15. Risk to Standards

One commenter felt that the true effect of DEQ's proposal would be that some areas in the AQMA will exceed federal standards very quickly, as industrial emissions grow under newly issued permits that will not require offsets.

RESPONSE:

DEQ disagrees. DEQ's industrial permitting program requires every new or expanding major industrial source to show that their proposed emission increase will not jeopardize air quality. This is the case under either DEQ's original proposal or the final recommendation. DEQ will not grant an air quality permit to a new or expanding facility that may cause, or contribute to, a violation of air quality standards.

16. Contingency Plan

One commenter thought that the proposal fails to provide any effective contingency plan.

RESPONSE:

DEQ disagrees. The plan includes two stages of contingency provisions. The contingency plan establishes early warning action thresholds at 80% of PM₁₀ standards. If monitored values exceed these thresholds, the Department could reconvene the advisory committee to investigate the cause of the high levels, and take preventative action if necessary. If a violation of standards is measured, the contingency plan requires an immediate reevaluation of the plan and emission reduction strategies as needed to correct the violation.

17. Ranking of Air Quality in Jackson County

One commenter said that Jackson County is already among the dirtiest counties in Oregon for PM₁₀ and PM_{2.5} pollution; therefore DEQ's air quality requirements should be more protective.

RESPONSE:

DEQ's recommendation responds to this concern by keeping the most stringent air quality requirements in place. Relative to other counties in Oregon, Jackson County is among the higher ranked areas in regard to fine particulate levels (PM_{2.5}). However, air quality levels throughout Oregon (including Jackson County) are well below both the PM₁₀ and PM_{2.5} standards. In fact, EPA has recently designated all of Oregon in attainment for PM_{2.5}.

18. Monitoring Locations

One commenter felt that DEQ's measuring devices for particulate pollution are not located properly.

RESPONSE:

DEQ disagrees. EPA guidance describes procedures for placing monitoring equipment in and near areas where people live, including areas of special concern (PM₁₀ hot spot sites). EPA's monitoring objectives for PM₁₀ reflect

finding the areas of highest PM₁₀ concentrations that are also areas of high population density.

Several monitoring studies have been conducted in the Rogue Valley to identify appropriate monitoring locations. The Department's PM₁₀ and PM_{2.5} monitors are appropriately located, and are consistent with EPA guidance. Currently, PM₁₀ monitoring is conducted in both Medford and White City. PM_{2.5} monitoring is currently conducted in Medford. DEQ is pursuing funding to begin PM_{2.5} monitoring in White City.

19. Assumptions about industrial emissions

One commenter thought that the plan incorrectly assumes that industrial emissions will decrease in the future, and therefore puts compliance at risk. Another commenter stated that permitted industrial emissions used in the modeling analysis are based on source test data and do not assume sources will ever exceed those permitted limits, thus DEQ's estimates of industrial emissions are too low.

RESPONSE:

DEQ disagrees. The plan does not assume a decrease in future industrial emissions. The plan assumes that all existing industry will operate in the future at their maximum allowable levels (this is a worst-case planning scenario). In reality, existing industry will likely operate well below maximum levels. New and expanding industry (when and if it occurs) will be evaluated under the New Source Review program, and will have to meet the very strict pollution control technology and air quality limits established in the plan.

Any emissions discharge in excess of allowable permitted levels is a violation of the facility's permit and is subject to enforcement by the Department. DEQ and EPA agree that the maintenance analysis should be based on legally allowable (permitted) emission levels, and should not attempt to account for the possibility of a permit violation.

20. Assumptions in DEQ modeling analysis

Some commenters think that DEQ's choice of air quality models is flawed because the model does not take into account local topography or severe local air stagnation conditions, and that the analysis area does not extend far enough to include emission influences outside the Valley.

RESPONSE

DEQ disagrees. The Department used one of the best air quality models available. The model's performance has been verified, and the analysis approach has been approved by EPA. The Department's modeling analysis includes local topography, local air stagnation conditions, and does account for air quality influences from outside the Valley.

21. Estimate of woodstove emissions

One commenter thought that DEQ's woodstove emission estimates fail to account for newer certified stoves and natural gas conversions.

RESPONSE

DEQ disagrees. The Department's estimate and forecast for local wood heating emissions used local survey data to document wood heating practices and did

account for home heating trends, including the use of newer certified woodstoves, and the trend toward natural gas conversions.

22. Emissions from forestry burning

Several commenters said that the plan should also consider smoke impacts from outside the Valley. Especially from prescribed forestry burning, which is expected to increase in the future.

RESPONSE:

DEQ agrees. The Rogue Valley is a protected area under the Oregon Smoke Management Plan. One of the smoke management plan objectives is to protect the Valley from any smoke intrusions caused by prescribed forestry burning. These smoke management requirements are part of the PM₁₀ plan and strategy.

~ End ~

Attachment E

Medford-Ashland Air Quality Advisory Committee Membership

Medford-Ashland Air Quality Advisory Committee (2004)

The Medford-Ashland Air Quality Advisory Committee included representation from the following interests

- Local Business
- Jackson Co. Environmental Health Dept.
- City of Ashland
- City of Talent
- City of Medford
- City of Central Point
- City of Jacksonville
- City of Eagle Point
- City of Phoenix
- Jackson County Board of Commissioners
- Private Citizen
- Rouge Valley Transportation District
- Oregon Dept. Of Forestry
- Oregon Dept. of Transportation
- Jackson Co. Home Builders Association
- Jackson Co. Chamber of Commerce
- Jackson Co. Fruit Growers League
- Rouge Valley Council of Governments
- League of Women Voters
- Sierra Club
- Coalition To Improve Air Quality
- Boise Cascade Corporation
- Southern Oregon Timber Industries Association
- Rogue Disposal and Recycling, Inc.

Attachment F

Relationship to Federal Requirements

Relationship to Federal Requirements

Answers to the following questions identify how the proposed rulemaking relates to federal requirements and potential justification for differing from federal requirements. The questions are required by OAR 340-011-0029.

1. Are there federal requirements that are applicable to this situation? If so, exactly what are they? Yes.

Redesignation Requirements: The Medford-Ashland AQMA is currently designated as a nonattainment area under the Clean Air Act. In order for EPA to revise the AQMA's legal status to attainment (in compliance with standards), the Department must submit, and EPA must approve an attainment and maintenance plan showing that the AQMA is now and will continue to be in compliance with federal air quality standards for PM₁₀.

Industrial New Source Review (NSR) requirements: The PM₁₀ plan establishes emission control technology and air quality analysis requirements for new and expanding industrial sources.

2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?

The applicable federal requirements are performance based, requiring an attainment and maintenance plan that ensures current and future compliance with PM₁₀ National Ambient Air Quality Standards (considering all emission sources). The New Source Review program is both technology and performance based, specifying the level of emission control technology required, and requiring a demonstration that emission increases from new and expanding industry will not degrade air quality or cause a violation of federal air quality standards.

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. While Oregon has generally patterned its rules after federal air quality requirements, the Clean Air Act does not provide for area designations other than attainment and nonattainment. Oregon's NSR rules provide a precautionary maintenance area status that governs emissions growth from major industrial sources and ensures that compliance with PM₁₀ standards is not jeopardized. NSR requirements in the Medford PM₁₀ Attainment and Maintenance Plan are more protective than minimum federal NSR 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?

Based on public comment from the citizens of the Rogue Valley, the Department is retaining strict NSR requirements for new and expanding major industrial sources in order to help prevent any future violations of PM₁₀ or PM_{2.5} standards. By continuing to require state-of-the-art emission control technology and emission offsets for new and expanding industry, the NSR rules will help reduce the risk of needing costly retrofit control technology in the future.

5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?

No. The Department has committed to local communities that the PM₁₀ attainment and maintenance plan will be submitted to EPA as soon as possible.

6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?

Yes. The PM₁₀ plan evaluates expected growth in emission sources and ensures future compliance with federal standards. The maintenance NSR program provides a mechanism to track and manage emission growth from new and expanding major industry. This process helps manage emission increases and ensures that industrial growth does not jeopardize compliance with the PM₁₀ standards.

7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)

Yes. Over the past several decades, the existing wood products industry in the Medford area has invested heavily in the highest level of emission control technology. The proposed NSR program will continue to require state-of-the-art emission control technology (LAER) and emission offsets for new and expanding major industry in the AQMA. Continuing the LAER and emission offset requirement for new and expanding facilities will provide equity for older, existing facilities that have already invested significantly in state-of-the-art emission controls and emission offset credits.

8. Would others face increased costs if a more stringent rule is not enacted?

Possibly. If a less stringent rule were adopted, and if the Medford area were to violate PM₁₀ standards, the area would once again become a nonattainment area. This would potentially require expensive retro-fit emission control technology on industry and/or other emission control strategies impacting the public.

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. The requirement for Lowest Achievable Emission Rate (LAER) is based on demonstrated technology.

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 maintenance plan and related requirements are designed to manage emission increases from PM₁₀ pollution sources and maintain compliance with PM₁₀ standards. Without these requirements, the Medford area might once again violate PM₁₀ standards, requiring more restrictive emission reduction strategies in the community. A return to nonattainment could have serious consequences for local citizens and businesses, and would be an impediment to economic development in the Rogue Valley.

Attachment G

Fiscal and Economic Impacts Statement

DEPARTMENT OF ENVIRONMENTAL QUALITY
 Chapter 340
 Proposed Rulemaking
 STATEMENT OF NEED AND FISCAL AND ECONOMIC IMPACT
 This form accompanies a Notice of Proposed Rulemaking

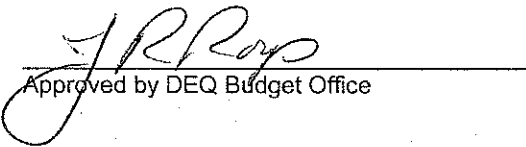
Title of Proposed Rulemaking:	Medford-Ashland PM10 Attainment and Maintenance Plan
Need for the Rule(s)	The Medford-Ashland Air Quality Maintenance Area (AQMA) is currently designated by the US Environmental Protection Agency (EPA) as a nonattainment area for PM10. In order to revise the AQMA's designation to attainment (indicating the area is in compliance), the Department must submit to EPA, and EPA must approve, an attainment and maintenance plan showing that the AQMA will continue to meet PM10 standards for at least the next 10 years.
Documents Relied Upon for Rulemaking	<p>The PM10 plan reflects the requirements and guidance of several documents, including but not limited to: the federal Clean Air Act, EPA guidance for the development of attainment and maintenance plans, guidance for the preparation of emission inventories, and air quality modeling protocols.</p> <p>Copies of the documents relied upon in the development of this rulemaking proposal can be reviewed at the Department of Environmental Quality's office at 811 S.W. 6th Avenue, Portland, Oregon. Please contact David Collier (503) 229-5177 for copies or for times when the documents are available for review.</p>
Fiscal and Economic Impact	
Overview	<p>The PM10 attainment and maintenance plan continues the air quality strategies adopted in the Rogue Valley to meet federal air quality standards for PM10. These strategies affect both the wood products industry in the Medford-Ashland area and many citizens in Rogue Valley communities. On-going emission reduction strategies include residential woodstove curtailment and open burning restrictions, emission limit rules for specific industrial manufacturing processes, and road cleaning programs. Emission growth management strategies for new and expanding industry include state-of-the-art emission control technology and emission offsets as part of the New Source Review (NSR) program.</p> <p>No new air quality strategies are needed to show continued compliance with PM10 strategies through at least the year 2015. The PM10 attainment and maintenance plan will not impose new costs on the public or local business.</p> <p>This rulemaking is intended to meet federal Clean Air Act requirements for PM10 nonattainment areas. Oregon statutory and implementation authority for the proposed rulemaking relies on ORS 468.020, ORS 468A.025, ORS 468A.035, and ORS 468A.420.</p> <p>ORS 183.335(2)(G) requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.</p>
General public	No new emission reduction measures are required from the public, and there is no new cost imposed.
Small Business <i>Business with 100 employees or less.</i>	No emission reduction measures are required from most businesses in this sector, and there is no new cost to small business. Small new and expanding industry, with PM ₁₀ emissions of 5 tons/year or more, will continue to be subject to the air quality requirements of New Source Review. DEQ recognizes that there may be a significant cost to a small new or expanding facility to obtain emission reductions (offset credits) to satisfy the NSR offset requirement. However, this is not a new requirement, and therefore does not impose a new cost to small business in this sector.
Large Business	Under this plan, current requirements for new and expanding major industry will remain the same. DEQ recognizes that there may be a significant cost to a new or expanding facility to obtain emission reductions (offset credits) to satisfy the NSR offset requirement. However, this is not a new requirement, and therefore does not impose a new cost to large business.
Local Government	<p>The PM10 attainment and maintenance plan does not require any new emission reduction measures, and there is no new cost to local government. Jackson County will continue to implement several existing emission reduction strategies.</p> <p>The PM10 attainment and maintenance plan continues the existing requirements for transportation</p>

	conformity analysis, and imposes no new costs. The Metropolitan Planning Organization for the Rogue Valley will remain the lead agency for conducting conformity analysis, with assistance from ODEQ and ODOT.
State Agencies	There are no new strategies required and no additional cost to state agencies. DEQ and the Oregon Department of Forestry (ODF) will continue to implement the Smoke Management Plan.
DEQ	Requirements of the Major New Source Review program and other industrial permitting requirements will continue to be implemented by DEQ staff. No new cost is imposed by the attainment and maintenance plan.
Other agencies	The PM10 attainment and maintenance plan imposes no new costs to other agencies.
Assumptions	The cost (market value) to obtain the necessary emission reduction credits (or the cost to create credits) would likely represent a significant expense; however this is not a new cost. The costs will be unique to each facility and circumstance.
Housing Costs	The Department has determined that this proposed rulemaking 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.
Administrative Rule Advisory Committee	The PM10 Attainment and Maintenance Plan was developed with the assistance of a local air quality advisory committee.


 Prepared by

David Collier
 Printed name

10/21/04
 Date


 Approved by DEQ Budget Office

Jim Roys
 Printed name

10/22/04
 Date

Attachment H

Land Use Statement

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for

* Medford-Ashland PM10 Attainment and Maintenance Plan *

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

The Medford-Ashland Air Quality Maintenance Area (AQMA) is currently designated by EPA as nonattainment for PM₁₀. In order to revise the AQMA's designation to attainment (indicating that the area is in compliance), the Department must submit to EPA, and EPA must approve, an attainment and maintenance plan showing that the AQMA will continue to meet PM₁₀ standards for at least the next 10 years. This rulemaking would adopt a PM₁₀ attainment and maintenance plan for the Medford-Ashland AQMA.

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:

Supporting rules for the PM₁₀ plan include Division 224, New Source Review (NSR), which governs emission increases from new and expanding major industry through ACDP and Title V permits. These permits are existing land use activities under OAR 340-18-0030(1)(c)(d). The PM₁₀ plan does not change existing NSR requirements in the Medford-Ashland AQMA.

The Department's permitting program for industrial sources requires an evaluation of land use and confirmation by local government that the proposed facility is consistent with the local land use plan.

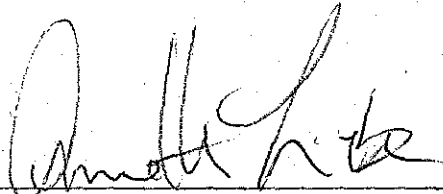
b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

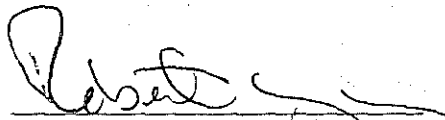
Yes No (if no, explain):

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.

NA.


Division


Intergovernmental Coord

10-25-04
Date

State of Oregon
Department of Environmental Quality

Memorandum

Date: November 24, 2004
To: Environmental Quality Commission
From: Stephanie Hallock, Director *S. Hallock*
Subject: Agenda Item J, Rule Adoption: Portland Area Carbon Monoxide Maintenance Plan as a revision of the Oregon State Implementation Plan (SIP), including supporting rules OAR 340-200-0040, 340-204-0090, and 340-242-0440, December 10, 2004 EQC Meeting.

Department Recommendation The Department of Environmental Quality (DEQ, Department) recommends that the Environmental Quality Commission (EQC, Commission) adopt the Portland Area Carbon Monoxide Maintenance Plan and supporting rules as presented in Attachment A. The proposed carbon monoxide (CO) plan repeals the oxygenated fuel requirement, amends Motor Vehicle Emission Budgets, modifies Transportation Control Measures, and incorporates expected changes to the Department's Vehicle Inspection Program (VIP).

The Department recommends that the wintertime requirement to use oxygenated gasoline in the Portland area be repealed effective October 31, 2005.

Background and Need for Rulemaking Carbon monoxide (CO) is a colorless, odorless, poisonous gas that decreases the oxygen-carrying capacity of blood. High concentrations can severely impair the function of oxygen-dependent tissues including the brain, heart and muscle. According to EPA, CO concentrations at levels less than the federal standards pose a low risk to public health.

The major human-caused source of CO is incomplete combustion of fossil fuels, primarily from gasoline-powered motor vehicles. Oregon's highest CO levels occur during the winter months in urban areas when CO from congested traffic is trapped near the ground. Carbon monoxide is one of six criteria pollutants regulated under the Clean Air Act.

In the early 1970s, the Portland area violated the National Ambient Air Quality Standards for CO, and Portland was designated as a *nonattainment area* for CO (i.e. an area not in compliance with standards). Because motor vehicles are the largest source of CO, the Clean Air Act Amendments of 1990 required the use of oxygenated fuel in CO nonattainment areas (including Portland). Oxygenated fuel was first required and sold in the Portland area in 1992. Since the highest CO levels occur in the winter months, oxygenated fuel is required from November 1st through February 29th each year. In addition to oxygenated fuel, CO reduction strategies relied on in the original air quality plan included federal

new car tailpipe emission standards¹, the DEQ's Motor Vehicle Inspection and Maintenance Program (VIP), and the Central City Transportation Management Plan (designed to reduce traffic congestion in downtown Portland and reduce peak CO levels).

Carbon monoxide levels in the Portland area improved as a result of the oxygenated fuel requirement and, more significantly, due to federal new motor vehicle emissions standards. In 1996, DEQ developed an air quality plan demonstrating how CO levels in the Portland area would remain below the air quality standard. This plan was adopted by the EQC and submitted to the Environmental Protection Agency (EPA) in 1996 with a request that EPA redesignate the Portland area from *nonattainment* to *attainment* for CO (i.e. an area in compliance with standards). The EPA approved the plan in 1997 and redesignated Portland to attainment for CO. The 1996 CO plan included the wintertime oxygenated fuel program, established an area wide cap on CO emissions for motor vehicles (known as an emissions budget), identified transportation control measures (to reduce motor vehicle travel), and established a growth allowance for new and expanding industry. The Clean Air Act requires that the CO maintenance plan be updated by the end of 2004 to ensure that CO standards will continue to be met through the year 2017.

The Department's 1996 CO maintenance analysis showed that the oxygenated fuel requirement is no longer necessary to meet CO standards. However, at that time, the Commission elected to retain the oxygenated fuel program in light of strong stakeholder interest, and asked the Department to reevaluate CO levels in two years (1998) when other emission reduction strategies, such as the "enhanced" vehicle emissions test, were fully implemented.

The Department's 1998 analysis again showed that oxygenated fuel is not needed to maintain compliance with CO standards, but stakeholder support for oxygenated fuel remained strong as a way to provide an added margin of safety. The Department recommended retaining the program for an additional two years (through 2000), at which time it would again be reevaluated. The 2000 assessment was to take into account the full benefit of the new enhanced vehicle emissions test, and incorporate improvements to EPA's computer model for estimating motor vehicle emissions. Due to delays in the release of EPA's new motor vehicle emissions model, DEQ decided to incorporate the next evaluation

¹ Federal motor vehicle (tailpipe) standards are established and implemented by the U.S. Environmental Protection Agency (EPA). Only California has the authority to adopt motor vehicle emission standards that differ from the national standards. Oregon has the option of "opting in" to California standards but, to date, has not done so.

of the oxygenated fuel program into the 2004 CO maintenance plan.

Over the years, CO concentrations in the Portland area have decreased substantially, and are now at levels approximately half the nine part per million (ppm) federal standard (for CO trends see Attachment A1, pages 9-10 of the maintenance plan). Much of this improvement is due to newer vehicles that are equipped with more efficient catalytic converters and computerized engine controls that automatically provide correct combustion conditions.

A consequence of these improvements is that oxygenated fuel has become less effective in providing additional CO reductions. As a result, recent CO maintenance plans adopted for Grants Pass, Klamath Falls and Medford all eliminated the oxygenated fuel requirement. In those communities, DEQ received no comments that oxygenated fuel should be retained.

The Department's current analysis for the Portland area shows that CO will continue to decrease in the future, with or without the oxygenated fuel requirement. Therefore, the Department recommends that the wintertime requirement to use oxygenated gasoline in the Portland area be repealed effective October 31, 2005.

Effect of Rule

This maintenance plan updates the initial maintenance plan that was adopted by the Commission in 1996, and ensures that the Portland area will continue to meet CO standards through 2017. This plan continues to rely on federal (national) motor vehicle emission (tailpipe) standards and DEQ's Vehicle Inspection program as the primary CO reduction strategies. This CO maintenance plan proposes changes in the areas described below:

Oxygenated Fuel: The proposed plan eliminates the current wintertime requirement to use oxygenated fuel. The Department's monitoring data and future forecast of CO levels show that the requirement is no longer necessary to ensure compliance with CO standards (see Attachment A1, page 18 of the CO maintenance plan for a discussion of future CO emissions). If the Department's recommendation is adopted, the repeal will take effect October 31, 2005, immediately before the 2005-2006 oxygenated fuel season. Lifting the requirement means that 24 fuel distributors operating in the Portland area no longer need an annual \$250 oxygenated fuel permit from DEQ. It also means that 13 fuel terminal operators no longer need an annual \$2,500 permit from DEQ. Lifting the oxygenated fuel requirement provides fuel distributors and the petroleum industry more flexibility in the fuel they can provide to the Portland area. Even if the mandatory use of oxygenated fuel is repealed, fuel blenders may still choose to add ethanol to gasoline for other purposes, such as

to boost fuel octane. Since ethanol may continue to be added to fuel voluntarily, it is unclear what effect repealing the oxygenated fuel requirement will have on the ethanol industry.

Motor Vehicle Emissions Budget: The proposed CO maintenance plan also updates the existing motor vehicle emissions budgets used by Metro and the Oregon Department of Transportation in the transportation planning process. State and federal rules designed to integrate transportation and air quality planning ensure that emissions from future transportation plans and projects are consistent with the allocations (or “budgets”) established for motor vehicles in air quality plans. The Portland area motor vehicle emissions budgets for CO are being revised to incorporate new emission estimates that reflect the latest forecasts of population and employment growth as well as future vehicle miles traveled. (see Attachment A1, page 19 of the CO maintenance plan)

Transportation Control Measures (TCMs): Transportation Control Measures are strategies (such as increased bus and light rail ridership), designed to reduce emissions by reducing motor vehicle use. This proposed maintenance plan establishes new TCMs for the Portland area, such as modest increases in transit service and improved facilities for bicyclists and pedestrians. These TCM’s were developed and approved by Metro and the Joint Policy Advisory Committee on Transportation² through a public process and in consultation with DEQ. The CO plan also includes contingent TCMs that, if triggered, would reinforce the region’s commitment to the Washington County Commuter Rail, the I-205 Light Rail and other projects that reduce motor vehicle use. Contingent TCM’s will be invoked if average vehicle use per person in the Portland area increases significantly above 2002 levels. (see Attachment A1, page 22 of the CO maintenance plan for a discussion on TCM’s)

Vehicle Inspection Program: The proposed plan reflects an expected change to DEQ’s Motor Vehicle Inspection Program (VIP). The change involves replacing the current “enhanced” emissions test for 1981 through 1995 vehicles with the quicker and slightly less restrictive “basic” emissions test. As the motor vehicle fleet in the Portland area ages, fewer and fewer cars will be subject to the enhanced test. Newer cars (an ever increasing portion of the fleet) will be subject to the new “On-Board Diagnostic (OBD)” test. The Department of Environmental Quality intends to phase out the enhanced test and rely primarily

² The Joint Policy Advisory Committee on Transportation (JPACT) is the organization charged with making regional transportation decisions for the Portland area in consultation with Metro. JPACT includes representation from local city and county governments, Metro council, ODOT, DEQ, and TriMet (and also coordinates with Vancouver and Washington state agencies).

on the OBD test, which is most effective at reducing CO emissions. The Department's CO maintenance analysis includes the expected VIP test change, and reflects the latest estimates of population and employment growth as well as expected future motor vehicle use. (VIP is discussed on page 21 of the CO maintenance plan, Attachment A1).

New Source Review: The proposed CO maintenance plan retains existing requirements for new and expanding major industrial sources under the New Source Review (NSR) program. New Source Review includes emission control technology requirements as well as air quality analysis provisions to ensure that emissions growth from new and expanding industry does not jeopardize CO standards. The NSR requirements for CO in Portland continue the Best Available Control Technology requirement and the existing industrial growth allowance. (New Source Review is discussed on page 21 of the maintenance plan, Attachment A1).

Contingency Plan: The proposed CO maintenance plan includes a Contingency Plan as required by the Clean Air Act. In the event of a future violation of CO standards, this plan requires reinstatement of all regulations that applied before the area was redesignated to attainment. Those regulations include state-of-the-art emissions control for new and expanding major industry, the resumption of oxygenated fuel requirements, and (if the violation occurs in downtown Portland) the reinstatement of the downtown Portland parking lid (i.e. a limit on the number of parking spaces allowed in the core downtown Portland area designed to reduce traffic congestion and lower CO levels). The contingency plan is discussed on page 23 of the maintenance plan, Attachment A1.

Commission Authority

The Commission has authority to take this action under ORS 468.020 and ORS 468A.035.

Stakeholder Involvement

The Department met directly with a variety of stakeholder groups, including representatives of the petroleum and ethanol industries, the Oregon Environmental Council, and with other state agencies to seek input on the CO maintenance plan and in particular, the oxygenated fuel requirement. Those state agencies included the Oregon Departments of Energy, Agriculture, and Economic and Community Development.

The Department also involved federal, state and local governments in developing the motor vehicle emissions budget and in selecting transportation control measures. The process began in February 2004 and included presentations to and discussions with the Joint Policy Advisory Committee on Transportation

(JPACT), the Transportation Policy Alternatives Committee (TPAC)³, and the Metro Council. The process ended with a series of recommendations that were adopted by Metro Council Resolution 04-3457 and incorporated in the proposed Portland Area CO Maintenance Plan. Metro Council's resolution is included as Attachment C.

Public Comment The public comment period extended from September 3 to October 25, 2004, and included a public hearing in Portland on October 20, 2004. In addition, the Commission received public comment on the oxygenated fuel requirement at their October 22, 2004 meeting in Tillamook. A summary of public comments and the Department's response are provided in Attachment D. Also see Attachments E and F for additional information on public comment received.

Key Issues The most controversial issue in this rulemaking is whether to repeal the oxygenated fuel requirement. As mentioned above, oxygenated fuel was originally mandated by the 1990 Clean Air Act amendments to reduce CO emissions in all CO nonattainment areas across the county. The oxygenated fuel requirement first took effect in Oregon in 1992. The oxygen content of fuel can be enhanced by adding either ethanol or methyl tertiary butyl ether (MTBE). Historically, ethanol has been the oxygenate of choice in the Pacific Northwest, preferred by the petroleum industry over MTBE for oxygenating fuel⁴.

During the comment period, some stakeholders advocated for keeping the oxygenated fuel requirement because it would continue to suppress CO levels and thereby provide an incremental health benefit.

According to EPA, there is a small risk that some adverse health effects could occur even at low CO concentrations, primarily for sensitive individuals (such as those with respiratory or heart disease). Therefore, sensitive individuals could theoretically see a small incremental health benefit from retaining oxygenated fuel. However, EPA's exposure analysis done for the last review of the current federal CO standard suggests that the federal CO standard protects over 99% of the population from adverse health effects. In their 1992 review of CO standards, EPA concluded that the potential public health risk, including sensitive populations, appears to be small, if any, when federal CO standards are met. Again, CO levels in the Portland area are projected to remain about half of federal standards through at least 2017, and will continue to decrease with or

³ The Transportation Policy Alternatives Committee (TPAC) is a subcommittee of the Joint Policy Advisory Committee on Transportation (JPACT), that advises JPACT on transportation issues in the Portland area.

⁴ MTBE has not been used in Oregon to meet oxygenated fuel requirements, but it has been found intermittently in Oregon's fuel supply (since lead was removed from gasoline), apparently as an agent to improve octane ratings.

without oxygenated fuel.

Several stakeholders argued that although oxygenated fuel is no longer needed to meet CO standards, there are other factors to consider such as, reduced toxicity, greenhouse gas reductions and energy independence.

While there may be benefits other than CO reductions related to fuel oxygenated with ethanol, there is no consensus about these benefits. The potential benefits of alternative fuels are being explored in forums such as the Governor's committees on global warming and renewable energy. The Department has participated in this work and supports these efforts; however, the Clean Air Act mandate for wintertime oxygenated fuel was specifically required to meet federal CO standards and that objective has been met.

Eliminating the requirement for oxygenated fuel may affect the ethanol industry by reducing demand for the product. At the same time, this action could benefit the petroleum industry by removing the obligation to blend an oxygenating agent with fuel thereby allowing greater flexibility and less complex and less expensive fuel handling. Fuel suppliers may choose to continue to blend fuel with ethanol for other reasons (such as to boost octane) as market forces dictate. If fuel suppliers discontinue the use of ethanol, the general public will benefit by an approximate two percent increase in fuel economy since ethanol has less energy content than conventional gasoline. The potential costs and benefits of the Department's proposal are discussed further in Attachment H.

As discussed previously, the Department recommends that the wintertime requirement to use oxygenated gasoline in the Portland area be repealed effective October 31, 2005. However, in light of public comment, the Commission may choose to consider these options:

Option 1: Repeal the oxygenated fuel requirement effective October 31, 2007. This option reduces CO emissions by approximately five percent for each of two years, and allows for other processes considering the use of ethanol to conclude prior to repeal of the wintertime oxygenated fuel requirement.

Option 2: Maintain the oxygenated fuel requirement throughout the life of the maintenance plan (through 2017). The oxygenated fuel requirement would be automatically repealed effective October 31, 2017, without further action by the Commission. Keeping the oxygenated fuel requirement under this option would continue an approximate five percent reduction in overall (area-wide) CO emissions in each year of the plan.

Next Steps

If the Portland Area CO Maintenance Plan is adopted by the Commission, it will be submitted to EPA Region 10 as a revision of the State Clean Air Act Implementation Plan (SIP) by the end of 2004. The Environmental Protection Agency has agreed to an expedited review schedule for review of the plan that will allow the new Motor Vehicle Emissions Budget and any changes to the oxygenated fuel requirement to be approved by EPA and become effective by November 1, 2005⁵. Approval of the new Motor Vehicle Emissions Budget by that date will avoid delaying transportation projects planned by Metro and the Oregon Department of Transportation.

During the public comment process for this proposed plan, many stakeholders expressed an interest in reducing green house gas emissions. Climate change and green house gas emissions are not addressed in this CO maintenance plan. However, the Department will bring an informational item to the Commission on the Governor's Global Warming Advisory Committee Report and implications for DEQ at its February 2005 meeting.

Attachments

- A. A1. Proposed Portland Area Carbon Monoxide Maintenance Plan
- A. A2. Proposed Rule Revisions
- B. Alternate Rule Revisions:
 - B1. Option 1 (repeal effective 2007)
 - B2. Option 2 (repeal effective 2017)
- C. Metro Council Resolution 04-3457
- D. Summary of Public Comments and Agency Responses
- E. Presiding Officer's Report on Oct. 20, 2004 Public Hearing
- F. Summary of Oct. 22, 2004 Oxygenated Fuel Testimony
- G. Relationship to Federal Requirements Questions
- H. Statement of Need and Fiscal and Economic Impact
- I. Land Use Evaluation Statement

Available Upon Request

- 1. Legal Notice of Hearing
- 2. Cover Memorandum from Public Notice
- 3. Written Comment Received

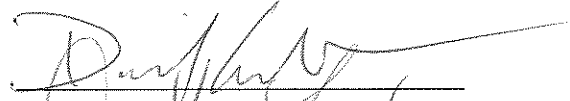
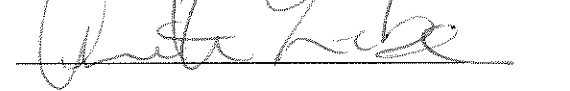
⁵ The Oregon requirement for oxygenated fuel would be repealed in state rule effective October 31, 2005. The federal requirement for oxygenated fuel would not be fully repealed until EPA approval of the CO maintenance plan, anticipated on or before November 1, 2005.

4. Appendices to Portland Area Carbon Monoxide Maintenance Plan
5. Emission Inventory for Carbon Monoxide

Approved:

Section:

Division:

Report Prepared By: Dave Nordberg

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Portland Area Carbon Monoxide Maintenance Plan

State Implementation Plan

Volume 2

Section 4.58

December 10, 2004

Prepared by:

Oregon Department of Environmental Quality
Air Quality Division
811 SW 6th Avenue
Portland, OR 97204-1390

Portland Area Carbon Monoxide Maintenance Plan

Oregon State Implementation Plan Volume 2, Section 4.58

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D9-8	Air Toxics Analysis

PORTLAND AREA CARBON MONOXIDE MAINTENANCE PLAN

OREGON STATE IMPLEMENTATION PLAN VOLUME 2, SECTION 4.58:

4.58.0 Acknowledgement and Summary

Oregon Department of Environmental Quality (DEQ) acknowledges the critical contributions that Metro (the Portland area regional government) made in developing this air quality CO maintenance plan. Special recognition is deserved for:

- Metro's transportation modeling used to determine on-road mobile emissions for baseline and future forecast years;
- Metro's lead role in developing Transportation Control Measures for the CO maintenance plan; and
- The Transportation Policy Alternatives Committee, Joint Policy Advisory Committee on Transportation and Metro Council for reviewing and providing input on the transportation-related components of the CO maintenance plan.

Other contributors are listed below:

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4.58.1 Introduction

4.58.1.0 Purpose of the Second Maintenance Plan

This is the second air quality maintenance plan developed to document and ensure continued attainment of the National Ambient Air Quality Standard (NAAQS) for carbon monoxide (CO) in the Portland, Oregon CO Attainment Area. The plan is written to comply with the federal Clean Air Act and the policies of the U.S. Environmental Protection Agency (EPA).

4.58.1.1 History of CO Problem in the Portland Area

On March 3, 1978, the EPA officially found that the Portland region failed to meet the 8-hour CO standard and designated the Portland metropolitan area as "nonattainment" for that pollutant. On June 20, 1979, the Oregon Department of Environmental Quality (DEQ) submitted a CO Control Strategy to EPA as required by the 1977 Clean Air Act. At the same time, DEQ requested an extension of the 1982 deadline for attaining the 9 parts per million (ppm) CO NAAQS. When DEQ submitted the CO Control Strategy, the area's design value (a numerical index of air quality) was 65% higher than the standard allowed. That value was based on measurements at the Central Air Monitoring Station from 1977 to 1979. EPA approved DEQ's plan and gave the Portland CO Nonattainment Area until the end of 1987 to come into compliance.

Although CO concentrations improved, the area's initial attempts to achieve the standard failed as did many other nonattainment areas throughout the nation. After the 1990 amendments to the Clean Air Act were enacted, EPA classified the Portland-Vancouver region as a moderate nonattainment area for CO and extended the deadline for compliance to the end of 1995. In November 1995, the EPA divided the Portland-Vancouver interstate control area into separate nonattainment areas for each state.

In 1996, monitoring demonstrated that the area achieved the air quality standard and was eligible for redesignation to attainment. Therefore, in 1996 DEQ submitted the first Portland Area CO Maintenance Plan to EPA demonstrating that the area would continue to maintain the CO standard ten years into the future and requested official redesignation to attainment. In 1997, EPA approved the new plan and officially designated the Portland area as attainment for CO.

CO concentrations in the Portland area continue to be significantly better than the air quality standard requires. However, the Clean Air Act requires DEQ to develop this second 10-year maintenance plan to ensure that the area will continue to achieve the NAAQS into 2017.

4.58.1.2 National Ambient Air Quality Standards for Carbon Monoxide

This CO Maintenance Plan addresses the CO NAAQS as defined by EPA pursuant to the federal Clean Air Act.

CO is a colorless, odorless gas that displaces oxygen in the body's red blood cells through normal respiration. The major human-caused source of CO is incomplete combustion of carbon-based fuels primarily through the use of gasoline-powered motor

vehicles. Other important sources of CO emissions are woodstoves, open burning and industrial boilers. Most serious CO concentrations occur during winter in urban areas, when cooler temperatures promote incomplete combustion and when CO emissions are trapped near the ground by atmospheric inversions.

EPA established the NAAQS for CO at 35 parts per million (ppm) for a 1-hour average and 9 ppm over an 8-hour average. 40 CFR part 50.8 defines how ambient air quality monitoring data are to be compared to the applicable NAAQS. It states that monitoring data should be expressed to one decimal place, and that standards defined in parts per million should be compared "in terms of integers with fractional parts of 0.5 or greater rounding." EPA interprets this rule to mean that any 8-hour CO concentration less than 9.5 ppm meets the standard. Any CO value monitored at or above 9.5 ppm is an exceedance. Two exceedances in one calendar year constitute an air quality violation. Therefore, it is the second highest CO concentration that is critical in determining if an area attains the air quality standard.

In general, demonstrating attainment of the standard requires monitoring ambient air quality using approved measuring instruments and procedures and verifying the results with a formal quality assurance/quality control program. All of the monitored locations within an area must be lower than the de facto standard of 9.5 ppm to remain in attainment. Air quality measurements in the Portland area easily satisfy this requirement as shown in Section 4.58.2 of this document.

4.58.1.3 Maintenance Plan Criteria/Organization of Document

Section 175A and related provisions of the Clean Air Act establish the criteria that must be satisfied for an air quality maintenance plan update:

- Attainment of NAAQS for CO
- Full approval of the State Implementation Plan (SIP) under section 110(k)*
- Demonstration that air quality improvement is due to permanent and enforceable emission reductions (see section 4.58.2.4)
- Full approval of CO maintenance plan under section 175A
- Fulfillment of all applicable Section 110 requirements*

The following sections summarize these criteria and refer to additional discussion of each topic elsewhere in this document.

*Section 110 describes general provisions needed for a SIP. Section 110(k) addresses Clean Air Act requirements applying to the redesignation of a specific area to attainment.

Attainment Verification

A maintenance area must continue to meet the applicable NAAQS. Attainment of the NAAQS for CO in the Portland area is discussed in Section 4.58.2, "Attainment Demonstration."

SIP Approval

EPA must have fully approved the applicable SIP for the area pursuant to Section 110(k) of the CAA. EPA approved the Portland Area CO Attainment Plan Oct. 7, 1982 and the 1985 revision on Feb. 13, 1987.

Section 110 requirements were addressed by the Portland Area CO Maintenance Plan and the area's requested redesignation to attainment adopted by the Oregon Environmental Quality Commission on Jul. 12, 1996 and approved by EPA to be effective Oct. 2, 1997.

Permanent and Enforceable Improvements in Air Quality

Permanent and enforceable reductions in emissions and improved ambient CO concentrations in the Portland area are discussed in section 4.58.2.4, "Permanent and Enforceable Improvements in Air Quality."

Maintenance Plan Elements

Section 175A of the Clean Air Act requires DEQ to submit a revision to the original CO maintenance plan eight years after redesignation that demonstrates maintenance of the air quality standard for an additional ten year period. This revision modifies the original CO maintenance plan and includes the following maintenance plan requirements:

- Section 4.58.3: [Continued] Attainment Emissions Inventory
- Section 4.58.3: [Continued] Maintenance Demonstration
- Section 4.58.4: Commitment to Continue Operating a Monitoring Network
- Section 4.58.4: Commitment to Continue to Verify Attainment
- Section 4.58.3: Contingency Plan

4.58.2 CONTINUED ATTAINMENT DEMONSTRATION

4.58.2.1 Ambient Air Quality Monitoring Program

The Portland area has three CO monitoring sites (see Appendix D9-1). One site is located in downtown Portland and the other two sites are located on Portland's eastside. The downtown site is at the Postal Building on SW 3rd Ave. between Alder and Washington Sts. The Portland eastside sites are at SE 82nd Ave. at Division St. and SE 58th at Lafayette.

The 3rd Avenue Postal Building site has recorded CO concentrations since 1988 and since 2002 operates all year. The remaining monitoring sites operate from October through March. The SE 58th at Lafayette monitor is a neighborhood scale installation that tracks a number of pollutants and has operated since 1981. The SE 82nd at Division site was established in 1989. Historical sites (those that have been discontinued) include monitors at SW 4th Ave. between Alder and Washington Sts.; the Central Air Monitoring Station (CAMS) at West Burnside between SW Broadway and SW 8th Ave.; and the Hollywood Station at 4112 NE Sandy Blvd. The CAMS station was shut down after three years of complying data so monitoring could be shifted to the SW 3rd Ave. site where concentrations appeared to be higher. The SW 4th and Alder station operated year-round until 2002 when the station was discontinued after recording 14 years of complying CO concentrations. Monitoring at the Hollywood site was stopped after six years of complying measurements.

During the CO season, monitors run continuously with 1 hour and 8 hour average CO concentrations being derived electronically via data loggers and integrators. After the results are reviewed for quality assurance, the measurements are entered into the Aerometric Information Retrieval System (AIRS) to provide EPA with DEQ's air quality data.

4.58.2.2 Summary of Ambient CO Data

Each recording of a CO concentration higher than the NAAQS is an exceedance. Two exceedances at a given monitor in a single year constitute a violation. Monitors in downtown Portland demonstrate that area last violated the CO NAAQS in 1984. The site at SE 82nd Ave. at Division last violated the CO standard in 1989. The last exceedance of the CO NAAQS in downtown Portland occurred Feb. 1, 1991 (10.6 ppm) at 3rd Ave. Based on short term monitoring during the winter of 1984-1985 and follow up monitoring at two different eastside locations, DEQ installed a permanent monitor at 82nd at Division in 1989. The last exceedance at that site occurred on Jan. 31, 1991 (10.2 ppm).

The highest and second highest CO concentrations at each of the Portland area monitors over the past decade are shown below:

Table 1 Highest CO Concentrations: 1993 to 2003

STATION LOCATION AND NUMBER	YEAR	Oct-Apr	1-HOUR AVERAGES		TIMES**	8-HOUR AVERAGES	
		Average	MAXIMUM	2ND HIGH	>9ppm	MAXIMUM (date)	2 ND HIGHEST (date)
Portland							
4th & Alder (PFA)	1993	1.73	15.7	11.9	0	6.6 (08/22)	5.8 (11/10)
DEQ # 10137 EPA # 410510078	1994	1.59	12.0	10.0	0	7.5 (01/20)	6.2 (09/22)
* Site discontinued 04/02	1995	1.34	9.1	8.3	0	7.1 (10/14)	4.5 (11/14)
	1996	1.36	8.6	8.0	0	6.4 (09/27)	5.7 (09/10)
	1997	1.37	7.8	7.8	0	4.8 (02/24)	4.7 (10/15)
	1998	1.13	8.4	7.1	0	4.6(03/11)	4.6 (09/30)
	1999	1.23	11.6	9.8	0	7.5 (01/05)	5.5 (10/22)
	2000	1.14	9.3	8.4	0	5.2 (11/17)	4.0 (04/11)
	2001	1.04	6.3	5.9	0	3.6 (08/09)	3.5 (05/31)
	2002	*	3.6	3.5	0	2.4 (02/20)	2.4 (02/08)
SE Lafayette (SEL)	1993	0.95	8.5	8.4	0	7.3 (11/07)	6.6 (11/08)
5824 SE Lafayette	1994	0.74	9.0	7.5	0	6.1 (11/03)	5.7 (01/17)
DEQ # 10139 EPA # 410510080	1995	0.69	6.6	6.3	0	5.2 (10/15)	4.7 (02/10)
	1996	0.91	8.4	7.2	0	5.4 (03/02)	5.2 (01/11)
	1997	0.93	6.7	4.9	0	4.1 (03/29)	3.6 (10/28)
	1998	0.73	6.7	5.9	0	3.8 (12/09)	3.2 (12/16)
	1999	0.70	7.4	7.2	0	5.3 (01/04)	4.4 (01/10)
	2000	0.59	6.3	5.0	0	4.1 (02/08)	3.8 (11/02)
	2001	0.65	3.9	3.9	0	3.3 (02/13)	3.2 (03/01)
	2002	0.68	6.1	4.4	0	3.1 (11/15)	2.9 (11/14)
	2003	0.65	3.7	3.6	0	3.4 (03/30)	3.1 (03/02)
Old Postal Bldg (PPB)	1993	1.61	8.5	8.4	0	5.7 (12/09)	5.7 (10/02)
510 SW 3rd	1994	1.97	10.2	9.9	0	7.4 (01/20)	6.3 (12/16)
DEQ # 10141 EPA # 410510087	1995	1.74	12.2	9.6	0	6.6 (10/14)	6.3 (12/17)
	1996	1.82	10.6	8.6	0	5.3 (02/07)	5.2 (11/11)
	1997	1.68	9.6	7.8	0	5.9 (03/18)	4.8 (12/19)
	1998	1.60	8.1	8.0	0	4.7 (11/17)	4.6 (01/16)
	1999	1.54	12.6	10.4	0	7.3 (01/05)	6.2 (10/21)
	2000	1.43	6.3	6.0	0	3.7 (02/18)	3.6 (01/25)
	2001	1.21	5.4	4.9	0	3.4 (02/01)	3.4 (02/14)
	2002	1.09	7.1	5.1	0	3.4 (10/17)	3.1 (10/27)
	2003	1.10	5.1	5.0	0	3.4 (12/05)	3.3 (09/03)
82nd & Division	1993	2.12	11.7	11.6	0	8.7 (11/08)	8.4 (11/02)
DEQ# 10142 EPA# 410510243	1994	1.99	9.1	7.8	0	6.8 (11/03)	6.4 (10/08)
	1995	1.54	8.7	7.8	0	7.5 (10/15)	6.6 (10/07)
	1996	1.62	19.8	9.5	0	6.6 (01/11)	6.5 (03/02)
	1997	1.34	12.5	5.9	0	5.1 (12/31)	4.5 (11/08)
	1998	1.28	7.5	6.8	0	4.8 (10/22)	4.4 (12/16)
	1999	1.26	9.0	8.8	0	5.9 (01/10)	5.7 (01/04)
	2000	1.34	6.2	5.6	0	5.3 (11/12)	4.4 (01/06)
	2001	1.19	6.0	5.3	0	4.2 (03/01)	3.9 (02/28)
	2002	1.20	7.1	5.4	0	4.5 (11/15)	4.5 (11/14)
	2003	1.10	5.9	5.2	0	4.0 (02/04)	4.0 (03/29)

The five highest 8 hour average CO concentrations for the last five years are shown below:

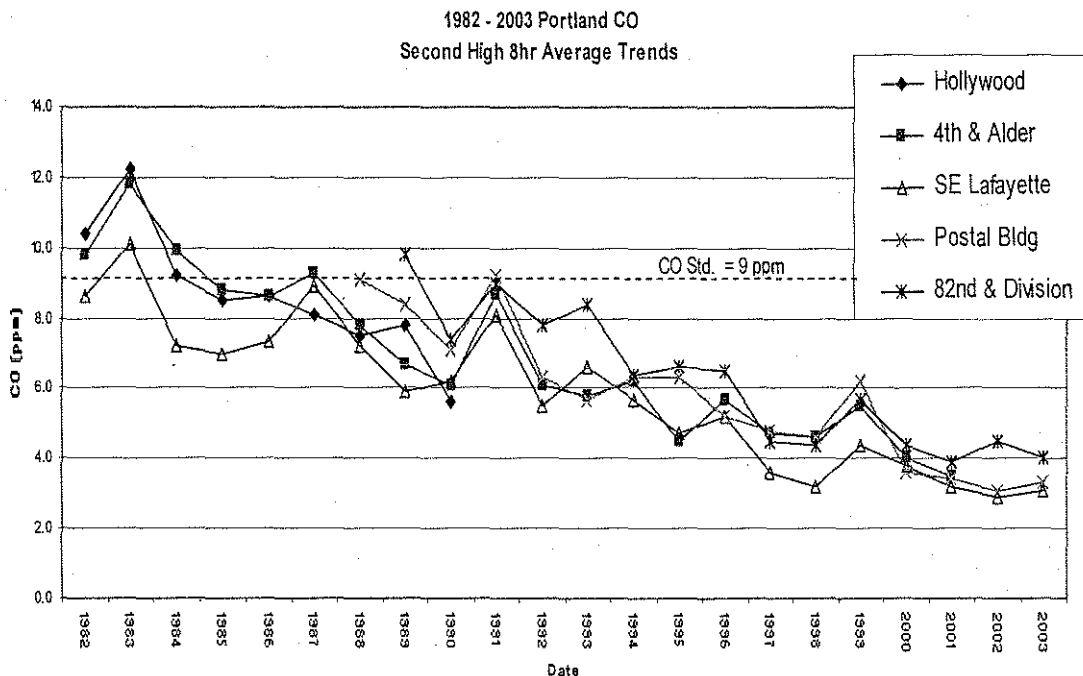
Table 2 Five Highest 8 Hour CO Concentrations

Portland 82nd & Division (PED)	
1/10/1999	5.9
1/4/1999	5.7
11/12/2000	5.3
10/20/1999	4.9
10/23/1999	4.8
Portland SW 3rd (PPB)	
1/5/1999	7.3
10/21/1999	6.2
10/22/1999	5.1
1/4/1999	4.8
10/3/1999	4.2
Portland SE Lafayette (SEL)	
1/5/1999	5.3
1/11/1999	4.4
10/21/1999	4.3
10/23/1999	4.2
2/18/2000	4.1
Portland Fourth and Alder (PFA)	
1/5/1999	7.5
10/22/1999	5.5
11/17/2000	5.2
10/21/1999	5
7/9/1999	4.5

Portland 4th & Alder was shut down on 3/31/2002 and does not have a complete data set.

A graph of the second highest 8 hour CO average at each of the Portland area monitors is shown below:

Figure 1 CO Trends – 1982 to 2003



4.58.2.3 Permanent and Enforceable Improvement in Air Quality

Permanent Emission Reductions

Control strategies included in the initial maintenance plan period were:

Federal Motor Vehicle Control Program (establishing emission standards for new motor vehicles).

Vehicle Inspection and Maintenance Program

- Basic Test: 1975 to 1980 model year vehicles
- Enhanced Test: 1981 through 1995 vehicles
- On Board Diagnostic (OBD) Test: 1996 to 4+ year old vehicles

Wintertime Oxygenated Fuel

Major New Source Review with Best Achievable Control Technology (BACT)

Transportation Control Measures

- 2040 Growth Concept & Land use Measures
- Increased Transit Service
- Expanded Light Rail Transit System
- Central City Transportation Management Plan (selected portions)
- Expanded Bicycle and Pedestrian Facilities

Contingency Plan

Representative Baseline Period

As a condition of redesignation to attainment, EPA requires that air quality improvements not be the result of temporary factors such as slow economic periods or unusually favorable meteorology. While that requirement does not necessarily pertain to areas that were previously redesignated to attainment, the "Probabilistic Rollback" technique of establishing regional airshed capacity (described in 4.58.3.) is based on the 11 year period between 1992 and 2002. Use of this long term base period removes any need to demonstrate that a single baseline year is not an anomaly.

4.58.2.4 Demonstration That DEQ's CO Network May Reasonably Be Considered Representative Of Worst Case CO Concentrations

This section presents evidence that the locations of the DEQ monitors for CO represent "worst case" or peak level concentrations. Specific elements include:

- wide ranging field sampling conducted by DEQ to identify areas with high peak CO levels,
- screening techniques used to identify intersections with apparent potential for high CO concentrations, and
- historical field studies showing that the DEQ CO network tends to record higher CO concentrations than screened intersections.

4.58.2.4.1 Comprehensive CO Field Studies

DEQ has vigorously tried to identify the localized areas that experience the highest peak CO concentrations. It conducted studies that included monitoring at more than 100 locations during the winters of 1984-85, 1988-89, and 1993-94. When those special studies identified areas that seemed to have higher CO levels than the existing network, DEQ added new monitoring sites. Those actions resulted in the addition of the CO sites at 510 SW 3rd Ave. (Postal Building) and 82nd Avenue at Division. These studies demonstrate that the DEQ CO site network can reasonably be considered representative of worst case CO concentrations.

DEQ conducted a meteorological evaluation of general conditions present during those special sampling studies. That analysis is presented in the second portion of Appendix D2-2 of the original Portland Area Carbon Monoxide Maintenance Plan adopted in 1996. That analysis found that the conditions present during the 1984-85 sampling period included typical average winter conditions (with a number of especially high wind speed days). The protocol for selecting sampling days was changed for the 1988-89 and 1993-94 field studies to capture a higher percentage of sampling days with lower wind speeds and poorer air dispersion conditions. Findings from those studies provide a reasonable basis for concluding that the DEQ CO monitoring network appears to be representative of worst case conditions.

4.58.2.4.2 Screening Technique Used To Identify Intersections With Potential For High CO Concentrations.

To identify the Portland area intersections with the greatest potential to produce high CO concentrations, Metro (the local Metropolitan Planning Organization) used its EMME 2 Travel Demand Model to determine which intersections experience the highest CO emissions from mobile sources. To do this, Metro calculated the total amount of CO emissions produced at the top 25 intersections in the Portland area for a 24 hour period. For the purpose of this calculation, the approaching legs of each intersection were normalized to 1/20th of a mile to approximate the length of one city block.

This technique has several advantages over the traditional method of assessing worst case intersections. The traditional method involves multiplying the traffic volume at a given intersection by the quotient of the intersection's volume divided by its capacity. The formula is expressed as V^2/C . One difficulty with this approach is that it depends on data collected by several different jurisdictions in the metropolitan area, which invariably introduces inconsistencies that cannot be fully reconciled. An additional shortcoming is that the V^2/C algorithm does not directly account for the emission factors of the mix of vehicles (and varying CO emission rates of those vehicles) that are present at specific locations.

In contrast, the EMME 2 approach used by Metro applies a single assessment technique that is consistent for intersections in each of the 24 local jurisdictions in the Portland metropolitan area. The travel demand model technique also has the advantage of estimating intersection emissions using Mobile 6.2 emission factors that are applicable for the traffic speeds and vehicle mix that are characteristic of specific locations.

Applying this technique indicates that the six intersections with the greatest potential for producing high CO concentrations are:

Table 3 Intersections with the Highest CO Approach Leg Emissions (grams per day)

<u>Intersection</u>	<u>1999 Value</u>	<u>2020 Value</u>
1. SE McLoughlin (OR 99E) at SE Bybee	105,250	48,893
2. Cascade Hwy. (OR 213) at Washington St.	not in top 25	48,692
3. SE McLoughlin (OR 99E) at SE Holgate	88,696	44,770
4. SE McLoughlin (OR 99E) at SE 17 th Ave.	90,555	44,085
5. Mt. Hood Hwy (US 26) at SE Palmquist	not in top 25	40,954
6. Pacific Hwy. (OR 99W) at SW Hall Blvd.	94,357	39,144

[Note: Intersection emissions for 1999 are calculated with oxygenated fuel. Emission projections for 2020 are calculated without oxygenated fuel.]

These locations are to be taken as representing the three intersections with the heaviest traffic volumes plus the three intersections with the worst level of service (LOS). Therefore, they are to be used in meeting the requirements for CO "hot spot" analyses cited in the transportation conformity rules at OAR 340-252-0240(1)(a)(C) and (D).

4.58.2.5 Conclusions Regarding Demonstration of Continued Attainment

Ambient air monitoring results demonstrate that since the Portland area was redesignated to attainment of the CO air quality standard, CO concentrations have fallen steadily. That trend reflects a national pattern of newer vehicles producing considerably reduced amounts of CO. The "probabilistic rollback" method used to establish the Portland area's airshed capacity (to accommodate CO emissions) is based on data from eleven consecutive years. That long baseline period eliminates the need to demonstrate that a single baseline or design value year reflected typical economic and meteorological conditions. The intersection assessment technique described in section 4.58.2.4.2 provides an objective indication of the Portland area intersections (including approaching legs) that have the highest potential to produce elevated CO concentrations in the future. Designating these intersections means they will receive additional scrutiny under the transportation conformity rules (hot spot analysis) if they are affected by a future transportation project.

4.58.3 MAINTENANCE PLAN

Section 175A of the Clean Air Act section requires a state to submit a second maintenance plan to EPA 8 years after an area is redesignated to attainment. The new maintenance plan must demonstrate that the area will continue to meet the air quality standard for an additional 10-year period (Nov. 1, 2007 through Feb. 28, 2017). However, the existing Motor Vehicle Emissions Budgets must be updated using a new computer model of mobile emissions (Mobile6) before the next Metropolitan Transportation Improvement Program can demonstrate that its projects will not cause more vehicle emissions than the air quality plan allows. Therefore, the revised emissions budgets need to be approved by the Environmental Protection Agency (EPA) in 2005 to avoid interruption of the transportation project approval process. To minimize such disruptions, this maintenance plan and its emissions analyses address the years 2005 through 2017 so the plan can take effect early--as soon as it is approved by EPA.

This updated Carbon Monoxide (CO) Maintenance Plan demonstrates that the CO NAAQS will not be violated in the Portland area throughout the plan period.

4.58.3.1 Attainment Inventory

As part of the Portland Area CO Maintenance Plan update, DEQ developed an attainment emission inventory for the year 1999. The CO emission inventory reflects detailed estimates of CO emissions from all sources on a typical winter day. Emissions are grouped in four major categories: Industrial (Point) Sources, On-Road Mobile Sources, Non-Road Mobile Sources, and Area Sources. The emissions inventory is used in conjunction with ambient air quality monitoring to determine the capacity of the region's airshed to accommodate CO emissions without violating the CO standard.

The 1999 baseline year was originally chosen because that year reflected the highest ambient CO concentrations in Portland's recent history and therefore represented a conservative base year for demonstrating future compliance with the CO NAAQS. The effect of this choice of baseline years was later minimized, however, when EPA Region 10 requested that the Probabilistic Rollback technique of calculating airshed capacity be applied instead of a single baseline year. The Probabilistic Rollback approach is discussed in Appendix D9-6.

The 1999 emissions were based on actual industrial emissions rather than permitted emissions. On-road motor vehicle emissions were calculated using EPA's Mobile 6.2 emissions factor model in a link based analysis using Metro's EMME2 travel demand model. The baseline inventory reflected the use of oxygenated fuel in the Portland area and a vehicle inspection and maintenance program using basic and enhanced vehicle testing. Details are provided in the 1999 Emissions Inventory, Appendix E, Table 3, which is summarized by Table 4 below:

Table 4 1999 Annual and Seasonal CO Emissions

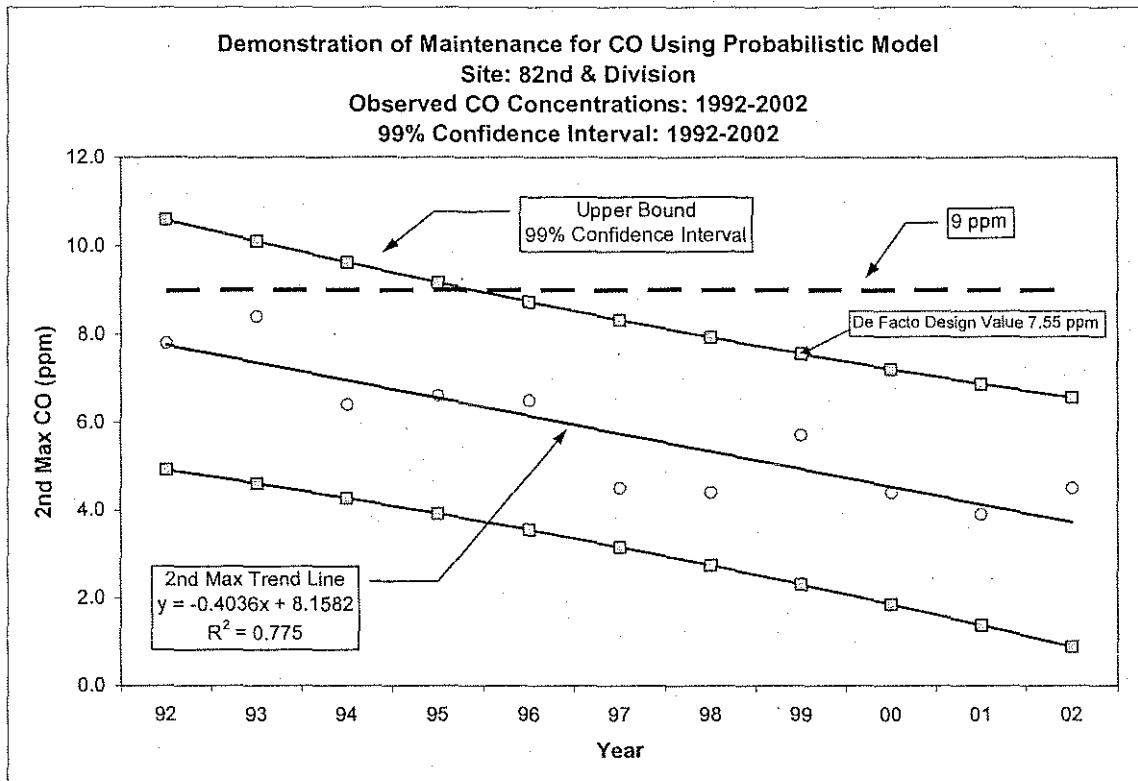
Area / County	Source Type	CO Emissions	
		Annual (tons/year)	Seasonal Day (lbs/day)
Portland CO MA			
	Stationary Point *	19,159	106,590
	Stationary Area	77,942	809,455
	Mobile Non-Road	121,669	372,098
	Mobile On-Road	278,333	1,525,114
	Total CO MA	497,103	2,813,257
* includes 25 mile buffer sources			

Traditionally, the "design value" (an index of air quality in relation to the 9 ppm air quality standard) is based on the emissions inventory on a single baseline year. The proportion of that design value to the air quality standard is then used to establish regional airshed capacity. For example, if emissions in the baseline year totaled 100,000 lbs. of CO per winter day, and if the design value for that period were 4.5 ppm (half the allowable 9 ppm standard), one can calculate that the airshed could experience twice the inventoried emissions (or 200,000 lbs. per winter day) before reaching the 9 ppm CO standard. In reality, the design value for 1999 was 6.2 ppm, or 69% of the CO standard.

However, EPA suggested that DEQ apply a "Probabilistic Rollback" technique for calculating airshed capacity, noting that it is based on a multiple year period and is statistically more robust. See Appendix D9-6. This technique is also more conservative in that it focuses on the 99% confidence interval for baseline year emissions. Applying this technique produces the plot for the controlling CO monitor located at 82nd Avenue at Division St. as shown in Figure 2.

Using the Probabilistic Rollback technique, the 99% upper bound confidence interval for the year 1999 is 7.55 ppm or 83.9% of the 9 ppm CO standard. The 7.55 ppm value is used as the de facto design value for purposes of this CO maintenance plan. Proportioning 1999 CO emissions of 2,813,25 lbs. per winter day up to the level at which ambient CO concentrations would reach the 9 ppm CO limit, indicates that the airshed should be able sustain 3,347,776 lbs. of CO emissions per winter day. This calculation of airshed capacity is done at the 99% confidence interval, meaning that with emissions at the 3,347,776 lbs. per winter day limit, the region has only a 1% chance of violating the air quality standard in a given year. (The reciprocal of 83.9% is 119%, therefore regional airshed capacity can be computed as 2,813,256 lbs. per day times 119% = 3,347,776 lbs. per day at the 99% confidence interval.)

Figure 2 CO Concentration 99% Confidence Interval at 82nd & Division



4.58.3.2 Maintenance Demonstration

CO emissions within the Portland area airshed were estimated for future years as described in the Emission Inventory (SIP Volume 2, Section 4.58, Appendix D9-4). Emissions projections were completed for the years 2005, 2010, and 2020. Emissions for 2017 (the final year of the plan) were determined by interpolating between the 2010 and 2020 analysis years. While emissions for the 1999 baseline year were estimated with oxygenated fuel, projections of future emissions reflect the removal of the oxygenated fuel requirement for the Portland area effective Oct. 31, 2005.

Future projections also assume that 1981 through 1995 vehicles are tested by the "basic" inspection and maintenance test rather than the "enhanced" test currently required. This assumption in demonstrating future compliance allows that change to be made in the future and is discussed in Section 4.58.3.2.2.

Baseline and future CO emissions (summarized from Emissions Inventory Appendix D9-4) are shown below:

Table 5 Pounds of CO Per Winter Day

	<u>1999</u>	<u>2005</u>	<u>2010</u>	<u>2017</u>
Industrial Emissions	106,590	67,401	71,085	76,241
Area Sources	809,454	872,852	925,684	999,648
On-Road Emissions	1,525,114	1,226,323	619,753	834,301
Non-Road Emissions	<u>372,098</u>	<u>530,435</u>	<u>975,074</u>	<u>690,469</u>
Total:	2,813,256	2,679,011	2,591,596	2,600,659

Table 6 Tons of CO Per Year

	<u>1999</u>	<u>2005</u>	<u>2010</u>	<u>2017</u>
Industrial Emissions	19,159	11,957	12,610	13,525
Area Sources	77,944	84,029	89,152	96,323
On-Road Emissions	278,333	223,804	177,951	142,769
Non-Road Emissions	<u>121,669</u>	<u>159,595</u>	<u>182,459</u>	<u>203,516</u>
Total:	497,105	479,385	462,172	456,133

Several trends in emissions between the 1999 baseline year, and final year of the CO maintenance plan merit comment. First, the large decrease in industrial emissions between 1999 and 2005 is the result of permanent closure of a large aluminum company. Second, on-road emissions decrease steadily in the future due to the increased effectiveness of emission control devices of modern cars and trucks. Third, CO emissions from non-road vehicle are projected to increase substantially from 1999 to 2017. That increase reflects the projected growth in the future use of non-road equipment. Finally, total CO emissions are projected to stay well below the calculated airshed capacity of 3,347,776 lbs. of CO per winter day throughout the life of the new CO maintenance plan. See projected allowable emissions in Table 8, below.

4.58.3.2.1 Motor Vehicle Emissions Budgets (MVEBs)

Federal and state transportation conformity regulations require that on-road mobile emissions produced by the Portland area's regional transportation system remain within the amount anticipated by this CO maintenance plan. Motor Vehicle Emissions Budgets (MVEB) are therefore set as provided in Table 7 below.

MVEBs are established in relation to projected future vehicle emissions. Given the large safety margin between projected future emissions and airshed capacity, CO MVEBs were set using forecasted on-road motor vehicle emissions plus an additional safety margin. Emissions budgets for 2005 and 2010 reflect 1% per year more than the on-road motor vehicle emissions forecast available when the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council recommended budget amounts. The budget for 2017 reflects 1% per year above the forecast, plus 1.5% annual growth for an additional 20 years.

This approach will allow Metro as the Metropolitan Planning Organization (MPO) to write a 20 year Regional Transportation Plan (RTP) in 2017 (the final year of the Second CO Maintenance Plan) that is able to demonstrate conformity until 2037--the last possible year of the 2017 RTP. The resulting CO budgets are shown below:

Table 7 CO Motor Vehicle Emissions Budgets (lbs. per winter day)

<u>2005</u>	<u>2010</u>	<u>2017</u>
1,238,575	1,033,578	1,181,341

4.58.3.2.2 Control Measures

This update of the Portland Area CO Maintenance Plan includes several changes to the control strategies included in the initial CO maintenance plan. Modified and unchanged control strategies follow:

Subregions

The original CO maintenance plan included motor vehicle emissions budgets for two subregions: the Central Business District of downtown Portland and 82nd Ave. corridor (Division to Woodstock). These subregional budgets have not limited emissions in either area and air quality monitoring in each subregion shows that CO concentrations continue to improve. DEQ finds these subregional budgets provide no benefit but add an administrative burden to Metro's conformity demonstrations. Therefore, subregional emissions are not continued in this plan.

Central City Transportation Management Plan (CCTMP)

The Portland Area CO Maintenance Plan developed in 1996 incorporated many provisions of the Portland CCTMP as Transportation Control Measures. These provisions are highly complicated to interpret and enforce and are not continued in the updated CO maintenance plan. The full CCTMP, however, remains in force as requirements of the City of Portland.

Oxygenated Fuel

The Clean Air Act Amendments of 1990 mandated the use of wintertime oxygenated fuel in areas such as Portland that failed to meet the National Ambient Air Quality Standard for CO. Since then, Portland's CO concentrations have improved significantly, and oxygenated fuel has a far lower CO reduction benefit. This reduced benefit is largely due to the increasing prevalence of improved catalytic converters and computerized engine controls which effectively minimize emissions without fuel additives.

Since the oxygenated fuel requirement was adopted as a means to control levels of ambient CO, and the requirement is no longer needed for that purpose, this CO maintenance plan discontinues the oxygenated fuel requirement effective Oct. 31, 2005.

Inspection and Maintenance Program

Under DEQ's existing vehicle emissions testing program in the Portland area, 1975 to 1980 vehicles are subject to the basic test, 1981 through 1995 vehicles are subject to the enhanced test and 1996 and newer vehicles are subject to the On Board Diagnostics (OBD) test. The OBD test is quicker and more effective than the enhanced test and will become increasingly dominant as 1996 and newer vehicles become an ever larger portion of the fleet. This CO maintenance plan therefore modifies the SIP to replace the enhanced test requirement for 1981-1995 vehicles with the quicker and easier "basic" (two speed idle) emissions test. This change is a change to the SIP only. The vehicle testing rules for 1981-1995 vehicles will remain unchanged because the Portland Area Ozone Maintenance Plan continues to require enhanced testing to control ozone precursors. However, if a similar modification is evaluated and found to not interfere with maintenance of the ozone standard, the rule change to replace enhanced testing with basic testing will be pre-approved within the CO plan.

Until the Inspection/Maintenance requirement in the rules for 1981 through 1995 vehicles (enhanced testing) is changed to align with the test requirement in the CO maintenance plan (basic testing), DEQ will consider vehicles that meet the enhanced test requirement as also meeting the basic test requirement.

Forecasts of future emissions in this CO maintenance plan are calculated on the premise that 1981 through 1995 vehicles are subject to the basic emissions test. This change increases CO emissions in 2005 by 15,960 lbs. per winter day (1.4% of on-road motor vehicle emissions for that year).

Major New Source Review

The CO maintenance plan continues the existing requirement that new and expanding industrial sources apply the level of emissions control equipment described as Best Available Control Technology (BACT). The plan also continues to offer an Industrial Growth Allowance that may be used by new or expanding sources instead of securing emissions offsets (as described below).

Industrial Growth Allowance

The current CO maintenance plan continues the existing CO industrial growth allowance of 14,880 lbs. per day or 2700 tons per year. The owner or operator of a proposed major source or major modification may apply to DEQ for an allocation of the growth allowance in lieu of providing an emission offset. The DEQ will allocate the growth allowance on a first-come, first-served basis until the allowance is depleted. No applicant may be awarded more than 50% of the available allowance or 10 tons per year (whichever is greater) unless the Oregon Environmental Quality Commission approves an exception.

DEQ will report the use the growth allowance to EPA Region 10 for each period described in Section 4.58.4.4 "Administrative Requirements." Each report is due within 12 months following the end of each activity period. If the Portland area violates the CO standard, use of the growth allowance will be suspended as described in the Contingency Plan below.

Transportation Control Measures (TCMs)

This CO Maintenance Plan includes Transportation Control Measures which are measures that reduce emissions by reducing vehicle use, and that must be implemented under the transportation conformity rules. The TCMs in this CO maintenance plan replace the TCMs specified in the first Portland Area CO Maintenance Plan. The emission reduction benefits of these TCMs are included in the emission projections on which the Portland Area CO Maintenance Plan is based. The revised TCMs are as follow:

1. Transit Service Increase: Regional transit service revenue hours (weighted by capacity) shall be increased 1.0% per year. The increase shall be assessed on the basis of a 5 year rolling average of actual hours for assessments conducted between 2006 and 2017. Assessments made for the period through 2008 shall include the 2004 opening of Interstate MAX.
2. Bicycle Paths: Jurisdictions and government agencies shall program a minimum total of 28 miles of bikeways or trails within the Portland metropolitan area between the years 2006 through 2017. Bikeways shall be consistent with state and regional bikeway standards. A cumulative average of 5 miles of bikeways or trails per biennium must be funded from all sources in each Metropolitan Transportation Improvement Program (MTIP). Facilities subject to this TCM must be in addition to those required for expansion or reconstruction projects under ORS 366.514.
3. Pedestrian Paths: Jurisdictions and government agencies shall program at least nine miles of pedestrian paths in mixed use centers between the years 2006 through 2017, including the funding of a cumulative average of 1½ miles in each biennium from all sources in each MTIP. Facilities subject to this TCM must be in addition to those required for expansion or reconstruction projects under ORS 366.514, except where such expansion or reconstruction is located within a mixed-use center.

Contingent TCMs

This CO maintenance plan includes several measures that will become TCMS under the transportation conformity rules if an index of per person vehicle travel (Vehicle Miles Traveled per capita) increases certain amounts for two consecutive years. These provisions are included in this maintenance plan under the Contingency Plan, Part B, Phase 2.

4.48.3.3 Total Projected CO Emissions

In addition to normal growth projected for the future, this plan allows CO emissions to increase through the industrial growth allowance and full use of the Motor Vehicle Emissions Budget. If emissions grow to the maximum allowed under each of these mechanisms, total future CO emissions will be as shown:

**Table 8 Total Projected CO Emissions w Growth Allowance and max. MVEB
(lbs. CO per winter day)**

	<u>2005</u>	<u>2010</u>	<u>2017</u>
Industrial Emissions	67,401	71,085	76,241
(Growth Allowance)	14,880	14,880	14,880
Area Sources	872,852	925,684	999,648
On-Road MVEB	1,238,575	1,033,578	1,181,341
Non-Road Emissions	<u>530,435</u>	<u>619,753</u>	<u>690,469</u>
Total:	2,724,143	2,664,980	2,962,579

4.58.3.4 Contingency Plan

The CO maintenance plan must contain contingency measures that will be implemented in the event of a violation of the CO standard or other triggering mechanisms contained in the plan. This contingency plan includes two sets of contingency measures. The provisions specified under Part A of the Contingency Plan are linked to ambient concentrations of CO. The provisions specified under Part B of the Contingency Plan are linked to increases in the average amount of vehicle use per person.

Part A, Phase 1: Risk of Violation

If monitored (8-hour) CO levels at any site within the Portland area on the National Air Monitoring System or the State and Local Air Monitoring System registers a second high concentration equaling or exceeding 90% (8.1 ppm) of the 9 ppm CO National Ambient Air Quality Standard during a calendar year, DEQ will form a planning group to evaluate the implementation of additional emission reduction strategies. Within six months of the validated 90% second high CO concentration, the planning group will recommend which additional control strategies (if any) should be applied to prevent or correct any violation of the 8-hour CO standard. Additional strategies to be considered include, but are not limited to:

- a) increased parking pricing in the Central City,
- b) increased funding for transit,
- c) value pricing on major roadways that increase vehicle travel capacity,
- d) a trip reduction program,
- e) modified regional parking ratios, and
- f) accelerated implementation of bicycle and pedestrian networks.

If a third 8-hour CO concentration exceeds 90% of the CO standard in a single calendar year, the planning group may evaluate additional potential actions or take no further action if the third exceedance was due to an exceptional event.

Part A, Phase 2: Actual Violation

Section 175A(d) of the Clean Air Act provides that any control strategies removed upon redesignation to attainment must be reinstated if the area violates the air quality standard. The provisions of this section of the Contingency Plan are dictated by that Clean Air Act requirement.

If the Portland area violates the NAAQS for CO, the following contingency measures will automatically be implemented:

- a) New Source Review requirements for proposed major sources and major modifications in the maintenance plan area (and the area of significant air quality impact) will be changed. The requirement to install BACT will be replaced with a requirement to install Lowest Achievable Emissions Rate (LAER) technology. In addition, the Industrial Growth Allowance established in Section 4.58.3.2 will be eliminated. These requirements will take effect upon validation of the violation. BACT and a growth allowance may be reinstated if provided for in a new maintenance plan adopted by the Environmental Quality Commission (EQC) and approved by EPA.
- b) The requirement to use wintertime oxygenated fuel in Clackamas, Multnomah, Washington, and Yamhill Counties will be reinstated.
- c) The downtown parking lid will be reinstated. (This measure will be implemented only if the violation occurs in the downtown area formerly subject to the parking lid requirement.)

Part B, Phase 1: 5% VMT Increase

Metro will review and verify the local average vehicle miles traveled per capita (VMT/capita) derived from the most recent estimates of population and daily vehicle miles traveled from federal and state sources.

If daily VMT/capita exceeds 20.5 daily VMT/capita (a 5 % increase above the 2002 rate) for two successive years, the Standing Committee [TPAC, as defined at OAR 340-252-0060(2)(b)(A)(iii)] shall be convened to:

- a) determine whether there is a data problem with the trigger;
- b) if there is not a data problem with the trigger, identify and analyze the effectiveness of those local actions that could reduce air pollutant emissions; and,
- c) determine whether a recommendation should be made to JPACT to initiate local action to reduce VMT/capita until the 2002 level is once again attained.

Part B, Phase 2: 10% VMT Increase

Metro will review and verify local VMT/capita values derived from the most recent estimates of population and daily vehicle miles traveled from federal and state sources.

If average daily VMT/capita exceeds 21.5 miles (a 10 percent increase above the 2002 rate) for the Oregon portion of the Portland-Vancouver Air Quality Maintenance Area for two successive years, the following measures will become required Transportation Control Measures for the region (as determined by the programming of funds for specified projects):

- a) Washington County Commuter Rail within six years after exceeding the 21.5 VMT/capita rate,
- b) Interstate 205 Light Rail Transit (I-205 LRT) within six years after exceeding the 21.5 VMT/capita rate;
- c) An increase of efforts for the Regional Travel Options Program sufficient to increase the number of employers reached by the program by at least 5 % per year the number of employers currently subject to the DEQ Employee Commute Options program. Alternatively, specific projects from the Regional Transportation Options program could be substituted.
- d) An increase of funding of at least 5% per year greater than current funding for Transit Oriented Development projects.
- e) Other programs or projects consistent with state and federal law as may be determined by the Metro Council after consultation with the Joint Policy Advisory Committee on Transportation.

4.58.4 ADMINISTRATIVE REQUIREMENTS

Administrative requirements related to compliance with Clean Air Act provisions are described below.

4.58.4.1 State Implementation Plan (SIP) Requirements

Portland meets all requirements for the State Implementation Plan (SIP) specified in Section 110 of the federal Clean Air Act. Section 110 requires a former nonattainment area to provide for the implementation, maintenance and enforcement of an air quality standard.

4.58.4.1.1 Summary of Fully Approved SIP

The Portland Carbon Monoxide Attainment Plan adopted in 1979 and amended in 1982 plus the Portland Area Carbon Monoxide Maintenance Plan adopted in 1996 applied a variety of control strategies to control CO emissions. Because motor vehicles generate the majority of CO emissions in the Portland area, control strategies focused on transportation control measures. EPA approved the attainment plan in October 1982. Strategies in that CO maintenance plan included:

- a. A vehicle inspection and maintenance program for vehicles registered in the control area. The program became mandatory in 1975 and required affected vehicles to pass a biennial emission inspection before being registered. In the program's first twelve years, the vehicle inspection program achieved more than a 25% reduction in CO emissions.
- b. Improved public transit in the Portland metropolitan area that included expanded service, a downtown transit mall, bus shelters, park and ride lots, exclusive bus lanes, and a "fareless square" area in downtown Portland.
- c. An area-wide carpool program offered by TriMet (the regional transit service) since 1974. The program encouraged ride-sharing and included a ride-matching service and incentives, such as reduced or free parking rates in downtown Portland for carpool vehicles.
- d. A light rail line linking downtown Portland to Gresham on the east side of the metropolitan area.
- e. Traffic flow improvements, including installation of computerized traffic signals and parking limitations on several streets in downtown Portland.
- f. Establishment of bicycle lanes and other programs to encourage cycling as a travel option.
- g. A downtown parking and circulation program that included a maximum number of parking spaces allowed in the downtown area, improved roads to divert traffic away from downtown, a program to encourage "employee flex time" by downtown businesses, etc.

h. Federal Motor Vehicle Emissions Control Program.

In addition to the control measures cited in the attainment plan, Portland implemented several projects after the original 1979 plan submittal that benefited air quality. These included:

- a. More transit improvements, especially a new route system for TriMet that increased ridership up to 25,000 passengers per day within 3 years of implementation.
- b. Increased bus purchases and service improvements.
- c. Transit fare incentives, including monthly bus passes at a reduced rate.
- d. More ramp metering at freeway entrances.
- e. Additional traffic flow improvements, especially the connection of traffic signals in the Coliseum area, Hall Blvd. by Tualatin Valley Hwy. and Denny Rd., construction of the Tualatin Bypass, and establishment of one way couplets in residential areas in Northwest Portland.
- f. McLoughlin Corridor Rideshare program.
- g. Employer bicycle planning project similar to rideshare program already in place.
- h. Legislation to encourage ridesharing.
- i. Shop and Ride program.
- j. City of Portland Bicycle Parking program.
- k. A program for flexible employee working hours.
- l. Traffic signal system project that more efficiently coordinated and interconnected traffic signals throughout Portland.
- m. Downtown Portland air quality plan under the CO attainment plan, including:
 - Maintaining a downtown parking inventory and establishing a maximum parking ratio.
 - Measures to improve downtown traffic circulation (e.g., improved road connections and limiting new off street parking facilities).
 - Measures to encourage employee flexible working hours.
 - Measures to promote bicycling.
 - Measures to encourage ridesharing.
 - Measures to improve transit.
- n. City of Portland employee travel project that included a reduction in work-related travel.
- o. Construction of Westside Light Rail.

4.58.4.1.2 1990 Clean Air Act Amendments

The 1990 Amendments to the Clean Air Act placed additional requirements on the Portland area. These included the following:

- a. 1990 emission inventory (to be revised every three years thereafter).
- b. Oxygenated gasoline.
- c. Vehicle Inspection and Maintenance Program modifications.
- d. Transportation Conformity Rules.
- e. New Source Review Rules for major sources.
- f. Contingency Measures.

4.58.4.2 Monitoring Network and Commitments

DEQ will continue to comply with the air monitoring requirements of Title III, Section 319 of the Clean Air Act. DEQ will continue to operate the monitoring sites in compliance with EPA monitoring guidelines set out in 40 CFR Part 58 "Ambient Air Quality Surveillance" and Appendices A through G of Part 58. In addition, DEQ will continue to comply with the "Ambient Air Quality Monitoring Program" specified in Volume 2, Section 6 of the SIP. Further, DEQ will continue to operate and maintain the network of State and Local Air Monitoring Stations (SLAMS) and National Air Monitoring Stations (NAMS) in accordance with the terms of agreement between DEQ and EPA Region 10.

4.58.4.3 Verification of Continued Attainment

DEQ will analyze CO air quality monitoring data once each year to verify continued attainment of the CO standard as required by 40 CFR Part 50 and EPA guidance. This data, along with data from previous years, will be used to determine whether the region continues to attain the NAAQS.

DEQ will also prepare an updated "growth factor" emission inventory summary if the second highest 8-hour CO concentrations exceed 85% (or 7.6 ppm) of the 9 ppm CO standard during any three year reporting period. Growth factor reporting year will be 2007, 2010, 2013 and 2016. The growth factor emission inventory updates will be submitted to EPA within 12 months following the end of the periodic emission inventory calendar year. In preparing the updates, DEQ will review the emission factors, rule effectiveness and penetration factors, and other significant assumptions used in the emission forecast. DEQ will confirm or adjust these factors if more accurate data are available. Any new emission sources will be included in the update. If the second highest 8-hour CO concentrations remain below 85% of the standard, no reports will be submitted.

DEQ will compare the updated emission summary to the emission inventory and forecast in Appendix E, Table 3 to evaluate any changes that have occurred. If there have been significant changes, DEQ will consult with EPA Region 10 to determine if a more extensive periodic emission inventory is necessary. If a more detailed inventory is needed, it will be submitted to EPA within 23 months after the end of the reporting year.

4.58.4.4 Maintenance Plan Commitments

As part of the CO maintenance plan, DEQ commits to do the following:

- If monitored CO concentrations exceed 85% of the 8-hour CO standard, DEQ will prepare periodic emission inventory updates for 2007, 2010, 2013 and 2016. (When required, the emission inventory updates will be submitted to EPA within 12 months following the end of the periodic emission inventory calendar year specified in Section 4.58.4.3);
- Report activity in the CO industrial growth allowance program for the periods 2005 -2007, 2008-2010, 2011-2013 and 2014-2016. (These reports will be submitted to EPA within 12 months following the end of each period.); and
- Maintain documentation of approved TCM substitutions as specified in Appendix D9-2.

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DIVISION 200
GENERAL AIR POLLUTION
PROCEDURES AND DEFINITIONS

340-200-0040

State of Oregon Clean Air Act Implementation Plan

- (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, 42 U.S.C.A. §§ 7401 to 7671q.
- (2) Except as provided in section (3), revisions to the SIP will be made pursuant to the Commission's rulemaking procedures in division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the United States Environmental Protection Agency for approval.
- (3) Notwithstanding any other requirement contained in the SIP, the Department may:
 - (a) 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, 2002); and
 - (b) Approve the standards submitted by a regional authority if the regional authority adopts verbatim any standard that the Commission has adopted, and submit the standards to EPA for approval as a SIP revision.

[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.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

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. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 17-1993, 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. & cert. ef. 3-21-94; DEQ 14-1994, f. & cert. ef. 5-31-94; DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 9-1995, f. & cert. ef. 5-1-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 19-1995, f. & cert. ef. 9-1-95; DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95; DEQ 8-1996 (Temp), f. & cert. ef. 6-3-96; DEQ 15-1996, f. & cert. ef. 8-14-96; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 23-1996, f. & cert. ef. 11-4-96; DEQ 24-1996, f. & cert. ef. 11-26-96; DEQ 10-1998, f. & cert. ef. 6-22-98; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 17-1998, f. & cert. ef. 9-23-98; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 21-1998, f. & cert. ef.

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10-12-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 5-1999, f. & cert. ef. 3-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 6-2000, f. & cert. ef. 5-22-00; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 13-2000, f. & cert. ef. 7-28-00; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 17-2000, f. & cert. ef. 10-25-00; DEQ 20-2000 f. & cert. ef. 12-15-00; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 16-2001, f. & cert. ef. 12-26-01; DEQ 17-2001, f. & cert. ef. 12-28-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2002, f. & cert. ef. 5-3-02; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 5-2003, f. & cert. ef. 2-6-03; DEQ 14-2003, f. & cert. ef. 10-24-03; DEQ 19-2003, f. & cert. ef. 12-12-03; DEQ 1-2004, f. & cert. ef. 4-14-04

DIVISION 204
DESIGNATION OF AIR QUALITY AREAS

340-204-0090

Oxygenated Gasoline Control Areas

(1) The following are oxygenated gasoline control areas until October 31, 2005: Clackamas, Multnomah, Washington and Yamhill Counties.

~~(2) The oxygenated fuel requirement also applies to any area formerly listed as nonattainment for carbon monoxide in 340-204-0030 and classified by EPA as moderate or worse, until EPA redesignates the area to attainment and repeals the oxygenated fuel requirement.~~

~~[NOTE: The department has submitted a request to the Environmental Protection Agency asking that the oxygenated fuel requirement be repealed in the Grants Pass Control Area and Klamath Falls Control Area. These areas remain Oxygenated Gasoline Control Areas and oxygenated fuel requirements continue to apply until such time as EPA approves the request for repeal. Contact the Air Quality Division's State Implementation Plan Coordinator for current information].~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.420

Hist.: DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0470; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 4-2001, f. & cert. ef. 3-27-01

DIVISION 242
RULES APPLICABLE TO THE PORTLAND AREA

340-242-0440

Industrial Growth Allowance Allocation

(1) The owner or operator of a proposed new major source or major modification emitting VOCs, NO_x, or CO, as identified in OAR 340-242-0400, may obtain a portion of any remaining emissions in the respective growth allowance based on the following conditions:

(a) Access is on a first-come-first-served basis, based on the submittal date of a complete permit application;

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- (b) Unused PSEL donation sources that meet the donation criteria specified in OAR 340-242-0420(2) have priority access to their respective growth allowance as a "tie-breaker" over non-donation sources; and
- (c) No single source may receive an emissions allocation of more than 50% of any remaining growth allowance, or up to 10 tons per year, whichever is greater. On a case-by-case basis, the Environmental Quality Commission may approve an emissions allocation of greater than 50% upon consideration of the following:
 - (A) Information submitted by the source to the Department justifying its request for exceeding the 50% emissions allocation, based on significant economic, employment, or other benefits to the Portland area that will result from the proposed new major source or major modification;
 - (B) Information provided by the Department on other known new major sources or major modifications seeking an emissions allocation from the same growth allowance; and
 - (C) Other relevant information submitted by the source or the Department.
- (2) To avoid jeopardizing maintenance of the ozone standard during the interim years of the plan, the Department will allocate only a portion of the VOC and NO_x growth allowances each year. The Department will track the use of emissions from the growth allowances and will notify unused PSEL donation sources by mail if either growth allowance is reduced by 50 percent. The amount of the growth allowance that can be allocated each year is identified in Section 4.50 of the **State Implementation Plan (SIP)**, which is on file with the Department.
- (3) The amount of the CO growth allowance that can be allocated is identified in the Portland Area Carbon Monoxide Maintenance Plan, Section 4.581 of Volume 2 of the State Implementation Plan on file with the Department.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040]

[Publications: The publication(s) referred to or incorporated by reference in this rules are available from the office of the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0740

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DIVISION 200

**GENERAL AIR POLLUTION
PROCEDURES AND DEFINITIONS**

340-200-0040

State of Oregon Clean Air Act Implementation Plan

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- (2) Except as provided in section (3), revisions to the SIP will be made pursuant to the Commission's rulemaking procedures in division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the United States Environmental Protection Agency for approval.
- (3) Notwithstanding any other requirement contained in the SIP, the Department may:
 - (a) 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, 2002); and
 - (b) Approve the standards submitted by a regional authority if the regional authority adopts verbatim any standard that the Commission has adopted, and submit the standards to EPA for approval as a SIP revision.

[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.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

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. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 17-1993, 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. & cert. ef. 3-21-94; DEQ 14-1994, f. & cert. ef. 5-31-94; DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 9-1995, f. & cert. ef. 5-1-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 19-1995, f. & cert. ef. 9-1-95; DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95; DEQ 8-1996 (Temp), f. & cert. ef. 6-3-96; DEQ 15-1996, f. & cert. ef. 8-14-96; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 23-1996, f. & cert. ef. 11-4-96; DEQ 24-1996, f. & cert. ef. 11-26-96; DEQ 10-1998, f. & cert. ef. 6-22-98; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 17-1998, f. & cert. ef. 9-23-98; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 21-1998, f. & cert. ef.

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10-12-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 5-1999, f. & cert. ef. 3-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 6-2000, f. & cert. ef. 5-22-00; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 13-2000, f. & cert. ef. 7-28-00; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 17-2000, f. & cert. ef. 10-25-00; DEQ 20-2000 f. & cert. ef. 12-15-00; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 16-2001, f. & cert. ef. 12-26-01; DEQ 17-2001, f. & cert. ef. 12-28-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2002, f. & cert. ef. 5-3-02; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 5-2003, f. & cert. ef. 2-6-03; DEQ 14-2003, f. & cert. ef. 10-24-03; DEQ 19-2003, f. & cert. ef. 12-12-03; DEQ 1-2004, f. & cert. ef. 4-14-04

DIVISION 204
DESIGNATION OF AIR QUALITY AREAS

340-204-0090

Oxygenated Gasoline Control Areas

(1) The following are oxygenated gasoline control areas until October 31, 2007: Clackamas, Multnomah, Washington and Yamhill Counties.

~~(2) The oxygenated fuel requirement also applies to any area formerly listed as nonattainment for carbon monoxide in 340-204-0030 and classified by EPA as moderate or worse, until EPA redesignates the area to attainment and repeals the oxygenated fuel requirement.~~

~~[NOTE: The department has submitted a request to the Environmental Protection Agency asking that the oxygenated fuel requirement be repealed in the Grants Pass Control Area and Klamath Falls Control Area. These areas remain Oxygenated Gasoline Control Areas and oxygenated fuel requirements continue to apply until such time as EPA approves the request for repeal. Contact the Air Quality Division's State Implementation Plan Coordinator for current information].~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.420

Hist.: DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0470; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 4-2001, f. & cert. ef. 3-27-01

DIVISION 242
RULES APPLICABLE TO THE PORTLAND AREA

340-242-0440

Industrial Growth Allowance Allocation

(1) The owner or operator of a proposed new major source or major modification emitting VOCs, NO_x, or CO, as identified in OAR 340-242-0400, may obtain a portion of any remaining emissions in the respective growth allowance based on the following conditions:

(a) Access is on a first-come-first-served basis, based on the submittal date of a complete permit application;

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- (b) Unused PSEL donation sources that meet the donation criteria specified in OAR 340-242-0420(2) have priority access to their respective growth allowance as a "tie-breaker" over non-donation sources; and
- (c) No single source may receive an emissions allocation of more than 50% of any remaining growth allowance, or up to 10 tons per year, whichever is greater. On a case-by-case basis, the Environmental Quality Commission may approve an emissions allocation of greater than 50% upon consideration of the following:
 - (A) Information submitted by the source to the Department justifying its request for exceeding the 50% emissions allocation, based on significant economic, employment, or other benefits to the Portland area that will result from the proposed new major source or major modification;
 - (B) Information provided by the Department on other known new major sources or major modifications seeking an emissions allocation from the same growth allowance; and
 - (C) Other relevant information submitted by the source or the Department.
- (2) To avoid jeopardizing maintenance of the ozone standard during the interim years of the plan, the Department will allocate only a portion of the VOC and NO_x growth allowances each year. The Department will track the use of emissions from the growth allowances and will notify unused PSEL donation sources by mail if either growth allowance is reduced by 50 percent. The amount of the growth allowance that can be allocated each year is identified in Section 4.50 of the **State Implementation Plan** (SIP), which is on file with the Department.
- (3) The amount of the CO growth allowance that can be allocated is identified in the Portland Area Carbon Monoxide Maintenance Plan, Section 4.581 of Volume 2 of the State Implementation Plan on file with the Department.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040]

[Publications: The publication(s) referred to or incorporated by reference in this rules are available from the office of the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0740

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DIVISION 200
GENERAL AIR POLLUTION
PROCEDURES AND DEFINITIONS

340-200-0040

State of Oregon Clean Air Act Implementation Plan

- (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, 42 U.S.C.A. §§ 7401 to 7671q.
- (2) Except as provided in section (3), revisions to the SIP will be made pursuant to the Commission's rulemaking procedures in division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the United States Environmental Protection Agency for approval.
- (3) Notwithstanding any other requirement contained in the SIP, the Department may:
 - (a) 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, 2002); and
 - (b) Approve the standards submitted by a regional authority if the regional authority adopts verbatim any standard that the Commission has adopted, and submit the standards to EPA for approval as a SIP revision.

[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.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

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. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 17-1993, 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. & cert. ef. 3-21-94; DEQ 14-1994, f. & cert. ef. 5-31-94; DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 9-1995, f. & cert. ef. 5-1-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 19-1995, f. & cert. ef. 9-1-95; DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95; DEQ 8-1996(Temp), f. & cert. ef. 6-3-96; DEQ 15-1996, f. & cert. ef. 8-14-96; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 23-1996, f. & cert. ef. 11-4-96; DEQ 24-1996, f. & cert. ef. 11-26-96; DEQ 10-1998, f. & cert. ef. 6-22-98; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 17-1998, f. & cert. ef. 9-23-98; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 21-1998, f. & cert. ef.

OREGON ADMINISTRATIVE RULES
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10-12-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 5-1999, f. & cert. ef. 3-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 6-2000, f. & cert. ef. 5-22-00; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 13-2000, f. & cert. ef. 7-28-00; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 17-2000, f. & cert. ef. 10-25-00; DEQ 20-2000 f. & cert. ef. 12-15-00; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 16-2001, f. & cert. ef. 12-26-01; DEQ 17-2001, f. & cert. ef. 12-28-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2002, f. & cert. ef. 5-3-02; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 5-2003, f. & cert. ef. 2-6-03; DEQ 14-2003, f. & cert. ef. 10-24-03; DEQ 19-2003, f. & cert. ef. 12-12-03; DEQ 1-2004, f. & cert. ef. 4-14-04

DIVISION 204
DESIGNATION OF AIR QUALITY AREAS

340-204-0090

Oxygenated Gasoline Control Areas

- (1) The following are oxygenated gasoline control areas until October 31, 2017: Clackamas, Multnomah, Washington and Yamhill Counties.
- ~~(2) The oxygenated fuel requirement also applies to any area formerly listed as nonattainment for carbon monoxide in 340-204-0030 and classified by EPA as moderate or worse, until EPA redesignates the area to attainment and repeals the oxygenated fuel requirement.~~

~~[NOTE: The department has submitted a request to the Environmental Protection Agency asking that the oxygenated fuel requirement be repealed in the Grants Pass Control Area and Klamath Falls Control Area. These areas remain Oxygenated Gasoline Control Areas and oxygenated fuel requirements continue to apply until such time as EPA approves the request for repeal. Contact the Air Quality Division's State Implementation Plan Coordinator for current information].~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.420

Hist.: DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0470; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 4-2001, f. & cert. ef. 3-27-01

DIVISION 242
RULES APPLICABLE TO THE PORTLAND AREA

340-242-0440

Industrial Growth Allowance Allocation

- (1) The owner or operator of a proposed new major source or major modification emitting VOCs, NO_x, or CO, as identified in OAR 340-242-0400, may obtain a portion of any remaining emissions in the respective growth allowance based on the following conditions:
 - (a) Access is on a first-come-first-served basis, based on the submittal date of a complete permit application;

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- (b) Unused PSEL donation sources that meet the donation criteria specified in OAR 340-242-0420(2) have priority access to their respective growth allowance as a "tie-breaker" over non-donation sources; and
- (c) No single source may receive an emissions allocation of more than 50% of any remaining growth allowance, or up to 10 tons per year, whichever is greater. On a case-by-case basis, the Environmental Quality Commission may approve an emissions allocation of greater than 50% upon consideration of the following:
 - (A) Information submitted by the source to the Department justifying its request for exceeding the 50% emissions allocation, based on significant economic, employment, or other benefits to the Portland area that will result from the proposed new major source or major modification;
 - (B) Information provided by the Department on other known new major sources or major modifications seeking an emissions allocation from the same growth allowance; and
 - (C) Other relevant information submitted by the source or the Department.
- (2) To avoid jeopardizing maintenance of the ozone standard during the interim years of the plan, the Department will allocate only a portion of the VOC and NO_x growth allowances each year. The Department will track the use of emissions from the growth allowances and will notify unused PSEL donation sources by mail if either growth allowance is reduced by 50 percent. The amount of the growth allowance that can be allocated each year is identified in Section 4.50 of the **State Implementation Plan (SIP)**, which is on file with the Department.
- (3) The amount of the CO growth allowance that can be allocated is identified in the Portland Area Carbon Monoxide Maintenance Plan, Section 4.581 of Volume 2 of the State Implementation Plan on file with the Department.

[NOTE: These rules are included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040]

[Publications: The publication(s) referred to or incorporated by reference in this rules are available from the office of the agency.]

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0740

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF MAKING) RESOLUTION NO. 04- 3457
RECOMMENDATIONS TO THE)
ENVIRONMENTAL QUALITY COMMISSION) Introduced by Councilor Park
OF THE STATE OF OREGON CONCERNING)
THE SECOND PORTLAND AREA CARBON)
MONOXIDE MAINTENANCE PLAN)

WHEREAS, in 1996 the Oregon Department of Environmental Quality prepared a draft Carbon Monoxide Maintenance Plan; and

WHEREAS, Metro reviewed the draft Plan, and, after consultation with the Joint Policy Advisory Committee on Transportation, adopted Resolution No. 96-2260, For the Purpose of Recommending to the Environmental Quality Commission the Transportation Control Measures (TCM's), contingencies, and emissions budgets to be included in the Portland Region's Ozone and Carbon Monoxide (CO) Maintenance Plans; and

WHEREAS, in 1996, the Oregon Environmental Quality Commission approved a Portland Area Carbon Monoxide Maintenance Plan and submitted the Plan to the United States Environmental Protection Agency (EPA); and

WHEREAS, on September 2, 1997 the EPA approved the Carbon Monoxide Maintenance Plan for the Portland, Oregon area; and

WHEREAS, the EPA and the Oregon Environmental Quality Commission agreed that an updated plan would be submitted to the EPA by the year 2005; and

WHEREAS, the Department of Environmental Quality is producing a draft Second Portland Area Carbon Monoxide Maintenance Plan; and

WHEREAS, while the subject of the Maintenance Plan is carbon monoxide, other pollutants including volatile organic compounds, oxides of nitrogen, air toxics such as benzene and acrolein and other emissions from transportation sources are of concern and can be ameliorated through local air quality actions; and

WHEREAS, the Oregon Administrative Rules for the Department of Environmental Quality concerning transportation conformity (OAR 340-252-0060) state that the metropolitan planning organization shall be responsible for: "(iv) Developing and evaluating TCMs in ozone and/or carbon monoxide nonattainment and/or maintenance areas"; and "(v) providing technical and policy input on emission budgets"; and

WHEREAS, the Transportation Policy Alternatives Committee, the Joint Policy Advisory Committee on Transportation and the Metro Council have reviewed and discussed the transportation aspects of the draft Second Portland Area Carbon Monoxide Maintenance Plan including transportation control measures, emission budgets, subregional areas and oxygenated fuels ; now therefore

BE IT RESOLVED,

1. The Metro Council recommends to the Environmental Quality Commission of the State of Oregon that the transportation control measures as listed in Exhibit A, be included in the Second Portland Area Carbon Monoxide Maintenance Plan.

2. The Metro Council will take the following actions and encourages and supports its local government partners and state and other regional agencies to:

a. continue support of efforts to develop and redevelop in centers and mixed use areas within the urban portion of the region by providing funding for, and cooperating, with the Transit Oriented Development program, the Regional Travel Options program, and any similar programs and projects in the urban area,

b. continue to implement the 2040 Growth Concept to encourage growth patterns that can be served by a balanced transportation system, including walking, biking, transit as well as motor vehicles in order to maintain air quality within the region as well as meeting other region-wide goals.

c. keep urban growth boundary and growth forecasts and allocations up-to-date and coordinated for use in future conformity determinations,

d. maintain support for the Portland Central City Transportation Management Plan, including its parking regulations, to encourage transit use, walking and biking as convenient and effective methods of transportation for people within the Central City area, recognizing that auto trips and goods movement via trucks will remain an important component of travel within the Central City. Any changes to parking regulations should strive to realize or exceed the existing central city parking assumptions of the regional transportation model, especially the parking, transit pass and fareless area factors.

e. maintain support of the Metro code provisions that regulate parking requirements for the region;

f. maintain and enhance support for the DEQ Employee Commute Option program to find ways of encouraging employers to provide ECO programs and advance the participation of employees in such programs.

3. The Metro Council recommends that the carbon monoxide motor vehicle emission budgets (winter, daily) for the region be set as follows:

2005	2010	2017
1,238,575 lbs	1,033,578 lbs	1,181,341 lbs

4. The Metro Council recommends that the emission set asides for industrial sources be set at 14,880 pounds per day of carbon monoxide or 2,700 tons per year.

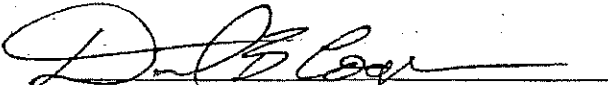
5. The Metro Council recommends that the subregional areas, namely, that area included in the Portland Central City Transportation Management Plan, and the 82nd Avenue subregion, not be included in the Second Portland Area CO Maintenance Plan and that the region not be required to complete additional air quality analyses for subregions over and above the required region-wide analysis.

ADOPTED by the Metro Council this 17th day of June, 2004.



David Bragdon, Council President

Approved as to Form:



Daniel B. Cooper, Metro Attorney

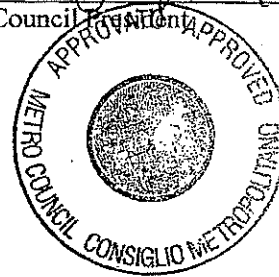


Exhibit A

Resolution No. 04-3457

**Transportation Control Measures Recommended for Inclusion in the Second
Portland Area Carbon Monoxide Air Quality Maintenance Plan**

1. Transportation Control Measures.

- a. a 5 year rolling average of 1.0 % per cent per year increase in regional transit revenue hours weighted by capacity, including the addition of Interstate MAX in 2004, between the years 2006 through 2017 ; and
- b. program at least 28 miles of bikeways or trails, consistent with State and regional bikeway standards between the years 2006 through 2017, including a cumulative average of 5 miles funded in each biennium from all sources in the MTIP, these facilities in addition to those required for expansion or reconstruction projects under ORS 366.514; and
- c. program at least nine miles of pedestrian paths in mixed use centers between the years 2006 through 2017, including the funding of a cumulative average of 1 ½ miles in each biennium from all sources in each MTIP, these facilities in addition to those required for expansion or reconstruction projects under ORS 366.514, except where such expansion or reconstruction is located within a mixed use center.

2. Contingent Actions.

- a. Metro will review the vehicle miles traveled per capita (vmt/capita) based on the most recent estimates of population and daily vehicle miles traveled from Federal, State sources, as reviewed and verified by Metro.
- b. Should reported vmt per capita exceed a rate of 21.5 vmt/capita (a 10 percent increase above the 2002 rate) for the Oregon portion of the Portland-Vancouver Air Quality Maintenance Area for two successive years, the following measures would become required TCM for the region:
 - i. Washington County Commuter Rail within six years after exceeding the 21.5 vmt/capita rate;
 - ii. I-205 LRT within six years after exceeding the 21.5 vmt/capita rate;
 - iii. an increase of efforts for the Regional Travel Options Program sufficient to increase the number of employers reached by the program by at least 5 % per year the number of employers currently subject to the DEQ Employee Commute

Exhibit A

Options program. Alternatively, specific projects from the Region Resolution No. 04-3457
Transportation Options program could be substituted.

iv. an increase of funding of at least 5 % per year greater than current funding for
Transit Oriented Development projects.

v. Other programs or projects consistent with State and Federal law as may be
determined by the Metro Council after consultation with the Joint Policy
Advisory Committee on Transportation.

c. Should vmt/capita exceed 20.5 daily vmt/capita (a 5 % increase above the 2002 rate)
for two successive years, the Standing Committee [TPAC, as defined at OAR 340-252-
0060 (2) (b) (A) (iii)] shall be convened to consider:

i) whether there is a data problem with the trigger; and,

ii) if there is not a data problem with the trigger, identification of and analysis of
effectiveness of those local actions that could reduce air pollutant emissions; and,

iii) whether a recommendation to initiate one or more of these local air quality
actions until the 2002 vmt/capita level is one again attained, should be made to
JPACT.

**Summary of Public Comment and Agency Response
 Portland Area Carbon Monoxide Maintenance Plan**

Prepared by: Dave Nordberg

Date: Nov. 24, 2004

<p><i>Comment period</i></p>	<p>The proposed 2004 Portland Area Carbon Monoxide (CO) Maintenance Plan ensures that the Portland area will continue to maintain CO standards through at least 2017, and makes a number of changes to the existing plan. These changes include discontinuing the wintertime oxygenated fuel requirement (effective October 31, 2005), updating the Motor Vehicle Emissions Budgets and Transportation Control Measures (TCMs), preparing for expected changes in how DEQ tests emissions of 1981 through 1995 vehicles, and continuing a growth allowance for new and expanding industry. The Department took public comment on the proposed plan from September 3, 2004, through 5:00 P.M. October 25, 2004.</p>
<p>Public Hearings</p>	<p>The Department of Environmental Quality (the Department) held one public hearing in Portland on October 20th. Nine people attended the October 20th public hearing with three people offering comments.</p> <p>The Environmental Quality Commission (the Commission) was provided an informational briefing on the CO plan and oxygenated fuel issue at their October 22nd meeting in Tillamook. This meeting offered the public an opportunity to comment directly before the Commission. Nine people provided comment at the Commission meeting, with two speaking for repeal of the oxygenated fuel mandate and seven speaking in support of retaining the mandate.</p> <p>In all, the Department received 270 comments on the proposed CO maintenance plan. While the maintenance plan contains a number of CO reduction strategies, the comments received were primarily focused on the proposal to eliminate the wintertime oxygenated fuel requirement. Twenty-four commenters advocated repealing the oxygenated fuel requirement and 245 urged that oxygenated fuel be retained. A few commenters also addressed other elements of the plan.</p>
<p>Organization of comments and responses</p>	<p>Summaries of comments received and the Department's responses are provided below. Comments are organized according to those that concern oxygenated fuel and those that relate to other matters. Within the oxygenated fuel group, comments are grouped into those that favor repealing the oxygenated fuel requirement and those who want the requirement to be retained.</p>

	<p>Those who submitted comments are listed at the end of this summary in one of three groups: organizations, public officials and private individuals. Commenters are shown together with a reference number that links them with the positions they hold. Private individuals that submitted comments are not listed separately, but rather are grouped according to the type of comment submitted (e.g., standardized email, or original letter).</p> <p>This summary includes comments expressed in a number of letters that were sent to the Department before the comment period officially opened. They are included in the record because copies of these letters were resubmitted to the Department by an oxygenated fuel advocate during the official comment period.</p> <p>All comments received have been reviewed by the Department and have been made part of the public record. In addition to this summary, a copy of the full record of public comments is available for inspection at the Department of Environmental Quality headquarters at 811 SW 6th Ave., 11th Floor, Portland, OR 97204. Photocopies of comments received are available for a fee.</p>
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Overview of Public Comments Received

The Portland Area CO Maintenance Plan published for public comment proposed a number of changes to the existing plan. All commenters except one addressed the Department's proposal to repeal the wintertime oxygenated fuel requirement. The proposed carbon monoxide (CO) plan would repeal the oxygenated fuel requirement, amend Motor Vehicle Emission Budgets, modify Transportation Control Measures, and incorporate expected changes to the Department's Vehicle Inspection Program. A few comments related to the general changes proposed for the plan, Transportation Control Measures, or technical corrections and clarifications.

Comments in favor of repeal of oxygenated fuel:

Organizations	8
Officials or Agencies	1
Letters and Emails from Individuals	15

Of the above, 2 letters addressed other issues. One supported the CO plan in general; the other suggested that Transportation Control Measures should be reconsidered.

Comments in favor of keeping oxygenated fuel:

Organizations	15
Officials or Agencies	9
Verbal Testimony Only	2
Letters and Emails from Individuals	77

Form letters	142
Comment both for and against oxygenated fuel	1
Other comment (clarifications corrections).	1
Total Comments:	271

I. Comments in Favor of REPEALING the Oxygenated Fuel Requirement

1. The oxygenated fuel requirement should be repealed because it is no longer needed to meet the air quality standard for CO. (Commenters: 1, 2, 3, 4, 5, 7, 9)

DEPARTMENT RESPONSE: The Department agrees. The oxygenated fuel requirement is a feature of the Portland CO Maintenance Plan, and is no longer needed to meet the air quality standard for CO. The oxygenated fuel requirement was mandated by the Clean Air Act for areas like Portland that did not meet the standard because Motor vehicles are the largest source of CO emissions, Since the requirement was implemented in 1992, CO levels declined significantly due to more stringent emissions standards for new motor vehicles. As new vehicles comprise a larger percentage of the Portland area fleet, oxygenated fuel is less effective at further reducing CO emission from motor vehicles. Current CO levels in Portland are less than half the standard, and the Department's projections show that emissions will continue to decline with or without the oxygenated fuel requirement.

2. It is important to recognize that repealing the oxygenated fuel requirement does not preclude fuel suppliers from using ethanol in fuel in the future. (Commenter: 4)

DEPARTMENT RESPONSE: The Department agrees. Fuel suppliers will continue to be able to blend ethanol into Oregon's fuel in volumes up to 10%. There are several reasons why fuel suppliers may continue to do so voluntarily. Those include ethanol's cost advantage, ethanol's octane-boosting properties as well as federal and state efforts to promote energy independence and support agricultural markets.

3. The experience of the Puget Sound area showed that carbon monoxide (CO) levels continued to fall after the oxygenated fuel requirement was lifted. (Commenter: 7, 8)

DEPARTMENT RESPONSE: The Department agrees. That trend is consistent with the Department's projections for the Portland area

which indicate future CO emissions will decline with or without oxygenated fuel. (Oxygenated fuel becomes less effective at reducing CO emissions as new, cleaner vehicles comprise an ever growing proportion of the area's fleet.)

4. The purpose of the wintertime oxygenated fuel requirement is compliance with the CO air quality standards. The influence of fuel ethanol on greenhouse gas emissions or air toxic emissions is more properly considered in other forums, such as the Oregon Department of Energy's Renewable Energy Advisory Committee, the Governor's Global Warming Advisory Group and the national energy bill. (Commenter: 7, 8)

DEPARTMENT RESPONSE: Department agrees that the oxygenated fuel requirement may produce many benefits beyond its original purpose of reducing CO concentrations and that other forums are available to consider those benefits.

5. Even with the elimination of the wintertime oxygenated fuel requirement in Portland, the demand for ethanol may be supported by possible national legislation requiring the use of 5 billion gallons of ethanol nationally per year. (Commenter: 7, 8)

DEPARTMENT RESPONSE: The provisions of a possible future energy law are speculative. The Department declines to predict how a potential future statute may relate to the oxygenated fuel requirement in the Portland area.

6. A new study shows that fuel blended with ethanol has higher evaporative losses (through permeation) than fuel without ethanol. (Commenter: 7)

DEPARTMENT RESPONSE: Vehicle emissions that occur through evaporation are a concern in controlling the precursors of ozone which is a summertime problem. This finding does not bear on the oxygenated fuel requirement for the Portland area which only applies from the beginning of November through the end of February.

7. The Commission should initiate rulemaking to replace or exceed any greenhouse gas reduction or air toxics benefits lost with the repeal of oxygenated fuel. (Commenter: 9)

DEPARTMENT RESPONSE: The Department acknowledges this request from Metro Council and the Joint Policy Advisory Committee on Transportation. The Department will discuss with the Commission in February 2005 the recommendations of the Governor's Advisory Group on Global Warming and the Department's role in implementing these initiatives.

8. Oxygenated fuel has significantly less energy content than conventional gasoline. That translates to lower gas mileage and higher cost for consumers. (Commenters: several citizens represented by reference number 10, 40)

DEPARTMENT RESPONSE: The Department agrees that fuel oxygenated with ethanol yields slightly lower mileage than conventional gas. Fuel ethanol, however enjoys a significant federal subsidy that has made ethanol cheaper than gasoline in recent years. To date, the cost differential between ethanol-oxygenated fuel and conventional gas at least partially offsets differences in the energy content of the two fuels.

9. Decreased gas mileage of oxygenated fuel actually causes more air pollution. (Commenter: Some of the citizens grouped under comment reference number 10)

DEPARTMENT RESPONSE: The Department disagrees. While oxygenated fuel does lower fuel efficiency, it produces lower CO emissions than conventional gasoline when considered over equivalent distances of travel.

10. By decreasing gas mileage, oxygenated fuel actually increases the nation's dependence on foreign oil. (Commenter: One citizen among those included under reference 10)

DEPARTMENT RESPONSE: The Department disagrees. Suppliers that use ethanol to meet the oxygenate requirement need to add 7.8% of the additive (by volume) to gasoline. The resulting fuel decreases mileage approximately 2% which results in a net reduction in the total amount of petroleum used.

11. Oxygenated fuel seems to make vehicles run poorly. (Commenters: Some of the citizens grouped under comment reference number 10)

DEPARTMENT RESPONSE: DEQ acknowledges a small number of vehicles experience poor performance due to incompatibilities between oxygenated fuel and the vehicle's mechanical design. The vast majority of gas-powered vehicles are compatible with the use of oxygenated fuel. Degraded operating characteristics with different fuels can indicate an underlying mechanical or adjustment problem.

12. The benefit of fuel ethanol in reducing the nation's dependence on foreign energy is exaggerated because 50% of the country's fuel ethanol is imported. (Commenter: One citizen among included under reference 10)

DEPARTMENT RESPONSE: The Department's recommendation to discontinue the oxygenated fuel requirement is due to the fact that it is no longer needed to meet the air quality standard for CO. The Department's recommendation is not based on what effect the requirement may have on the nation's energy independence.

13. Other states are banning Methyl Tertiary Butyl Ether (MTBE), which is one of two additives commonly used to oxygenate gasoline. That will increase the demand for ethanol—the oxygenating agent used in Oregon. With the increasing demand for ethanol, continuing the oxygenated fuel requirement could lead to ethanol shortages, price spikes, and increased use of MTBE in Oregon. (Commenters: 4, 8)

DEPARTMENT RESPONSE: The Department sees no evidence that retaining the Portland oxygenated fuel program will produce future ethanol shortages. California's MTBE ban took effect at the beginning of 2004 and the conversion to ethanol in California's gasoline was achieved without significant supply problems.

The vast majority of the area's gasoline is produced by four refineries in Washington State. Those refineries no longer produce MTBE, and the pipeline that connects those refineries to Portland prohibits MTBE from the system making significant use of MTBE in the Portland area unlikely.

14. California has petitioned EPA to waive the 2% oxygen requirement for gasoline used in that state is. That petition supports the proposed repeal of the Portland area oxygenated fuel requirement and is backed by several environmental or public interest groups. (Committer: 7)

DEPARTMENT RESPONSE: California's waiver request does not relate to the Portland area oxygenated fuel requirement. California's petition applies to federal requirements for Reformulated Gasoline (RFG) which is a strategy for controlling the summertime problem of ground-level ozone.

II. Comments in Favor of RETAINING the Oxygenated Fuel Requirement

15. The oxygenated fuel requirement should be retained because it will continue to have a positive affect on CO concentrations and our air can never be too clean. (Commenters: 11, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 40 and most of the commenters included in group 37)

DEPARTMENT RESPONSE: The use of oxygenated fuel in the Portland area would continue a small reduction in CO emissions. (Oxygenated fuel will reduce overall emissions by five percent per year.) In 1992, EPA reviewed the existing CO standard and concluded that the risk of adverse public health effects appears to be small at CO levels lower than the federal CO standard. Again, CO levels in the Portland area are projected to remain about half of federal standards, and CO emissions will continue to decrease with or without oxygenated fuel.

16. The oxygenated fuel requirement should be retained because it reduces carbon dioxide (CO₂) emissions which contribute to global warming. (Commenters: 11, 15, 17, 18, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 38 and some of the commenters included in group 37)

DEPARTMENT RESPONSE: The Department disagrees. The purpose of the wintertime oxygenated fuel requirement is compliance with the CO standards. The Department estimated that vehicle tailpipe emissions of CO₂ are not reduced from the use of fuel oxygenated with ethanol. A full lifecycle analysis of the production of ethanol fuel is generally considered to create less CO₂ emissions when compared to conventional gasoline, but estimates of the benefit vary widely. The use of fuel ethanol to reduce greenhouse gas emissions is being considered in other forums. The most notable of these is the Governor's Advisory Group on Global Warming.

17. The oxygenated fuel requirement should be retained because it reduces air toxics. (Commenters: 11, 17, 18, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 38 and some of the commenters included in group 37)

DEPARTMENT RESPONSE: The Department disagrees. The purpose of the wintertime oxygenated fuel requirement is compliance with the CO standards. The Department estimates that fuel oxygenated with 10% ethanol may reduce the relative toxicity of vehicle emissions approximately two to five percent during the oxygenated fuel season when compared to conventional gasoline. The Department also notes that this estimate includes a wide margin of error.

18. The oxygenated fuel requirement contributes to lower fuel prices because ethanol extends fuel supplies or is cheaper than gas. Therefore repealing the oxygenated fuel program could increase the price of gasoline. (Commenters: 11, 18, 25, 27, 28, 29, 30, 35, 38 and some of the commenters included in group 37)

DEPARTMENT RESPONSE: The Department disagrees. The repeal of oxygenated fuel would not necessarily affect local gasoline prices. While the Department is proposing to lift the obligation to use oxygenated fuel in the winter, fuel suppliers may choose to continue to blend fuel with ethanol to boost octane or provide a less expensive product as market forces dictate.

19. Several ethanol plants are proposed for construction in Oregon. The oxygenated fuel requirement provides a local market for ethanol and therefore supports economic development through construction of these plants. (Commenters: 11, 13, 15, 18, 21, 22, 23, 25, 27, 28, 29, 30, 33, 34, 35, 36)

DEPARTMENT RESPONSE: The Department recognizes that retaining the oxygenated fuel requirement may provide some secondary benefit to proposed ethanol plants in Oregon. However, it is clear that the wintertime oxygenated fuel requirement for Portland is no longer needed as a CO reduction measure. The development of the statewide ethanol industry is being stimulated by the Oregon Department of Energy (DOE) through various initiatives to support statewide economic development goals.

20. The oxygenated fuel regulation supports the use of ethanol which is a renewable fuel. (Commenters: 11, 14, 15, 17, 20, 22, 24, 25, 26, 28, 30, 31, 32, 36, 38 and many of the commenters included in group 37)

DEPARTMENT RESPONSE: The oxygenated fuel requirement has achieved its purpose as a CO reduction strategy. Repeal of the oxygenated fuel requirements would not hinder the continued development of ethanol as a renewable fuel for all of Oregon. The DOE presently encourages the use on renewable fuels through a number of market incentives. These include business and residential tax credits for renewable fuel equipment, the Small Scale Energy Loan Program and a property tax reduction for ethanol plants located in Enterprise Zones. DOE also recently submitted the Oregon Renewable Energy Action Plan for the Governor's consideration which provides recommendations for advancing the use of renewable fuels statewide.

21. The oxygenated fuel requirement supports the use of fuel ethanol and therefore makes the nation less dependent on foreign oil or oil in general. (Commenters: 14, 20, 38 and many of the commenters included in group 37)

DEPARTMENT RESPONSE: The Department does not know how repealing the Portland oxygenated fuel requirement may affect the nation's dependence on foreign oil. The Department acknowledges that the development of a statewide renewable fuels strategy could reduce reliance on petroleum.

22. The oxygenated fuel requirement should be retained because it helps extend the fuel supply, but fees on fuel terminals and distributors should be dropped. (Commenter: 12)

DEPARTMENT RESPONSE: The Department disagrees and sees no evidence that a repeal of the oxygenated fuel program would diminish the supply of fuel to the Portland area. If the oxygenated fuel requirement were retained, the Department would need to maintain fees to support issuing permits to terminals and distributors.

23. The oxygenated fuel requirement should be kept because it supports ethanol production in Oregon. That in turn will strengthen the market for Oregon wheat or benefit dairy farmers providing a local source of a high protein ethanol byproduct for cattle feed. (One commenter noted a byproduct of cheese production may in turn be used in the ethanol distillation process. (Commenters: 14, 16, 21, 22, 34, and some of the commenters included in group 37)

DEPARTMENT RESPONSE: The Department acknowledges the potential benefit for Oregon agriculture in the production of ethanol. However, as indicated earlier, the role of ethanol in Oregon and the economic benefits of its production are being addressed as part of the larger statewide effort on renewable fuels, coordinated by the Oregon Department of Energy. The wintertime oxygenated fuel requirement in Portland is a carbon monoxide reduction strategy that has achieved its purpose and is no longer needed to reduce CO.

24. EPA's computer model of mobile emissions (Mobile6) underestimates the CO and air toxic reduction benefits of oxygenated fuel. Test data from the Auto Alliance indicate that a 10% blend of ethanol reduces CO from newer cars by 30%. EPA's Complex Model [for reformulated gasoline] indicates a 10% ethanol blend reduces potency weighted air toxics approximately 25%. (Commenters: 19, 25)

DEPARTMENT RESPONSE: Mobile6 is EPA's officially approved model for estimating motor vehicle emissions and therefore is the

model that must be used to estimate motor vehicle CO emissions in the maintenance plan. As for air toxics, based on the Mobile6 model estimates, the Department believes that fuel oxygenated with ethanol may reduce the toxicity of motor vehicle emissions approximately two to five percent. However, it should be recognized that these estimates carry a high degree of uncertainty.

25. A memo dated March 7, 1996 from L.D. Hopkins of Texaco was submitted as evidence that the author saw the elimination of oxygenated fuel mandates as a significant step in increasing gasoline demand and improving the profit margins of West Coast refineries. (Commenter: 19)

DEPARTMENT RESPONSE: The Department has no corroborating information regarding what effect, if any, repealing the oxygenated fuel requirement may have on the profitability of West Coast refineries. Some related issues are discussed in the "Statement of Need and Fiscal and Economic Impact" (included as Attachment H),

26. The Department should apply a broad perspective in considering the proposed repeal of oxygenated fuel. Rather than addressing pollutants individually, the Department should assess the multiple beneficial effects of fuel oxygenated with ethanol on multiple pollutants and retain the current requirement. (Commenter: 27)

DEPARTMENT RESPONSE: The Department consulted with a variety of stakeholders and agencies and considered many issues related to the oxygenated fuel requirement, including the effect that lifting the requirement could have on other pollutants such as greenhouse gases and air toxics. The Department consulted with a variety of stakeholders and agencies in considering the issues involved in repealing the oxygenated fuel requirement. At this time, there is uncertainty as to what, if any, other air quality benefits are provided by the use of ethanol. The Department believes it is premature at this point to base its recommendation on potential and uncertain benefits that ethanol may have regarding air toxics and greenhouse gases. As stated previously, the role of ethanol in economic development and energy independence is being taken on at the state levels by the DOE. The Department's recommendation is based on its analysis showing that the oxygenated fuel requirement is no longer needed during the winter as a CO reduction measure.

27. Many legislators are interested in pursuing a statewide renewable fuels program. The oxygenated fuel requirement is a key component to any future plan and should be retained until a comprehensive renewable fuels program is fully implemented. (Commenter: 30)

DEPARTMENT RESPONSE: The Department supports the goals of a statewide renewable fuel policy, however, the Department recommends that the Commission repeal the wintertime oxygenated fuel requirement because it is no longer needed to meet the CO standard. The Department does not believe that this wintertime mandate should be retained as a surrogate for other objectives.

28. The oxygenated fuel requirement should be expanded to apply all year rather than the four coldest months and/or should be expanded to the rest of the state. (Commenters: 36 and some of the individuals included 37.)

DEPARTMENT RESPONSE: The Department cannot justify expanding the oxygenated fuel requirement to all months of the year on the basis of protecting human health from harmful exposure to CO.

III. Other Comments

29. Metro, the regional government and Metropolitan Planning Organization for the Portland area, recommends that the provisions of Metro Resolution 04-3457 be adopted as part of the Portland Area Carbon Monoxide Maintenance Plan. That specifically includes features of the proposed CO plan relating to Transportation Control Measures (TCMs), Motor Vehicle Emissions Budgets (MVEB), the Industrial Growth Allowance. (Commenter 9)

DEPARTMENT RESPONSE: The Department agrees. The Commission's rules on integrating air quality and transportation planning charge Metro with developing measures that reduce emissions by minimizing vehicle travel. The TCMs included in the Portland Area CO Maintenance Plan are the product of a series of public meetings, and were approved by JPACT and Metro Council in Resolution 04-3457

The Department notes that Metro was active in developing the transportation related elements of the CO plan and acknowledges the agency's support for the proposed plan.

30. The Department should reconsider those Transportation Control Measures (TCMs) proposed for the CO maintenance plan that emphasize the use of rail transit. Rail transit is expensive and may not achieve the air quality benefits expected because many riders first drive to a park and ride lot, and because Transit Oriented Developments may generate fewer riders than projected. (Commenter: 6)

DEPARTMENT RESPONSE: The Department disagrees. The transportation control measures (TCMs) in the plan were developed

by Metro, in consultation with DEQ. TCMs were subject to review and revision through a series of public meetings, and were approved by JPACT and Metro Council in Resolution 04-3457.

31. The Federal Highway Administration (FHWA) submitted technical comments suggesting 11 clarifications, corrections or improvements. The full text of these comments is available in the public record. (Commenter: 39)

DEPARTMENT RESPONSE: The Department incorporated these clarifications and corrections into the CO maintenance plan proposed for adoption by the Commission.

32. DEQ should work with the Legislature to ban MTBE. (Commenter: 17)

DEPARTMENT RESPONSE: If the Legislature introduces legislation, the Department will participate in discussions on the issue.

<i>List of Commenters and Reference Numbers</i>				
Reference Number	Name	Organization	Address	Date on comments
1	Jim Craven	American Electronics Association	5285 SW Meadows Rd. Lake Oswego, OR 97035	10-04-04
2	Greg Miller	Associated General Contractors (Oregon Columbia Chapter)	9450 SW Commerce Cr #200 Wilsonville, OR 97070	10-25-04
3	H. Daniel Sinks	ConocoPhillips Co.	3900 Kilroy Airport Way # 210 Long Beach, CA 90806	10-19-04
4	Steve O'Toole	Petroleum Association of Oregon	7070 SW Fir Loop, Suite 150	10-18-04 (rec'd)
5	Monty King	Oregon Independent Auto Dealers Assoc.	2582 19 th St., SE Salem, OR 97302	10-6-04
6	John Charles	Cascade Policy Institute	john@cascadepolicy.org	10-25-04
7	Brian Doherty	Western States Petroleum Association	c/o Miller Nash LLP 3400 US Bancorp Tower 111 SW Fifth Ave., Portland, OR 97204-3699	10-22-04 & 10-25-04
8	William Kidd (oral)	Western States Petroleum Association	c/o BP	10-20-04
9	David Bragdon & Rod Park	Metro Council & the Joint Policy Advisory Committee on Transportation	600 NE Grand Ave. Portland, OR 97232-2736	10-19-04
10	15 Individuals	None	Available in Rulemaking Record	various
11	Gary Neal	Port of Morrow	P.O. Box 200 Boardman, OR 97818	10-01-04
12	Frank Greinke	SC Fuels	1800 W. Katella Ave., Ste. 400	10-04-04
13	Judge Pryor	Eastern Oregon Rural Alliance	PO Box 427 Condon, OR 97823	10-04-04
14	Tammy Dennee	Oregon Wheat Growers League	115 SE 8 th St. Pendleton, OR	10-12-04

List of Commenters and Reference Numbers				
Reference Number	Name	Organization	Address	Date on comments
15	Lynn Lundquist	Oregon Business Association	6700 SW 105 th , Suite 108 Beaverton, OR 97008	10-15-04
16	Jim McMullen	Tillamook County Creamery Association	PO Box 313 Tillamook, OR 97141	10-18-04
17	Chris Hagerbaumer	Oregon Environmental Council	520 SW 5 th Ave., Suite 940 Portland, OR	10-19-04
18	John Hamilton	Treasure Valley Renewable Resources	PO Box 549 Fruitland, ID 83619	10-21-04
19	Tom Koehler	Celilo Group		10-22-04, 10-25-04
20	Rhett Lawrence	Oregon State Public Interest Research Group	1536 SE 11 th Ave. Portland, OR 97214	10-22-04
21	Katie Fast Dale Buck (oral)	Oregon Farm Bureau	3415 Commercial St., SE, #117 Salem, OR 97303	7-08-04 10-22-04
22	Rick Gustafson	Sheils, Oblitz & Johnsen	520 SW 6 th Ave., Suite 400 Portland, OR 97204	7-28-04
23	Peter K. Williamson	Port of St. Helens		7-27-04
24	Sharon Genasci	The Northwest District Association, Health and Environment Committee	1819 NW Everett St., #205 Portland, OR 97209	9-13-04
25	Charles Carlson	Cascade Grain Products	2813 SW Tolkien Lane Lake Oswego, OR 97034	10-19-04, 10-20-04, 10-22-04 & 10-25-04
26	Diane M. Linn Maria Rojo de Steffey Serena Cruz Lisa Naito Lonnie Roberts	Multnomah County Board of Commissioners	501 SE Hawthorne Blvd. # 600 Portland, OR 97214	9-23-04
27	Erik Sten	Portland City Commissioner	1221 SW 4 th Ave., Room 240 Portland, OR 97204	10-05-04
28	Bill Bradbury	Oregon Secretary of State	136 State Capitol Salem, OR 97310-0722	10-18-04
29	R. Thomas Butler	State Representative	900 Court St. NE H-289 Salem, OR 97310	10-21-04
30	Jeff Merkley Ginny Burdick Jackie Dingfelder Mary Nolan Carolyn Tomei Diane Rosenbaum Greg MacPherson Mark Hass Gary Hansen Steve March Mitch Greenlick Brad Avakian Charlie Ringo Avel Gordly	Oregon Legislators	900 Court St., NE Salem. OR 97301	10-22-04
31	Rob Drake	Mayor of Beaverton	PO Box 4755 Beaverton, OR 07076	4-19-04

List of Commenters and Reference Numbers				
Reference Number	Name	Organization	Address	Date on comments
32	Vera Katz Jim Francesconi Randy Leonard Dan Saltzman Erik Sten	Mayor and Portland City Commissioners	1221 SW 4 th Ave., Portland, OR 97204	5-14-04
33	Jeff Kropf	State Representative	900 Court St., NE Salem. OR 97301	6-16-04
34	Ted Ferrioli	State Senator	900 Court St., NE, S217 Salem. OR 97301	8-09-04
35	Debra Kafourey (oral)	Citizen		10-22-04
36	Neil Koehler (oral)	Kinergy		10-22-04
37	77 individuals who sent original letters or emails			9-03-04 to 10-18-04
38	142 individuals who sent an electronic form letter (134 emails have identical text, 8 have variations)			9-20-04 to 10-25-04
39	Michelle Eraut	Federal Highway Administration, Oregon Division	The Equitable Center, Suite 100 530 Center Street, NE Salem, OR 97301	10-22-04
40	Manfered Wiesel	individual		10-19-04

Agenda Item J, Rule Adoption: Portland Area CO Maintenance Plan
December 10, 2004 EQC Meeting

Attachment E
Page 1 of 4

State of Oregon
Department of Environmental Quality

Memorandum

Date: October 28, 2004

To: Environmental Quality Commission
From: Audrey O'Brien
Subject: Presiding Officer's Report for Rulemaking Hearing
Title of Proposal: Portland Area Carbon Monoxide Maintenance Plan
Hearing Date and Time: October 20, 2004, 2:00 to 2:30 p.m.
Hearing Location: DEQ Room 3A, 811 SW Sixth Avenue, Portland, OR,

The Department held the rulemaking hearing on the above titled proposal on October 20, 2004, beginning at 2:00 p.m. I was the hearing officer for this hearing. I informed people that the hearing would be recorded and that formal verbal comments would become part of the public record for the rulemaking. I informed the audience that the Department would evaluate all comments received and provide responses to the comments in the formal rulemaking package. I informed attendees that the formal public comment period would end on October 25, 2004 at 5:00 p.m.

Before beginning the formal hearing, Dave Nordberg presented information about the specific rulemaking proposal and procedures for the hearing. No one had questions for Dave after his presentation. The formal hearing started at 2:15 p.m. and ended at 2:30 p.m. Nine people attended. Three people provided formal verbal comments on the Portland Area Carbon Monoxide Plan.

Bill Kidd representing the Western States Petroleum Association submitted comments supporting the Department's recommendation to discontinue the oxygenated fuel mandate. He said there are other programs in Oregon looking at renewable energy.

Steve O'Toole as the Executive Director of the Petroleum Association of Oregon commented supporting the Department's position to eliminate winter oxyfuel requirement. The Petroleum Association of Oregon (PAO) is not anti-ethanol and supports research and development of alternative sources of energy. The PAO does not support the mandate of oxygenated fuel. PAO is concerned about the supply and transportation of ethanol and questions whether there will be enough supply of ethanol given an anticipated requirement for ethanol from Congress and from California's demand for ethanol.

Charles Carlson from Cascade Grain provided comments supporting retaining the oxygenated fuel requirement. He supports a ban on MTBE. The worldwide market has sufficient supply of ethanol to meet demand. He thinks that ethanol should not be removed from Portland until the Governor's Renewable Energy Plan that will mandate 10% ethanol use is in place.

The hearing transcript and written comments from the presenters are attached to this memo.

Memo To: Environmental Quality Commission

Page 2

PORTLAND AREA CARBON MONOXIDE MAINTENANCE PLAN
PUBLIC HEARING
October 20, 2004

Those attending were:

Audrey O'Brien, DEQ, Northwest Region, Air Quality Manager
Dave Nordberg, DEQ, HQ Air Quality Division
David Collier, DEQ HQ Air Quality Division
Brian Doherty, WSPA, 111 S. W. 5th Avenue, Portland, OR 97204
Bill Kidd, BP, 521-236th Street, N. W., Stanwood, WA. 93292
Paul Roman, PAO, 805 S. W. Broadway # 1900, Portland, OR 97205
Jim C. Jones, PAO, 650 15th Street, S. E., Salem, OR 97301
Charles Carlson, Cascade Grain, 2813 S. River Lane, Lake Oswego, OR 97034
Steve O'Toole, PAO 7070 S. W. Fir Loop, Suite 150, Tigard, OR 97223
Michelle Eraut, 530 Center Street, Suite 100, Salem, OR 97302
John Taylor, DEQ, Salem
Justin Klure, ODOE, Salem, 625 Marion Street, N. E., Salem, OR 97301

Today is Wednesday, October 20th and it's about 2:15 p.m. and my name is Audrey O'Brien. This is a formal public hearing for the Carbon Monoxide Maintenance Plan update. We're going to take formal comments now. The first person is going to be Bill Kidd. Would you please state your name?

Thank you. My name is **Bill Kidd**. I work for BP and today I'm representing the Western States Petroleum Association which represents most of the major oil producers in the region in the six western states. We're here today quite simply to support the recommendation from DEQ on discontinuing the oxygenated fuel mandate and obviously there are many parts of the plan and our comments are only to speak to the oxygenated fuel mandate. It's clear from information just presented that the DEQ has put together that it is no longer necessary to have a mandate to meet the federal CO standards. That's been the conclusion from as early as 1998. We have a great example of an analogous situation in Puget Sound. The oxygenate mandate was eliminated in 1996 in the Seattle metropolitan area and they also continue to seek CO reductions without oxy fuels. I think very important is the fact that recently Metro also supports the discontinuation of the oxygenate mandate. I'm providing you a copy here of an unsigned letter to EQC which Metro adopted at their October 19th work session and I will see that you get a signed copy of that as soon as possible.

As Mr. Nordberg pointed out there are a lot of reasons that people talk about whether or not there should be a mandate for ethanol here and here are the things about greenhouse gases and air toxics and several other issues there. Again, I applaud DEQ for just sticking to the facts and sticking to the science. We are talking about a CO mandate or CO maintenance plan here. It's clear from the data that oxygenated fuel is not necessary to be able to meet that mandate. There are other programs going on around the State Department of Energy here looking at renewables, the Governor's Global Warming Advisory Group. The National Energy bill has a lot of things about ethanol and bio-fuels and so there are many other forums in which the topic of ethanol use can be discussed. It's just not appropriate to do it with respect to the CO maintenance plan, in our opinion.

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Our industry has worked very closely with DEQ and EPA in a spirit of partnership. We've already seen significant gains in addressing air pollution issues through improved fuels. For example, now BP clean gasoline is available in Oregon through capital enhancements that we have made at our refinery in Cherry Point, Washington. Gasoline sold here meets all requirements of California's CARB Phase III which will have benefits in air toxics and other noxious emissions from cars. Also, ultra-low sulphur diesel is another important thing coming down the pike. Here in June 2006, diesel sold on the road will be significantly lower in sulphur content and so Portland and the state will see significant improvements in air quality without an ethanol mandate.

Audrey O'Brien: Thank you very much. Okay, next I have Steve O'Toole.

Steve O'Toole: Thank you very much. My name is Steve O'Toole. I'm the Executive Director of the Petroleum Association of Oregon. The PAO represents Oregon's petroleum distributors and retailers and is the new organization formed through the merger of the Oregon Petroleum Marketers Association and the Oregon Gasoline Dealers Association. The Petroleum Association of Oregon is in support of the DEQ position to eliminate the winter oxyfuel requirement because it is no longer needed and is outdated. As you know, Portland already meets the federal clean air rules for carbon monoxide and CO levels as has been presented continue to drop without the oxyfuel requirement, since computerized emission control equipment and better catalytic converters reduce emissions without extra oxygen.

We need to emphasize that this organization is not anti-ethanol or anti-renewable fuels. In fact, we do support the research and development of alternative sources of energy and members of our organization are currently selling bio-diesel. A couple of decades from now we certainly anticipate that our members could well be pumping hydrogen instead of gasoline. What is important to realize is that removing the oxyfuel requirement eliminates the mandate for ethanol. Controlling harmful emissions is the goal. The method of meeting emission requirements should not be an issue nor should it be a goal of the DEQ. Arguments for and against ethanol, and there are many of them on both sides of the issue really clouds the issue. The real issue is whether the oxyfuel requirements should be mandated during the winter months. Again, therefore, the argument is whether to eliminate the mandate, not a situation having to do with whether we should be using ethanol.

A major concern of this organization is the supply and transportation of ethanol. With various states banning the use of MTBE, including California and New York, supply becomes a very arguable issue. Current production at the end of 2003 was approximately 2.8 billion gallons of ethanol. As of May of 2004, our indications are that it's now up to about 3.3 billion gallons a year of ethanol again for the year 2004.

The House Senate Conference Committee energy reform bill called for a renewable fuels ethanol requirement of 5 billion gallons, and, therefore plus the recent events in New York and California I think that we can well see that there is a real question of whether we will have enough ethanol. The California Energy Commission also expects the demand for ethanol to more than double in that state. Under our current mandate, if the demand outstrips supply, we could see possible MTBE use in Oregon and/or the cost of gasoline spike, beyond the already high wholesale and retail price. We feel that our State government can't afford the high risk of a wholesale and retail gas price spike caused from a lack of ethanol that could be prevented by removing the mandate.

Thank you very much.

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Audrey O'Brien: All right. Does anyone else want to testify or provide formal comments today?

Charles Carlson: I'm here to not support the elimination of the oxygenated fuel requirement. I think oxygenated fuel reduces carbon monoxide greenhouse gases and other air toxics. Yes, we have reduced carbon monoxide a lot in EPA Region 10. However, from 1982 to 2001, we are still the second worst district of 10 as far as carbon monoxide even though we do meet those standards.

It's interesting to note that we've seen mandated ethanol in Minnesota and Chicago, in EPA Region 5, have the lowest CO concentrations. Yet I think throughout the state, you can actually see from the existing sites that Portland has some of the lowest CO emissions. I say that it's because of the continued use of ethanol. There are many reports out there that even new vehicles still show that tailpipe emissions are reduced up to 30% from ethanol. Taking ethanol out of that mix would cause carbon monoxide to increase even from those vehicles.

Total overall emissions may go down because of the age of the vehicles that get introduced into the area. Beyond the course of the carbon monoxide, I think we need to look at greenhouse gas emissions. Just recently California regulated greenhouse gas emissions from vehicles. If accepted by the automobile manufacturing industry and put into place throughout areas where CO is controlled, ethanol will be extremely important in reducing those greenhouse gas emissions. According to studies that are out there, we're looking to achieve up to 20 to 35% decrease in greenhouse gases because of ethanol. It's a renewable fuel. I agree with people who say that we should be worried about MTBE in our gas. I would hope that we would support some kind of a ban of MTBE in the state as 19 states have done throughout the country. Ethanol is a cost effective fuel additive. It's a clean additive and there are adequate supplies of ethanol throughout the United States like one man said, 3.4 billion gallons this year to many numerous projects on the table for being built added to that and we will probably go beyond the 5 billion gallons of ethanol mandate before the RFS is even enacted.

In addition, this is a world-wide market which has produced over 13 billion gallons of ethanol worldwide. We have seen this when imports from Brazil have helped meet the ethanol demand. Plus there is also the ethanol that comes in from the Caribbean initiative already that's 7% of the ethanol that's produced in the country. We have not seen any point in time where we have been low in ethanol and we can't meet supplies. Stocks remain consistent and can be used respectively in gasoline without a worry of running out. I also have to point to the Governor's Renewable Energy Plan that calls for a 10% mandate of ethanol in the State of Oregon by a certain timeframe. It's not effective right now to remove the ethanol mandate in Portland until that plan is in place and those can be dealt with by the Governor's Renewable Energy Plan.

Audrey O'Brien: Thank you very much. Is there anyone else who wishes to provide formal comments today? All right, at this point I am going to close the formal comment period and public hearing testimony on the CO Maintenance Plan. It's almost 2:30.

Summary of testimony to EQC, 10/22/2004

Summarized by Susan Drake

Bill Bradbury, Oregon Secretary of State:

Supports keeping oxygenated fuel requirement in CO maintenance plan.

Program saves taxpayer money by lowering price of gas. Renewable fuel production in Oregon can create jobs. For every 1 billion dollars of investment in the renewable energy sector over 20,000 jobs are created. We could put a biorefinery in every county of the state.

The program enjoys support from a very broad cross-section of Oregonians including both Democratic and Republican legislators, farm organizations, environmental organizations and local government, both rural and urban.

Climate change is arguably the most important environmental issue facing the entire planet and the oxygenated fuels program supports the Governor's initiative on climate change. The Governor has set a priority for the creation of jobs through a renewable economy and the program is consistent with and supports this goal as well.

Mr. Bradbury encourages the Commission to keep the program in Portland and suggests that it should be expanded to include Medford and the entire state. Urges the Commission to continue the program in the next 10-year CO maintenance plan.

Dale Buck, Oregon Farm Bureau (filling in for Katy Fast):

Supports keeping oxygenated fuel requirement in CO maintenance plan.

Mr. Buck is a retired dairy farmer who lives in Cloverdale, OR. and a board member of the Oregon Farm Bureau representing Tillamook and Clatsop counties. Mr. Buck testified that Katy Fast sent a letter to DEQ Director Stephanie Hallock dated July 8, 2004. This letter, sent on behalf of the Oregon Farm Bureau, encouraged DEQ to keep the oxygenated fuels program. Distiller products are important to dairy farmers. Currently these products must be shipped in from other parts of the country and sometimes the supply is not very good. Dairy farmers in these counties are very interested in seeing an ethanol plant nearby so they can have the distiller's by-products and support the goal of renewable energy. Corn and hay farmers in the valley have had some concerns that this might take away from their business, but Mr. Buck emphasized that as a by-pass protein product, dairy cows are only fed about 5 lbs. per cow per day and that this shouldn't affect the on-going need for corn and hay.

Tom Koehler, Celilo Group:

Supports keeping oxygenated fuel requirement in CO maintenance plan.

Presented the Commission with a stack of support letters, including letters from OSPIRG and the Oregon Environmental Council and encouraged them to their importance as part of the decision making process. He discussed how Oregon has always prided itself by going beyond federal standards, how it's good for health and economic development. The large CO cushion means more industry can locate here without having to buy expensive offsets.

Provided the Commission with copies of a new study by the National Academy of Sciences which specifically was looked at air quality management in the US. The study concluded that programs that focus exclusively on one pollutant at a time have created an ineffective, inefficient and costly manner of doing business. The study encourages air quality regulators to look at a multi-pollutant strategy whenever they're looking at air quality regulations. Specifically, setting standards, planning and control strategies for criteria pollutants and HAPS have largely focused on single pollutants instead of potentially more protective and more cost effective multi-pollutant strategies.

The study concludes that an integrated assessment that considers multiple pollutants and multiple effects on health, ecosystems and global climate change in a single approach is needed. Mr. Koehler argues that the study is right and that this case is the first way to address these issues.

Charles Carlson, President, Cascade Grain Products:

Supports keeping oxygenated fuel requirement in CO maintenance plan.

See attached comments. Additional testimony:

- Oxygenated fuel reduces CO, greenhouse gases and air toxics and should be maintained in the plan.
- Currently in EPA Region X ranks second worst in the country based on EPA air trends data on carbon monoxide from 1982 – 2001. The best area is Region V which is Minnesota with mandated 10% ethanol throughout the state plus they receive benefit of Chicago ethanol blending.
- By comparing Portland to other regions in the state, it is clear that Portland's CO levels have decreased with the use of oxygenated fuels.

DEQ states that oxygenated fuel continues to lower CO emissions by about 5%. In an article titled AQ and Ethanol in Gasoline author Gary Whitman says that ethanol creates up to 30% reductions even in new vehicles. The University of North Dakota focused on 2004 low emission vehicles in their study to be published shortly and this shows an almost 36% CO reduction tail pipe emissions from a 10% ethanol blend.

Question: Was the article by Gary Whitman reviewed or published?

Answer: This article is off of the Renewal Energy website.

Question: But not a journal?

Answer: Not that I know of.

Ethanol reduces the cost of gasoline, reduces carbon monoxide, CO₂, particulate matter, SO₂. It reduces our reliance on foreign oil. Let's do here what's been done in Minnesota. We should keep winter time oxygenated fuel at least until the Governor's plan, which includes mandates a 10% blend. We should ban MTBE.

Question: What's in the Governor's plan to put something like this in place?

Answer: The plan states that transportation fuels all petroleum diesel sold in the state of Oregon should be 5% biodiesel by 2010, 20% by 2025. All standard gasoline will contain 10% ethanol by 2010. Five percent of all gasoline in Oregon will be an 85% ethanol/15% gasoline by year 2015 growing to 15% by 2025. Ten percent of state government's transportation fuel needs will be met by biofuels by 2010 growing to 25% by 2025.

Comment: I want to be sure that you knew that we have recently been down to Port Westward and Columbia County and certainly have presentations about economic need in those communities. We did approve the developments which will enable both breaking ground. We are familiar with the ethanol plant.

Steve O'Toole, Executive Director, Petroleum Association of Oregon:

See attached comments. Additional testimony:

Support DEQ decision to remove oxygenated fuels requirement because it is no longer needed and is outdated.

Question: What is the federal subsidy for ethanol? How does it work?

Answer: Fifty-two cents per gallon. When they blend the ethanol and gasoline they apply it to the credit and the filling industry gets the credit back to reduce the cost of the ethanol they blended. And then they pass it on to whomever they are buying the ethanol from.

Question: Can you identify the waiver California has applied for?

Answer: They are trying to ask for a waiver from the mandate because they are not in attainment of their 2% blending requirement. They are required to use oxygenates in nonattainment areas. They have banned MTBE and are hoping they can get a waiver from the oxy fuel requirement until their market stabilizes.

Comment (Annette): The issue in California is reformulated gasoline which is intended to reduce summertime ozone. There is an oxygenate component to reformulated gasoline

that California has requested a waiver for and the basis of their waiver is that they will still meet the performance standard for ozone without the 2% oxygenate. It's not a CO issue. This applies too all ozone nonattainment areas in California.

Brian Doherty, Miller Nash Law Firm, Representing Western States Petroleum Organization:

Support DEQ decision to remove oxygenated fuels requirement because it is no longer needed.

See attached comments.

Shawn Reiersgaard, Environmental and Political Director, Tillamook County Creamery Association:

Supports keeping oxygenated fuel requirement in CO maintenance plan.

Dairy coop works to improve water quality, preserve farm land and use environmentally friendly chemicals. Good stewardship of resources is what makes Oregon such a great place to live and sets Tillamook dairy products apart. The Portland area oxygenated fuel program compliments their efforts. Dairy Institute is interested because our expanding cheese production would benefit because one of our waste products could be incorporated into to dairy cattle feed.

Question: Are you going to feed the mash to dairy cattle?

Answer: Yes.

Question: Not just Tillamook but also in Boardman and Idaho?

Answer: In Tillamook we have 145 dairies and have a plant in Boardman which produces the same amount of cheese that we produce here. We really are expanding and look forward to expanding further in Oregon.

Debra Kafoury, former State Representative from Portland, OR

Supports keeping oxygenated fuel requirement in CO maintenance plan.

Presented Commission with letter signed by 14 members of Oregon State Legislature from the Portland area. The letter supports continuing oxygenated fuel program. One of our key economic strategies is that Oregon is a clean place to live with progressive environmental regulation. The regulation saves Oregon tax payers money at the pump and oil companies make money on every gallon of ethanol they sell. It is a win-win program and should remain in place.

Question: How does the regulation save Oregon tax payers money at the pump?

Answer: The price of ethanol is 30 cents per gallon cheaper than gas.

Neil Koehler, Kinergy (producer and marketer of ethanol)

Supports keeping oxygenated fuel requirement in CO maintenance plan.

Kinergy sells ethanol in Oregon and California. Ethanol is the cheapest oxygenate in California. Ethanol is fastest growing transportation fuel. Need to find as many alternatives to petroleum as possible. Ethanol production is increasing, crude oil production in the US is rapidly declining. We have no options at the pump currently other than gasoline. Supports year round, state-wide oxygenated fuel requirements.

Encourages Commission to extend the program for the 10 year life of the CO maintenance plan with some added instruction or recommendation supporting renewable fuels standard which includes incentives.

Question: Who do you represent?

Answer: I am a distributor of ethanol with plans to build an ethanol plant in California and also looking for opportunities in Oregon.

Question: What would you use as feedstock?

Answer: In the past we have used waste products from the food and beverage industry and the plant we're working on in Fresno is a corn ethanol plant.

Question: If you add in the tax break then ethanol is about the same price as gasoline?

Answer: Yes. The cost is with the tax credit included.

Question: What is the alkylate that you mentioned? Is it an oxygenate?

Answer: It is not an oxygenate so it doesn't meet the oxygenate standard in California, but it is a component of gasoline. An alkylate is one of the compounds that comes off of the crude oil that has characteristics that make it more cleaner burning than some other components of gasoline. It is high octane and relatively non-toxic compared to some other components of gasoline. It is one way refiners meet clean air rules.

Question: I have only heard ethanol and MTBE mentioned as oxygenates. Are there others?

Answer: No. Ethanol is the only practical alternative to MTBE.

Comment: Regarding public input process, more than 200 letters in support of keeping oxygenated gas and 18 in support of getting rid of it. There is overwhelming support for keeping the program.

Comment: The oil industry is in support of getting rid of the mandate. Most other groups without self-interest overwhelmingly support the program.

Relationship to Federal Requirements

Portland Area Carbon Monoxide Maintenance Plan

Answers to the following questions identify how the proposed rulemaking relates to federal requirements and potential justification for differing from federal requirements. The questions are required by OAR 340-011-0029.

1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?

Yes. The Portland Area was redesignated to “attainment” of the National Ambient Air Quality Standard for carbon monoxide (CO) in 1997. As a condition of redesignation, the Oregon Department of Environmental Quality (DEQ) prepared the first Portland Area Carbon Monoxide Maintenance Plan that demonstrated how the region would continue to meet the CO standard until 2007. Section 175A of the Clean Air Act requires that a second maintenance plan be submitted to the U.S. Environmental Protection Agency (EPA) eight years after redesignation to ensure that the region will continue to achieve the air quality standard for an additional ten year period. This Portland Area Carbon Monoxide Maintenance Plan is developed to meet that requirement and is due to be submitted to EPA by December 31, 2004.

2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?

The requirements for this CO maintenance plan are performance based. The Clean Air Act requires an area that is subject to a maintenance plan to implement strategies that will control pollution emissions sufficiently to meet the air quality standard throughout the maintenance period but does not dictate which strategies must be implemented. An exception to this applies if a maintenance area violates the air quality standard during the life of the maintenance plan. In that event, the Clean Air Act specifies that any control strategies that were removed upon redesignation to attainment must be reinstated.

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. The Clean Air Act specifically allows the removal of the oxygenated fuel requirement once it is no longer needed to maintain the federal air quality standards. In addition, the federally mandated air quality plans rely on emission reduction strategies that are developed locally.

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?

Adoption of the updated maintenance plan fulfills a Clean Air Act requirement and establishes a regulatory framework that will remain in place until 2017. The plan preserves the industrial source requirements of the first plan. Therefore, the CO maintenance plan promotes a predictable and stable regulatory environment.

5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?

The new CO maintenance plan needs to address the ten year period from 2007 to 2017 but is developed to take effect by the end of 2005. This early implementation of the plan will allow the updated Motor Vehicle Emissions Budget to be approved by late 2005, when it is needed to allow Metro to adopt the the 2006-2009 Metropolitan Transportation Improvement Program.

6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?

Yes. The emissions forecast in the updated CO maintenance plan accounts for anticipated future growth. Pollution control strategies in the CO maintenance plan also contribute to decreasing concentrations of CO projected in the future. This allows the CO maintenance plan to accommodate future industrial growth through a CO growth allowance for the Portland area.

In addition, federally-mandated transportation conformity rules require that motor vehicle emissions produced by an area's future transportation system remain within the amount anticipated by an air quality plan. Those limits are defined by amounts cited in the Motor Vehicle Emissions Budgets. The favorable level of future emissions allows the new Motor Vehicle Emissions Budgets to include a comfortable safety margin. That safety margin will decrease the potential of future transportation conformity problems.

7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)

Yes. The proposed CO maintenance plan continues to focus on the most significant sources of CO (motor vehicles).

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. The proposed CO maintenance plan maintains the procedural, monitoring and reporting requirements of the Clean Air Act, EPA policies and the current CO maintenance plan.

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?

Yes. This CO maintenance plan includes Transportation Control Measures (TCMs) which are strategies that prevent pollution by reducing vehicle use, such as increased transit service. Because motor vehicles generate a number of pollutants, the TCMs provided to reduce CO will also reduce other mobile source emissions. These include reductions in a group of harmful compounds known as air toxics and ozone precursors.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340
Proposed Rulemaking
STATEMENT OF NEED AND FISCAL AND ECONOMIC IMPACT
 This form accompanies a Notice of Proposed Rulemaking

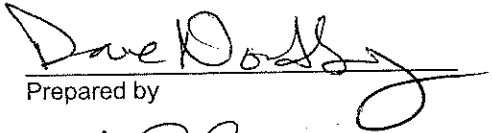
Title of Proposed Rulemaking:	Portland Area Carbon Monoxide Maintenance Plan
Need for the Rule(s)	The federal Clean Air Act requires a maintenance plan to demonstrate how the Portland area will stay below the National Ambient Air Quality Standard for carbon monoxide until 2017.
Documents Relied Upon for Rulemaking	Clean Air Act of 1990; the initial Portland Area Carbon Monoxide Maintenance Plan adopted Jul. 12, 1996 and approved by EPA to be effective Oct. 2, 1997.
Fiscal and Economic Impact	
Overview	<p>The proposed carbon monoxide (CO) maintenance plan modifies existing requirements in the three areas described below.</p> <p>Oxygenated Fuel: Effective October 31, 2005, the proposed 2004 Portland CO maintenance plan rescinds the existing requirement to use oxygenated fuel in the Portland area during four winter months. This means that fuel suppliers will no longer be required to blend wintertime fuel with an oxygen-enhancing additive. Ethanol has been the fuel additive used in the Portland area to meet the oxygenated fuel requirement. After October 31, 2005, the addition of ethanol (or any oxygenate) will no longer be required. Eliminating the requirement for oxygenated fuel may affect the local ethanol industry by reducing ethanol demand. Eliminating the requirement may provide potential savings to the petroleum industry.</p> <p>Although the oxygenated fuel requirement is being repealed, fuel suppliers may choose to continue to blend gasoline with ethanol for other reasons. These include the fact that ethanol boosts a fuel's octane rating, and that the federal government pays a 52¢ per gallon subsidy for each gallon of ethanol blended in fuel. This rulemaking may have no fiscal impact if fuel suppliers choose to continue blending gasoline with ethanol after the oxygenated fuel requirement is eliminated.</p> <p>There is limited information available to DEQ to provide a forecast of the financial effects of lifting oxygenated fuel in the Portland area. Fiscal impacts to fuel industries and the public depend greatly on whether the petroleum industry chooses to continue to blend fuel with ethanol, which in turn depends on market forces such as future prices for ethanol and conventional gasoline, the demand for ethanol as an octane enhancement, the proprietary market strategies of individual companies, or other issues related to the use of ethanol as a renewable fuel.</p> <p>DEQ is unable to predict how the petroleum industry and ethanol markets will adjust if the wintertime oxygenated fuel requirement is eliminated. However, motorists that change from oxygenated fuel to conventional gasoline are expected to realize an average improvement in fuel economy of approximately 2%.</p> <p>Transportation Control Measures (TCMs): TCMs are strategies that reduce vehicle emissions by reducing vehicle use. Under local transportation plans, designated TCM projects receive high priority for funding and implementation. The proposed CO plan</p>

	<p>designates three TCMs. Four additional contingent TCMs will be triggered if the average Vehicle Miles Traveled (VMT) per capita in the Portland area increases 10% over a 2002 baseline value. Identification of a project as a TCM has financial ramifications described in the section on local governments, below.</p> <p>Vehicle Inspection Program: The CO maintenance plan sets the stage for potential future changes to the Vehicle Inspection Program (VIP) by demonstrating that changes to the vehicle test procedures will not jeopardize the CO reduction strategy. The CO maintenance plan however, does not change the current VIP program, and therefore has no new fiscal impact.</p> <p>Note: ORS 183.335(2)(G) requests public comment on whether other options should be considered for achieving the plan's substantive goals while reducing negative economic impact of the plan on business.</p>
<p>General public</p>	<p>Oxygenated Fuel: Fuel suppliers may choose to continue selling fuel blended with ethanol after the wintertime requirement is removed, or may eliminate the use of ethanol as market forces dictate. If fuel suppliers discontinue the use of ethanol, the general public will likely see an approximate two percent increase in fuel economy (according to EPA) that may produce modest savings.</p> <p>Transportation Control Measures (TCMs): Designating existing transportation projects as TCMs will not have an economic effect on the general public.</p> <p>Vehicle Inspection Program: DEQ is currently evaluating the option to simplify the emissions test that applies to 1981 to 1995 vehicles. The CO maintenance analysis shows that simplifying this test will not jeopardize the Portland CO strategy. While this potential change is reflected in the CO plan analysis, the CO maintenance plan does not make changes to the VIP program. Changes to vehicle test procedures must also be evaluated in light of the affect on Portland ozone concentrations. The CO plan's evaluation of potential changes to VIP requirements has no fiscal impact on the VIP program or public.</p>
<p>Small Business</p>	<p>Oxygenated Fuel:</p> <p>Ethanol Industry: The value of the local ethanol market has ranged in recent years from approximately \$76-\$99 million per year, depending on the price of ethanol.</p> <p>Conclusion: The effect of eliminating the oxygenated fuel requirement is uncertain. Although this proposal eliminates the requirement for oxygenated fuel, the petroleum industry may choose to continue to blend gasoline with ethanol for other reasons, including price, octane enhancement, federal incentives (ethanol tax credit) and other market considerations. The continued demand for ethanol in the Portland area will depend on these factors.</p> <p>Fuel distributors & dealers: After the oxygenated fuel requirement is lifted in October 2005, 24 fuel distributors operating in the Portland area will no longer need an annual \$250 oxygenated fuel permit from DEQ. Removing the requirement will allow local distributors and dealers the flexibility to choose between oxygenated and conventional fuels as varying fuel prices make one or the other more attractive. The financial effect of this additional flexibility can not be quantified.</p> <p>Transportation Control Measures (TCMs): None</p> <p>Motor Vehicle Emissions Budgets (MVEBs): None</p> <p>Subregional MVEBs: None</p> <p>Vehicle Inspection Program: None</p>

<p>Large Business</p>	<p>For purposes of this analysis, large businesses are those with 50 or more employees.</p> <p>Oxygenated Fuel:</p> <p>Petroleum Industry: Large petroleum businesses include refiners, oil companies and large retailers. Eliminating the oxygenated fuel requirement will provide more flexibility for fuel providers because they will not have to supply a different type of gasoline for the Portland area than is used in the surrounding region. The petroleum industry will be able to use ethanol in its fuel when it is economically favorable to do so. In addition, since oxygenated and conventional fuels are each divided into three grades (regular, mid-grade and premium) shipping, handling and storing both oxygenated and non-oxygenated fuels involves handling six separate products. If oxygenated fuel is no longer required, shipping, handling and storage processes will be less complex and less expensive to manage.</p> <p>Conclusion: DEQ cannot predict how repealing the oxygenated fuel requirement may affect the ethanol or petroleum industries. The Portland ethanol market could be reduced substantially or may remain unchanged depending on market strategies within the petroleum industry.</p> <p><u>Fuel Terminal Operators:</u> Eliminating the oxygenated fuel program in October, 2005 means 13 fuel terminal operators will no longer need an annual \$2500 permit from DEQ, and will have more flexibility in the fuel they can provide to the Portland area.</p> <p>Transportation Control Measures (TCMs): None</p> <p>Motor Vehicle Emissions Budgets (MVEBs): None</p> <p>Subregional MVEBs: None</p> <p>Vehicle Inspection Program: None</p>
<p>Local Government</p>	<p>Oxygenated Fuel: Effects are the same as for the general public.</p> <p>Transportation Control Measures (TCMs): TCMs have the potential to affect Metro as the local Metropolitan Planning Organization (MPO), which is has authority for transportation planning under the federal transportation act, as well as local governments in the Portland area. Under the transportation conformity rules, designating a project as a TCM requires that project be implemented in a timely manner. If the TCM is not implemented as planned, the MPO may not be able to demonstrate conformity with the air quality plan. This could prevent approval and funding of new transportation plans or projects until the matter is resolved.</p> <p>The benefit however, of identifying a project as a TCM is the ability to continue funding and implementation of the TCM project, even if other projects are delayed due to conformity problems (provided the TCMs meet certain criteria).</p> <p>TCM strategies in the 2004 Portland CO maintenance plan were developed through public meetings of the Transportation Policy Alternatives Committee, Joint Policy Advisory Committee on Transportation and Metro Council between February and June of 2004. TCMs included in the plan are those adopted by Metro Council on June 17, 2004.</p> <p>Motor Vehicle Emissions Budgets (MVEBs): The MVEBs in the proposed plan update the existing budgets to reflect the new emission estimates of Mobile6--EPA's current computer program for estimating vehicle emissions. Should adoption of the new budgets be significantly delayed, Metro will be unable to demonstrate conformity and the Metropolitan Planning Organization would be unable to approve new projects until the matter is resolved. Apart from that possibility, the budgets are not expected to constrain the future transportation</p>

	<p>system and therefore will not have economic effects.</p> <p>Subregional MVEBs: Removal of the Subregional Motor Vehicle Emissions Budgets will relieve the Metropolitan Planning Organization (Metro) from the need to demonstrate that vehicle emissions in the two subregions conform to the CO Maintenance plan when adopting a new Regional Transportation Plan or Transportation Improvement Program. This change is estimated to save Metro an approximate average of 20 hours of technical staff effort per year or about \$1600.</p> <p>Vehicle Inspection Program: None</p>
<p>State Agencies</p>	<p>Oxygenated Fuel: Effects are the same as for the general public.</p> <p>Transportation Control Measures (TCMs): None</p> <p>Motor Vehicle Emissions Budgets (MVEBs): None</p> <p>Subregional MVEBs: None</p> <p>Vehicle Inspection Program: None</p>
<p>DEQ</p>	<p>Oxygenated Fuel: Once the oxygenated fuel requirement is removed, DEQ will lose \$38,500 in annual permit fees used to support the oxygenated fuel program. This loss reflects approximately 0.4 of a Full Time Employee.</p> <p>Transportation Control Measures (TCMs): None</p> <p>Motor Vehicle Emissions Budgets (MVEBs): None</p> <p>Subregional MVEBs: None</p> <p>Vehicle Inspection Program: None</p>
<p>Other agencies</p>	<p>Oxygenated Fuel: The use of ethanol as a fuel additive is subsidized by the federal government through a 52¢ per gallon of ethanol tax credit. An estimated 45 million gallons of ethanol per year are used in the Portland area during the wintertime oxygenated fuel season. If the oxygenated fuel requirement were removed and no suppliers choose to continue selling fuel oxygenated with ethanol, the federal government could save up to \$23.4 million in annual ethanol subsidies.</p> <p>Transportation Control Measures (TCMs): None</p> <p>Motor Vehicle Emissions Budgets (MVEBs): None</p> <p>Subregional MVEBs: None</p> <p>Vehicle Inspection Program: None</p>
<p>Assumptions</p>	<p>It is beyond the scope of this fiscal assessment to evaluate the potential economic effects of oxygenated fuel on the generation of greenhouse gases, the production of mobile source air toxics, contributions to the nation's energy independence, or changes in the use of renewable fuels.</p> <p>Market value of ethanol: The average wholesale price of ethanol in Portland before October 2003 was \$1.27 per gallon; however, since October, 2003 prices have risen sharply and the</p>

	price of ethanol in Portland is now approximately \$1.65 per gallon. For purposes of this assessment, fuel terminal operators are considered to be large businesses and fuel distributors are considered to be small businesses. Similarly, petroleum companies are assumed to be large businesses and ethanol companies are assumed to be small businesses.
Housing Costs	The Department has determined that this proposed rulemaking will have no affect 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.
Administrative Rule Advisory Committee	The Department did not use an advisory committee to develop the 2004 Portland Area CO Maintenance Plan. However, DEQ involved the local Metropolitan Planning Organization (established to address transportation issues under the federal transportation act) in developing the transportation related elements of the plan.



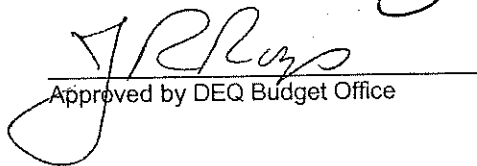
Prepared by

Dave Nordberg

Printed name

9-3-04

Date



Approved by DEQ Budget Office

Jim Roys

Printed name

9/2/04

Date

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
Portland Area Carbon Monoxide Maintenance Plan

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

The Portland Area Carbon Monoxide (CO) Maintenance Plan provides a group of strategies for the Portland region that will maintain air quality health standards to the year 2017. This plan is required by the Clean Air Act for areas such as Portland that formerly violated the National Ambient Air Quality Standard. The maintenance plan will prevent adverse health impacts, establish a new emissions budget that limits the amount of CO that can be emitted by the region's transportation system, and reinforce measures that reduce traffic congestion.

This proposed rulemaking modifies the existing Portland Area CO Maintenance Plan. The new CO maintenance plan rescinds the wintertime requirement to use oxygenated fuel in the Portland area effective October 31, 2005 and updates various provisions of the existing plan. The Plan demonstrates that the Portland area will continue to stay within CO air quality standards through at least 2017. The new CO maintenance plan will be submitted for the Environmental Protection Agency's (EPA's) approval as a revision of the State Implementation Plan.

The Department of Environmental Quality (DEQ) works with Metro and local governments to ensure that the Regional Transportation Plan and Transportation Improvement Program are consistent with the CO maintenance plan.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

Yes X No

a. If yes, identify existing program/rule/activity:

The CO maintenance plan is implemented in part through the New Source Review and Air Contaminant Discharge Permit programs which require land use compatibility determinations by local governments. Additionally, local and regional governments ensure that their comprehensive plans are consistent with the CO maintenance plan.

The second Portland Area CO Maintenance Plan will revise Oregon's State Implementation Plan under the Clean Air Act. The land use elements of the plan that reduce vehicle use or change traffic flow or congestion are not expected to differ from Metro's 2040 Growth Concept.

Industrial Source Requirements

The CO maintenance plan continues the existing major New Source Review program and the current level of industrial emissions control specified as Best Available Control Technology. The CO maintenance plan also maintains the present CO industrial growth allowance. The growth allowance reduces the need for industry to acquire emission offsets and thereby makes it easier for companies to locate or expand within the Portland area. The major New Source Review program is implemented through the Air Contaminant Discharge Permit (ACDP) program which is an existing activity identified in the DEQ State Agency Coordination (SAC) agreement approved by the Land Conservation and Development Commission. The existing procedure for statewide goal compliance and local plan compatibility adequately covers the New Source Review process. Before issuing a permit, DEQ requires every applicant for an ACDP to obtain a land use compatibility statement from the applicable jurisdiction.

Transportation Control Measures (TCMs)

The CO maintenance plan relies on emission reductions from TCMs developed and approved by Metro to increase transit service and improve bicycle and pedestrian facilities identified in the Regional Transportation Plan. In addition, the CO maintenance plan describes Contingent TCMs that will be triggered if the amount of vehicle miles traveled per capita rises 10% above the 2002 value. Contingent TCMs include the construction of the Washington County Commuter Rail and the I-205 Light Rail six years after the trigger is activated, plus increased support for the Regional Transit Options and Transit Oriented Development programs.

The TCMs affect Goal 6, (air, water and land resources quality), Goal 11 (public facilities and services) and Goal 12 (transportation). However, because Metro and local governments have primary responsibility for implementing the TCMs, these measures are technically not DEQ land use programs. Metro is responsible for ensuring that TCMs and the local comprehensive plans are compatible. DEQ's transportation conformity rules require that the TCMs be implemented or that substitute measures with equivalent emission reductions be put in place.

Motor Vehicle Emissions Budgets

The CO maintenance plan will update the existing Motor Vehicle Emissions Budgets that are required by the transportation conformity rules. These budgets limit the amount of CO that can be

emitted by motor vehicles operating on the regional transportation system, and can have a bearing on land use by constraining how that transportation system is developed. The new budgets were developed in consultation with Metro as the local Metropolitan Planning Organization (MPO) and local jurisdictions at public meetings of the Transportation Policy Alternatives Committee, Joint Policy Advisory Committee on Transportation, and Metro Council. They are based on projections of future traffic growth and include a margin of safety to accommodate the region's needs to the year 2037. The transportation conformity rules obligate Metro (as the MPO) to demonstrate that its Regional Transportation Plans and Transportation Improvement Programs comply with the updated CO maintenance plan before those plans and programs can be approved. DEQ's conformity rules are enforced by the Federal Highway Administration in consultation with DEQ and the EPA. The rules ensure compliance with the statewide goals in that they further intergovernmental consultation requirements to achieve compliance with the maintenance plan in support of air quality standards.

Oxygenated Fuel

Oxygenated fuel is not a program that affects land use.

Automatically triggered Contingency Plan

The Clean Air Act requires that control strategies removed at the time of redesignation to attainment must be reinstated if the area violates the carbon monoxide standard in the future. These provisions are included in the Contingency Plan section of the maintenance plan, and would restore Lowest Achievable Emission Rate (LAER) emission control technology, wintertime oxygenated fuel, and (if the violation occurs downtown) the downtown parking lid.

LAER describes the most restrictive level of industrial emission control technology for new or expanding industries and affects an existing land use program as described under "Industrial Source Requirements" above. A resumption of oxygenated fuel would not affect land use, but a return of the parking lid (which establishes a limit for the number of downtown parking spaces) could affect Goal 2 (land use planning), Goal 6 (air, water and land resources quality), Goal 11 (public facilities and services) and Goal 12 (transportation). Any of these measures would need to go through rulemaking before they take effect and further evaluation of the land use would be part of that rulemaking.

- b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?**

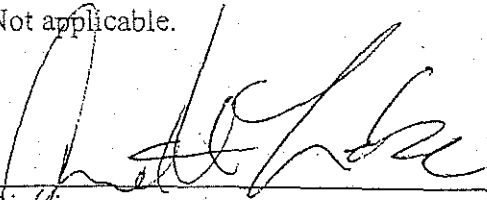
Yes X No (if no, explain):

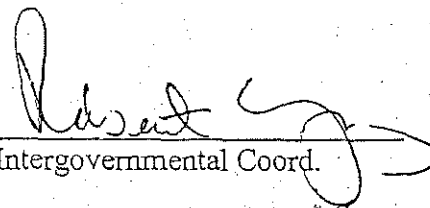
c. If no, apply the following criteria to the proposed rules.

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

3. If the proposed rules have been determined to affect 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.


Division


Intergovernmental Coord.

8/30/04
Date

Date: November 18, 2004

To: Environmental Quality Commission

From: Stephanie Hallock, Director

S. Hallock

Subject: Agenda Item K, Rule Adoption: Adoption of Onsite Wastewater Treatment System Rules
December 10, 2004, EQC Meeting

Department Recommendation The Department of Environmental Quality (Department) recommends that the Environmental Quality Commission (Commission) adopt the proposed Onsite Wastewater Treatment (formerly Onsite Sewage Disposal) rule amendments, OAR chapter 340, divisions 071 and 073, as presented in Attachment A.

Need for Rulemaking The Department administers the program for onsite wastewater treatment systems in Oregon. We contract the program to 22 counties and provide direct service to the other 14 counties. The program evaluates sites, issues permits for installation of onsite systems, licenses system installers and pumpers, approves new onsite technologies, and provides training and technical assistance to counties. Through June 2005, the Department is also engaged in the La Pine National Demonstration Project with Deschutes County and the US Geological Survey to assess water quality issues associated with onsite wastewater treatment systems in the La Pine area.

Onsite systems serve approximately one third of Oregon's population in mostly un-sewered, rural areas – and the number is growing as more rural areas are developed. A 2002 survey of onsite system installers and pumpers identified several opportunities for improving customer service and prompted the Department to convene an Onsite Program Improvement Advisory Committee (OPIAC) to help simplify permitting requirements and modernize the onsite program. The proposed rule amendments incorporate recommendations from the OPIAC as well as other stakeholders, commenters, and staff to streamline and update the program.

Effect of Rule Proposed changes to divisions 071 and 073 will allow additional alternative treatment technologies (ATTs) to be used in Oregon, simplify permitting for onsite systems using alternative technologies, replace the use of Water Pollution Control Facilities (WPCF) with Construction-Installation permits for small onsite systems, allow third-parties to certify onsite system installers and maintenance providers, change annual licenses to multi-year licenses for system installers and pumpers, update technical requirements for onsite systems, incorporate fee changes to support program changes, and make the rules consistent with current practices and more readable. Specifically, the proposed amendments:

- a. Streamline the permitting and approval process for alternative onsite systems [OAR 340-071-0345].
 - Establish an approval process and standards for onsite systems using ATTs. Apply a fee for approval of other innovative technologies to the approval process for ATTs.
 - Repeal the existing standards for aerobic treatment units, which will be incorporated into the new proposed ATT standards.
 - Allow, but not require, four types of alternative systems to be constructed under construction-installation permits instead of the more complex WPCF permits: recirculating gravel filters (RGFs), commercial sand filters (CSFs), ATTs, and holding tanks. Establish construction-installation -permit and annual evaluation fees for these systems [OAR 340-071-0130].
- b. Repeal the existing process for permitting experimental systems, which will be allowed as ATTs or through a revised innovative technology approval process [OAR 340-071-0135 or 0345].
- c. Update fees [OAR 340-071-0140].
 - Reduce the fee for renewing authorizations for hardship exceptions for temporary dwellings.
 - Establish a new flat fee to replace the existing fee structure for major repair permits of commercial systems. The flat fee will be lower for some commercial systems and will remain the same for all other systems.
 - Modify the fee categories for the annual compliance determination fee for onsite systems under WPCF permits. Fees will be lower for a few systems and the same for all others.
 - Repeal a redundant site evaluation fee for variances in designated rural areas.
 - Repeal Sewage Lagoon Fees no longer permitted under division 71.
- d. Revise technical requirements for onsite systems to improve performance and make the requirements more workable [OAR 340-71-110 to 0650 and 340-073-0025 to 0080].
- e. Require the owner of real property served by an ATT to have the system evaluated before transferring the property [OAR 340-071-0131].

- f. Clarify the process the Department uses to approve innovative technologies, materials, and designs for onsite systems [OAR 340-071-0135].
- g. Lengthen from one to three years the term of the license required for persons who install and pump onsite systems. Increase the amount of the surety bond required for each license [OAR 340-071-0600].
- h. Authorize the Department to implement a program to certify onsite system installers and maintenance providers through an agreement with another governmental entity (e.g., a community college). Require alternative systems maintenance providers to be certified and establish a deadline for certification [OAR 340-071-0650].

Commission Authority

The Commission has authority to take this action under ORS 183.335, 454.615, 454.625, 468.020, 468.065(2), 468B.010, 468B.020. These rules are implemented under 454.275, 454.305, 454.605, 454.610, 454.615, 454.625, 454.655, 454.657, 454.660, 454.662, 454.665, 454.675, 454.685, 454.695, 454.725, 454.745, 468.065, 468.070, 468B.0.15, 468B.050, 468B.055, and 468B.080

Stakeholder Involvement

In 2001, the Department hired a consultant, Steve Greenwood, to evaluate the onsite program and recommend improvements. Greenwood interviewed numerous installers, designers, program staff, county commissioners, and other stakeholder groups and surveyed 900 installers statewide to develop the *Greenwood Report* outlining key findings and recommendations for program improvements. A copy of the report is available at <http://www.deq.state.or.us/wq/onsite/GreenwoodReport.pdf>.

To follow up on the *Greenwood Report*, the Department convened the OPIAC to recommend specific program improvements and help develop the proposed rules. The OPIAC broadly represented onsite program stakeholders, including Harney County Commissioner Steve Grasty as chair, another county commissioner, a state legislator, three county onsite managers, onsite system installers and designers, septic tank pumpers, Oregon Realtors Association, Grants Pass Builders Association, Northwest Environmental Business Council, Oregon State University, and the Oregon Onsite Wastewater Association (O2WA) and in coordination with the Department's onsite Technical Review Committee. (Attachment C lists OPIAC members.)

During 11 meetings between July 2002 and February 2004, the OPIAC considered the *Greenwood Report*, recommendations from the La Pine/DEQ Operation and Maintenance Advisory Committee, and reports from earlier Certification Advisory and Product Approval Advisory Committees. The OPIAC identified specific program changes and reviewed and recommended rule revisions to the Department.

Throughout the rule development process, the Department has involved other stakeholder as well. Staff met with several contract counties and conducted workshops in Portland, Bend, and Eugene to discuss draft rule revisions. The Department's annual onsite program meetings and annual soil workshops featured presentations and training on proposed rule revisions. In addition, staff presented proposed revisions to O2WA conferences and to the Oregon Realtors Association. The proposed rules incorporate most of the OPIAC's recommendations as well as input from other stakeholders, public comments, and Department staff.

Public Comment The public comment period on the proposed rules extended from December 1, 2003, through January 15, 2004, and included public hearings in Portland, Eugene, Grants Pass, Bend, Burns, and Pendleton. Fifty-nine persons from the onsite wastewater industry (installers, pumpers, maintenance providers, consultants, and manufacturers), real estate industry, county commissioners, and county and state agencies commented.

Comments ranged from suggestions for complete reorganization of the rules to recommendations on technical specifications for drainfield construction. Many suggested that revisions would require resources or studies beyond the scope of this rulemaking. For example, the Department extensively edited the rules within the existing division structure but did not commit resources to comprehensively reorganize the onsite divisions, 071 and 073, as some requested. Similarly, the Department did not undertake studies to support recommendations for O&M requirements for all onsite systems or regulation of drip irrigation under the onsite program and deferred gray water reuse issues to the Department's Water Reuse Urban Task Force currently underway. The Department also declined to add requirements for onsite system owners and maintenance providers except where a clear need for further regulation had been demonstrated. Furthermore, the Department did not add detailed instructions for evaluating sites or installing and inspecting systems if those would limit professional judgment and flexibility needed in the field or were more appropriate in guidance.

The Department incorporated numerous changes to correct and clarify the rules and streamline and improve the onsite program. Program guidance was also updated to address several of the public comments.

Significant issues raised during the comment period are discussed in Key Issues below. A summary of all comments and the Department's responses is provided in Attachment B.

Key Issues

1. *Should operation and maintenance (O&M) requirements be specified for all onsite systems?*

Most onsite systems are constructed under a construction-installation permit that terminates upon issuance of a Certificate of Satisfactory Completion; thereafter the systems are subject to the O&M requirements in division 071. Large and complex systems are currently constructed and operated under WPCF permits that include O&M requirements. OAR 340-071-0130(13) requires all onsite systems to be operated and maintained so they do not create a public health hazard or pollute public waters. Otherwise, the rules do not specify O&M requirements for most types of onsite systems. The proposed rules describe O&M requirements for approved alternative systems that require higher levels of maintenance to operate properly (ATTs, RGFs, and CSFs). Some commenters noted that all onsite systems require maintenance to operate effectively, even standard systems, and recommended that the rules specify O&M requirements for all systems, particularly since there are an increasing number of onsite systems. The commenters cited the La Pine/DEQ Operation and Maintenance Advisory Committee recommendation for O&M requirements for all systems in the La Pine area. The Department's proposed O&M requirements for ATTs, RGFs, and CSFs include: a maintenance contract with a certified maintenance provider that will service these systems in accordance with the manufacturers' recommendations and the submittal of an annual report to the appropriate Agent (Department or contract county personnel) describing the service performed on each system.

Recommendation: The OPIAC recommended against adding O&M requirements for all systems in this rulemaking but suggested that the concept be evaluated in the future. The Department concurs with this approach and has not included the requirements in the proposed rules. Although there are benefits associated with system maintenance for all types of systems, we have not evaluated the need for additional O&M requirements. Data collected during studies of alternative drain media products suggest that the state of Oregon has a very effective program and has low system failure rates compared to other states. The Department has not planned further evaluation of O&M practices but is encouraging Agents to provide onsite system maintenance brochures to all homeowners with septic systems as some counties are now doing.

2. *Should time-of-transfer evaluations be required for all onsite systems?*

At present, no state or local regulation requires inspections of onsite systems when properties they serve are transferred, although often buyers and occasionally lenders require them. The Department is proposing a new rule to require time-of-transfer inspections only for ATT systems. ATTs usually require more careful O&M than other systems. Inspections before property transfers will help ensure that ATTs are properly operating and new owners are informed of O&M and reporting requirements. Notice of these inspections also helps the Department track ownership and annual reporting required for these systems.

Recommendation: The OPIAC and representatives from the real estate industry supported the time-of-transfer inspections for ATT systems but some members strongly opposed extending the requirement to other systems largely to avoid imposing costs and potential delays for inspections. As an alternative, they recommended a voluntary program to encourage owners, real estate agents, and transferees to have other systems evaluated. The Department agrees with a voluntary approach and also supports mandatory inspection of ATT systems.

The Department is working with Lane County to develop an information packet for voluntary time-of-transfer inspections to be distributed to lenders and realtors in the Coastal Zone Management Area. Time-of-transfer inspections are required for all onsite systems in coastal areas to obtain nonpoint source funding under the federal Coastal Zone Management Act, although Oregon intends to satisfy that requirement with a reliable voluntary program.

3. *Should homeowners be allowed to service their own ATT and RGF systems?*

The proposed rules require owners of ATT and RGF systems to either maintain a contract with a certified maintenance provider to service their systems or to become trained by their system manufacturer to maintain their own systems in accordance with OAR 340-071-0302(6), 0345(14), and 0100(94). Maintenance providers must submit an annual report for each ATT they are contracted to maintain and certify that these systems have been properly maintained. A few commenters suggested homeowners should not be allowed to maintain their own ATT and RGF systems unless they become actual certified maintenance providers under OAR 340-071-0650, because too many will simply avoid entering service contracts without ensuring proper maintenance.

Recommendation: The Department prefers maintenance be performed by trained professionals, but recommends allowing owners trained by manufacturers or certified as maintenance providers to maintain their own ATTs and RGFs as proposed. Agents can ensure that maintenance providers submit required annual reports and focus compliance reviews on homeowners maintaining their own systems as appropriate.

4. *Should the rules limit the number of systems installed to study unapproved technologies, materials, or designs?*

One method the Department uses to approve new technologies, materials, or designs for onsite systems under OAR 340-071-0135 allows a new product to be installed in onsite systems as part of field studies approved by the Department. These studies evaluate the performance of a system installed with new products after a specified period of time. For most products, if the difference in the percentage of system failures between the new product and standard trench after 3-5 years is statistically significant the product may be approved. The proposed amendments in OAR 340-071-0135 clarify the

existing process formerly in OAR 340-071-0116 and 0117.

Neither the existing rules nor the amendments proposed for public comment limit the number of systems that can be installed as part of a study; they simply require that the number be specified in the study protocol to be approved by the Department. One commenter suggested that to protect public health and water quality, the rule should limit the number of systems installed to those reasonably needed to evaluate the product's performance. The Department recently granted permission for as many as 12,000 systems to be installed for study over a five-year period, which has been argued by some stakeholders as being more than necessary to evaluate product performance. Each year a percentage of those systems are studied.

Recommendation: In the amendments proposed for adoption, the Department has added criteria limiting system installations to the number reasonably necessary to evaluate performance. This additional criterion will guide applicants and Department approval of studies and support decisions allowing the appropriate number of installations necessary to determine whether or not the alternative product or material will operate properly.

5. *Should ongoing NSF International certification be required for ATTs?*

The proposed rules establish a new process for the Department to approve ATT systems. The new approval process requires ATTs to be tested and certified according to standards and protocols for residential wastewater treatment systems established by NSF. Testing must be performed by NSF or the Environmental Protection Agency's Environmental Technology Verification program. The Department will approve systems that meet performance criteria and allow those systems to be installed in Oregon in accordance with the ATT rule, OAR 340-071-0345. Initial testing and certification typically costs between \$60,000 and \$80,000. Many states are now requiring NSF approval for alternative systems.

The rules proposed for public comment required only initial NSF testing for ATTs to be listed. Following public comment, the Department revised the rule to require continued certification through NSF. NSF performs annual audits on certified systems to evaluate compliance with certification criteria including investigation of changes that may influence performance. NSF may require re-testing for major changes. Ongoing certification is an integral part of NSF's certification process and is needed to ensure that certified systems meet construction standards and manufacturers comply with their service obligations. NSF estimates that annual audits for alternative systems will cost between \$5,000 and \$10,000. The Department did not re-notice this change for public comment.

Recommendation: The Department recommends adopting the ongoing certification requirement. Without ongoing certification, the Department would recommend against listing ATTs altogether because it does not have resources to audit changes in ATTs or performance under various field conditions to support continued approval of these systems. The NSF process is the only reliable certification process currently available for ATTs installed in Oregon.

The Department does not recommend postponing adoption of the ATT approval process to solicit additional public comment. Oregon's Administrative Procedures Act does not require re-noticing, and the Department does not believe more opportunity for comment is warranted. While ongoing certification will increase costs for manufacturers and therefore the purchase prices of ATTs, certification will enable manufacturers to sell more types and numbers of systems in Oregon. This process also allows for a more systematic, third-party approval procedure which removes much of the external influences that currently beleaguer our Department approval process. Moreover, the installations costs will decline for most residential systems because a WPCF permit will no longer be required and ATTs are generally less expensive than sand filters.

6. *Should NSF certification be required for the systems evaluated under the La Pine National Demonstration Project?*

A few commenters suggested that ATTs evaluated under the La Pine project should not require additional NSF certification to operate in Oregon.

Recommendation: The Department recommends that NSF certification be required for the La Pine systems. Information about the La Pine demonstration project is attached in Appendix H. The demonstration project has produced useful information but is not set-up as a protocol for approving onsite systems and was not sponsored as an approval process for onsite systems in Oregon. Moreover, the La Pine project will end in June of 2005, and the Department will need to rely on the NSF certification process to monitor ongoing performance and changes that are made to these ATT systems. Innovative systems that are part of the La Pine project that are not classified as ATTs may elect to use data from La Pine for approval through the Department's Technical Review Committee process.

**Implementation
of Onsite Rules**

A detailed implementation plan has been furnished as part of this report (Attachment I).

Next Steps

With Commission approval, the rules in divisions 071 and 073 will become effective on March 1, 2005; DEQ will begin implementing them immediately thereafter. Certain requirements in the rules will become effective at later-specified dates: time-of-transfer inspections beginning January 1, 2006; certification for installers and maintenance providers by March 1, 2006; and

multi-year licensing, licensee bond increases, and multi-compartment tank equipment on July 1, 2005.

The Department will continue training state and county onsite staff and communicate rule revisions to contract counties, installers, pumpers, maintenance providers, and manufacturers in accordance with the training and communication plan developed for this rule. The Department expects to sign an interagency agreement with Chemeketa Community College in early 2005 to implement a training and certification program for installers and maintenance providers, with certification required by March 2006.

Attachments

- A. Proposed Rules
- B. Summary of Public Comments and Agency Responses
- C. Advisory Committee Membership
- D. Presiding Officers' Reports on Public Hearings
- E. Relationship to Federal Requirements Questions
- F. Statement of Need and Fiscal and Economic Impact
- G. Land Use Evaluation Statement
- H. LaPine Project Fact Sheet
- I. Index of Onsite Program Guidance (Implementation Plan)

Available Upon Request

- 1. Legal Notice of Hearing
- 2. Cover Memorandum from Public Notice
- 3. Written Comment Received

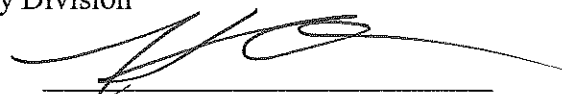
Approved:

Section:


Mark Cullington
Manager

Water Quality Division


Division:


Holly Schroeder
Administrator, Water Quality Division

Report Prepared By: Uri Papish,
State Onsite Program Coordinator,
Water Quality Division

State of Oregon
Department of Environmental Quality

Memorandum

Date: November 18, 2004
To: Environmental Quality Commission
From: Paul Slyman, Deputy Director 
Subject: Agenda Item M, Action Item : Director's Transactions for Commission Review
December 10, 2004 EQC meeting.

Proposed Action Oregon Accounting Policy 10.90.00 and Department of Environmental Quality (DEQ) Policy A10.90.00 (Attachments A and B) require that the Environmental Quality Commission (Commission) review and approve certain financial transactions of the DEQ Director on an annual basis. A summary of these transactions and copies of the Director's monthly timesheets and travel expense claims through October 2004 for the past year are provided in Attachment C. Timesheets and expense claims for November will be presented at the EQC meeting.

Background In 2001, the Department of Administrative Services (DAS) adopted a policy requiring Commission review and approval of the Director's transactions, including monthly time reports, vacation pay, travel expenses, and the state credit card use. In September 2001, the Commission adopted a policy delegating review and approval of these transactions to the Management Services Division Administrator, with annual Commission review of the approved transactions.

Department Recommendation The Department recommends that the Commission review and approve these transactions. This review will be documented in the Commission meeting minutes as directed by State policy.

Attachments
A. Oregon Accounting Manual (OAM) Policy No. 10.90.00.PO.
B. DEQ Policy re: Approval of Director's Transactions.
C. Summary of Director's Financial Transactions as defined by OAM 10.90.00 for the period 12/1/2003 – 10/31/2004. November information will be added prior to the December 10, 2004 meeting.

Approved:

Section:



Division:



OREGON ACCOUNTING MANUAL		Number 10.90.00.PO
Oregon Department of Administrative Services State Controller's Division		Effective Date July 16, 2001
Chapter	Internal Control	.1 OF .3
Part	Approval of Agency Head Transactions	
Section		Approval

Accountability and Control Standards

- .101 This policy sets accountability and control standards for the determination and delegation of review and approval authority for the agency head's monthly time report, requests for vacation payoff, use of exceptional performance leave, travel expense reimbursement claims, and Small Purchase Order Transaction System (SPOTS) card purchases. This policy is intended to ensure that these transactions are reviewed for completeness and accuracy and that they are in conformance with and measured against the documentation and compliance standards provided herein. In the case of agency heads that are elected, this policy may be applied at the option of that elected official.

Establishing Review and Approval Authority

- .102 Agency heads appointed by the Governor shall delegate review and approval authority for agency head financial transactions to the chief financial officer or to the person who holds the position of second-in-command to the agency head. The delegation shall be in writing.

Agency heads appointed by or reporting to a board or commission shall work with that body to create a review and approval structure for financial transactions of the agency head. The board or commission may delegate the review and approval authority, by direct designation or motion, in writing, to the board or commission chair or ranking officer. Or, the board or commission may delegate to the agency second-in-command, chief financial officer, or may choose to retain an active role in the approval process. Boards and commissions choosing to take an active role in the review and approval process must make the review and approvals of financial transactions a part of their regular meetings and document them in the minutes.

Boards and commissions delegating the review and approval process must at least annually review the financial transactions of the agency head approved as delegated. These post transaction reviews and approvals must be documented in the minutes of the board or commission annual meeting.

Requirement for Internal Procedure and Review

- .103 This policy requires agencies to develop internal procedures for the review and approval of the following agency head transactions:
- (a) Time reporting: Review and approve the agency head's monthly report of sick leave, vacation, holiday or other leave hours used. Review for completeness and accuracy and to ensure that all time that has been taken has been reported. Ensure that leave hours comply with HRSD 60.000.01 Sick Leave, 60.000.05 Vacation Leave, 60.010.01 Holidays, 60.000.15 Family Medical Leave, 60.005.01 Leave Without Pay and 60.000.10

Special Leaves with Pay. Time reporting (leave usage) must be documented using either paper or electronic timekeeping methods. The documentation must show that the time reports have been reviewed and approved by the appropriate authority, which, in the case of a board or commission, may be the ranking officer of the board. Note: Heads of agencies are classified as exempt from the Fair Labor Standards Act (FLSA) and as such should not be required to report actual hours worked. The time reporting review is intended to focus only on hours related to the categories defined above. The documentation must provide evidence for an audit trail and must be maintained by the agency for the prescribed IRS retention schedule for time records of three years and one quarter as well as the current record retention standards per Secretary of State, Archives Division.

- (b) Travel expense reimbursements: Review and approve all travel claims submitted by the agency head, whether for in-state or out-of-state travel. Ensure compliance with DAS Travel Rules OAM 40 10 00.PO as well as OAM 10 40 00 PO, Expenditures. The review and approval of travel transactions must be documented to provide an audit trail and evidence that the review complies with and was conducted in accordance with the prevailing state policies as listed.
- (c) Exceptional Performance Leave: This leave shall be granted to agency heads using the criteria set forth in HRSD 60.000.10 "Special Leaves With Pay". For agency heads appointed by the Governor, this leave shall only be granted by the Governor or by the Director of the Department of Administrative Services on behalf of the Governor. For agency heads reporting to a board or commission, this leave shall be granted by that body or by the board or commission chair and documented in the minutes of the board or commission. The review and approval responsibility is to ensure that the Exceptional Performance leave was granted based on appropriate criteria and authority and is in compliance with HRSD policy 60.000.10. The review and approval of these transactions must be documented to provide an audit trail and evidence that the review complies with and was conducted in accordance with the prevailing state policies as listed. The documentation must clearly demonstrate the criteria upon which the leave was granted. The documentation must include copies of the written request and approval granting the leave and copies of the board or commission minutes, if applicable. The documentation must be retained according to the current record retention standards per Secretary of State, Archives Division.
- (d) Vacation Payoff: Review and approve ensuring compliance with HRSD policy 60 000.05 "Vacation Leave". The review and approval of these transactions must be documented to provide an audit trail and evidence that the review complies with and was conducted in accordance with HRSD 60.000.05. That review must clearly demonstrate that the vacation payoff was approved in accordance with Section (6)(b) of that policy which mandates that a vacation payoff is only granted when taking vacation leave is not appropriate. Copies of the written request and approval granting the vacation payoff and copies of the board or commission minutes, if applicable, must be part of the documentation for these transactions.
- (e) Use of the Small Purchase Order Transaction System (SPOTS) purchase card: Review purchases to ensure that they are appropriate expenditures that further the business of the state and the mission of the agency and that the use of the SPOTS card complies with OAM 55 30 00.PO. The review must be conducted by someone other than the person whose name appears on the card. The review and approval of transactions must be documented to provide an audit trail and evidence that the review complies with and was conducted in accordance with the prevailing state policies as listed.

The documentation for all of the above should be retained according to the current record retention standards per Secretary of State, Archives Division.

Fiscal Officer Responsibility

- .104 Agency fiscal officers processing these financial transactions for the agency head have a duty to pre-audit and verify that the transactions comply with this policy.

Seeking Guidance from State Controller's Division

- .105 For the purposes of this policy, those persons delegated to review and approve financial transactions for state agency heads have a duty to comply with the provisions of this policy. Any agency head requests to deviate from this policy must be approved by the State Controller. Those persons delegated review and approval authority having reservations or questions about an agency head financial transaction may seek guidance from the State Controller's Division.

Transactions Subject to Audit

- .106 All financial transactions of state agency heads are subject to periodic audit by the Secretary of State Audits Division.

DEPARTMENT OF ENVIRONMENTAL QUALITY	POLICY NUMBER:
	SEPTEMBER 20, 2001
	PAGE 1 OF 1
POLICIES AND PROCEDURES	
SUBJECT: APPROVAL OF DIRECTOR'S TRANSACTIONS	APPROVAL:

INTENT: to set accountability and control standards for the review and approval of the director's financial transactions.

AUTHORITY: Oregon Accounting Manual (OAM) Policy No. 10.90.00.PO

POLICY: As delegated by the Environmental Quality Commission, the Management Services Division administrator will review and approve the Director's monthly time reports, requests for vacation payoff, use of exceptional performance leaves, travel expense reimbursement claims, and Small Purchase Order Transaction System (SPOTS) card purchases. This review will be performed in accordance with OAM 10.90.00.PO.

Annually, at the time of the Director's evaluation, the Commission will review the transactions approved as delegated. These post transaction reviews and approvals will be documented in the minutes of the Commission meeting.

**Summary of Director's Financial Transactions
as defined by OAM 10.90.00.PO
12/1/02 - 10/31/04**

TIME REPORTING**Summary of leave taken:**

Sick Leave	68	
Vacation	172	
Holiday	56	
Personal Business	24	
Misc. Paid Leave	13	(inclement weather)

VACATION LEAVE PAYOFF: None**EXCEPTIONAL PERFORMANCE LEAVE TAKEN: 40 hours****TRAVEL EXPENSE REIMBURSEMENTS**

<u>Date</u>	<u>Destination</u>	<u>Reason for Travel</u>	<u>Amount</u>
3/8 - 3/10/04	Washington DC	EPA 2005 Performance & Accountability Meeting / Meet with Mike Leavitt and members of the Environmental Council of States (ECOS)	\$443.00 *
4/6 - 4/9/04	Bend/Prineville, OR	Attended April Governor's Economic Revitalization Team (GERT) field trip and EQC meeting	\$193.21
4/17 - 4/20/04	Hot Springs, AK	ECOS 2004 Spring Meeting	\$861.45
5/6/04	Seattle, WA	Pacific NW Directors Group	\$199.60
5/11/04	Seattle, WA	Regional Agricultural Forum	\$334.95
5/19 - 5/21/04	Hermiston, OR	EQC Meeting	\$158.65
6/30 - 7/1/04	Hermiston, OR	Executive Review Panel (ERP) Meeting and meet with local officials	\$106.45
7/13 - 7/14/04	Denver, CO	ECOS Meeting	\$548.27 *
7/20 - 7/21/04	Washington DC	ECOS Meeting	\$312.40
7/29/04	Seattle, WA	Meet with EPA Region 10 Administrators	\$316.70

**Summary of Director's Financial Transactions
as defined by OAM 10.90.00.PO
12/1/02 - 10/31/04**

TRAVEL EXPENSE REIMBURSEMENTS (continued)

<u>Date</u>	<u>Destination</u>	<u>Reason for Travel</u>	<u>Amount</u>
8/5 - 8/6/04	Eugene, OR	Meet with Eugene and Roseburg offices and local officials	\$133.01
8/19 - 8/20/04	Medford, OR	Meet with Medford and Grants Pass offices and local officials	\$342.77
8/23 - 8/24/04	Hines, OR	GERT field trip	\$113.65
9/8 - 9/9/04	Coos Bay, OR	EQC Meeting	\$419.09
10/2 - 10/5/04	Oklahoma City, OK	Fall ECOS Meeting	\$667.05
10/22/04	Seattle, WA	Regional Agricultural Forum	\$19.00
		TOTAL:	<u>\$5,169.25</u>

* - travel reimbursed by 3rd party

USE OF SMALL PURCHASE ORDER TRANSACTION SYSTEM (SPOTS) PURCHASING CARD: None

PAYROLL AGENCY #	NET #	SHIFT	CHECK DISTRIBTN	SOCIAL SECURITY #	CONC JOB	POSITION #	CLASS	PAY BASIS	APPT TYPE	WORK HED	TIME SHEET #	
34000	34000	1	11000	CUMMINS, STEPHANIE H	[REDACTED]	1	0000001	MESN 77014	S	P	AA7	3-
START TIME	O/T	BEN PKG	COST CENTER DISTRIBUTION									PERIOD ENDING
0000	NE	XX	054100214010 100.00 %									12/31/03

LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS																									
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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

LEAVE BALANCES AS OF:	START DATE	END DATE	FULL TIME HOURS	SIGNED, CERTIFYING TRUE AND ACCURATE	# OF DAYS WORKED:	FORECAST	PRELIM	FINAL
TIME SHEET	12/01/03	12/31/03	184.0	STEPHANIE HARLOCK	22			
				SUPERVISOR		[Signature]		

1

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

PAYROLL AGENCY #	IEL #	SHIFT	CHECK DISTRIBTN	SOCIAL SECURITY #	CONC JOB	POSITION #	CLASS	PAY BASIS	APPT TYPE	TRK HED	TIME SHEET #	
34000	34000	1	11000	CUMMINS, STEPHANIE H	[REDACTED]	1	0000001	MESN Z7014	S	P	AA7	3-
START TIME	O/T	BEN PKG	COST CENTER DISTRIBUTION									PERIOD ENDING
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LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS													
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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

LEAVE BALANCES AS OF:	# OF DAYS WORKED:	FORECAST	PRELIM	FINAL
	20			

TIME SHEET	START DATE	END DATE	FULL TIME HOURS	176.0	SIGNED, CERTIFYING TRUE AND ACCURATE	SUPERVISOR:
	01/01/04	01/31/04			<i>Stephanie Cummins</i>	<i>[Signature]</i>

1

FORM # AD4240

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY # 34000	PERSONNEL AGENCY # 34000	SHIFT 1	CHECK DISTRIBUTN 11000	CUMMINS, STEPHANIE H	SOCIAL SECURITY # [REDACTED]	CONC JOB 1	POSITION # 0000001	CLASS MESN Z7014	PAY BASIS S	APPT TYPE P	WORK SCHED AA7	TIME SHEET # 2-0
START TIME 0000	O/T NF	BEN PKG XX	COST CENTER DISTRIBUTION 054100214010 100.00 %			%	%	%	PERIOD ENDING 02/29/04			

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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

SAVE BALANCES S OF:	# OF DAYS WORKED: 19	FORECAST: 19	PRELIM	FINAL		
TIME SHEET	START DATE: 02/01/04	END DATE: 02/29/04	FULL TIME HOURS: 160.0	EMPLOYEE: Stephanie DeLoock	SIGNED/CERTIFYING TRUE AND ACCURATE	SUPERVISOR: Helen John [Signature]

1

FORM # AD1743

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY # 34000	PERSONNEL AGENCY # 34000	SHIPT 1	CHECK DISTRIBTN 11000	CUMMINS, STEPHANIE H	SOCIAL SECURITY # [REDACTED]	CONC JOB 1	POSITION # 0000001	CLASS MESN Z7014	PAY BASIS S	APPT TYPE P	WORK SCHED AA7	TIME SHEET # 2-0
START TIME 0000	OT NE	BEN PKG XX	COST CENTER DISTRIBUTION 054100214010 100.00 %		%	%	%	[Signature]		PERIOD ENDING 03/31/04		

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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

LEAVE BALANCES AS OF:	# OF DAYS WORKED:	FORECAST	PRELIM	FINAL
TIME SHEET	03/01/04	03/31/04	184.0	23
EMPLOYEE:	SIGNED, CERTIFYING TRUE AND ACCURATE		SUPERVISOR:	
	Stephanie Hallock		[Signature]	

1

FORM # AD1743

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY # 34000	PERSONNEL AGENCY # 34000	SHIFT 1	CHECK DISTRIBUTN 11000	CUMMINS, STEPHANIE H	SOCIAL SECURITY #	CONC JOB 1	POSITION # 0000001	CLASS MESN 27014	PAY BASIS S	APPT TYPE P	WORK SCHED AA7	TIME SHEET # 2-0
START TIME 0000	OT NE	BEN PKG XX	COST CENTER DISTRIBUTION 054100214010 100.00 %			%	%	%	PERIOD ENDING 04/30/04			

LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS		
	1 TH	2 FR	3 SA	4 SU	5 MO	6 TU	7 WE	8 TH	9 FR	10 SA	11 SU	12 MO	13 TU	14 WE	15 TH	16 FR	17 SA	18 SU	19 MO	20 TU	21 WE	22 TH	23 FR	24 SA	25 SU	26 MO	27 TU	28 WE	29 TH	30 FR	31						
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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

LEAVE BALANCES AS OF:

TIME SHEET

START DATE 04/01/04

END DATE 04/30/04

FULL TIME HOURS 176.0

EMPLOYEE: Stephanie Hancock

SIGNED, CERTIFYING TRUE AND ACCURATE

SUPERVISOR: [Signature]

OF DAYS WORKED:

FORECAST 22

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FINAL

1

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY #	PERSONNEL AGENCY #	SHIFT	CHECK DISTRIBUTN	SOCIAL SECURITY #	CONC JOB	POSITION #	CLASS	PAY BASIS	APPT TYPE	WORK SCHED	TIME SHEET #
34000	34000	1	11000	CUMMINS, STEPHANIE H	[REDACTED]	1	0000001	MESN 27014	S	P AA7	2-1
START TIME	O/T	BEN PKG	COST CENTER DISTRIBUTION								PERIOD ENDING
0000	NE	XX	054100214010 100.00%			%	%	%			05/31/04

LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS						
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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

AVE BALANCES	START DATE		END DATE	FULL TIME HOURS	EMPLOYEE	SIGNED, CERTIFYING TRUE AND ACCURATE	# OF DAYS WORKED	FORECAST	PRELIM	FINAL
OF	05/01/04		05/31/04	168.0	Stephanie Hallock	[Signature]	20			
TIME SHEET	SUPERVISOR: <i>[Signature]</i> for EDC									

1

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY # 34000	PERSONNEL AGENCY # 34000	SHIFT 1	CHECK DISTRIBTN 11000	CUMMINS, STEPHANIE H	SOCIAL SECURITY # [REDACTED]	CONC JOB 1	POSITION # 0000001	CLASS MESN Z7014	PAY BASIS S	APPT TYPE P	WORK SCHED AA7	TIME SHEET # 2-0
START TIME 000	O/T NE	BEN PKG XX	COST CENTER DISTRIBUTION 054100214010 100.00 %			%	%	%	%	PERIOD ENDING 06/30/04		

LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS																														
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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

SAVE BALANCES S OF:	# OF DAYS WORKED: 22	FORECAST: 22	PRELIM	FINAL
TIME SHEET	START DATE: 06/01/04	END DATE: 06/30/04	FULL TIME HOURS: 176.0	EMPLOYEE: Stephanie Hallock
			SIGNED, CERTIFYING TRUE AND ACCURATE	
			SUPERVISOR: Ellen Jattibbe for EDC	

100

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FORM # AD1743

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY # 34000	PERSONNEL AGENCY # 34000	SHIFT 1	CHECK DISTRIBUTN 11000	CUMMINS, STEPHANIE H	SOCIAL SECURITY # [REDACTED]	CONC JOB 1	POSITION # 0000001	CLASS MESN Z7014	PAY BASIS S	APPT TYPE P	WORK SCHED AA7	TIME SHEET # 2-C
START TIME 000	O/T NE	BEN PKG XX	COST CENTER DISTRIBUTION 054100214010 100.00 %								PERIOD ENDING 08/31/04	

LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS																													
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OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

LEAVE BALANCES IS OF:

TIME SHEET

START DATE 08/01/04

END DATE 08/31/04

FULL TIME HOURS

176.0

EMPLOYEE:

Stephanie Hallock

SIGNED, CERTIFYING TRUE AND ACCURATE

OF DAYS WORKED:

FORECAST 32

PRELIM

FINAL

SUPERVISOR:

[Signature] 9/2

1

FORM # AD1743

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY # 34000	PERSONNEL AGENCY # 34000	SHIFT 1	CHECK DISTRIBTN 11000	CUMMINS, STEPHANIE H	SOCIAL SECURITY # [REDACTED]	CONC JOB 1	POSITION # 0000001	CLASS MESN Z7014	PAY BASIS S	APPT TYPE P	WORK SCHED AA7	TIME SHEET # 2-C
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START TIME 0000	O/T NE	BEN PKG XX	COST CENTER DISTRIBUTION 054100214010 100.00 %	%	%	%	PERIOD ENDING 09/30/04
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LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																												
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20																																																											
*	PRELIMINARY AND FINAL TOTALS																																																										

OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

SAVE BALANCES S OF:	START DATE 09/01/04	END DATE 09/30/04	FULL TIME HOURS 176.0	EMPLOYEE Stephanie Hallock	SIGNED, CERTIFYING TRUE AND ACCURATE	# OF DAYS WORKED: 21	FORECAST 9/30	PRELIM	FINAL
TIME SHEET					SUPERVISOR [Signature]				

1

FORM # AD1743

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

PAYROLL AGENCY # 34000	PERSONNEL AGENCY # 34000	SHIFT 1	CHECK DISTRIBUTN 11000	CUMMINS, STEPHANIE H	SOCIAL SECURITY # [REDACTED]	CONC JOB 1	POSITION # 0000001	CLASS MESN Z7014	PAY BASIS S	APPT TYPE P	WORK SCHED AA7	TIME SHEET # 2-C
START TIME 0000	O/T NE	BEN PKG XX	COST CENTER DISTRIBUTION 054100214010 100.00 %			%	%	%	PERIOD ENDING 10/31/04			

LINE	DATE - DAY																															PAY TYPE	REG HRS	LWOP	MISC HRS																														
	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU																																		
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*	PRELIMINARY AND FINAL TOTALS																																																																

OTHER ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

LEAVE BALANCES AS OF:

TIME SHEET

START DATE 10/01/04

END DATE 10/31/04

FULL TIME HOURS 168.0

EMPLOYEE: Stephanie Hallock

SIGNED, CERTIFYING TRUE AND ACCURATE

OF DAYS WORKED:

FORECAST 21

PRELIM

FINAL

SUPERVISOR: [Signature]

1

STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET



328/VKT 18006

1. Name of Employee Stephanie Hallock <i>Commis</i>		2. Agency DEQ		3. Period (Month and Year) March-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 <input checked="" type="checkbox"/> pm Other to	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

150
51

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
03/08/04	7:25 am		Washington, D.C.	38.25		12.75	25.50	150.00	188.25
03/09/04			lodging- stayed w/ friends	51.00				25.00	76.00
03/10/04		8:30 pm	Portland, OR	51.00					51.00
15. Totals				102.00		12.75	25.50	175.00	\$315.25

16. Accounting Codes	17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
10001-42004	MZ0000	03/08/04 SuperShuttle from Dulless to hotel				21.00
		03/09/04 Cab from Tabard Inn to AIA				8.00
4151	337.00	03/09/04 Room tax at Hotel Tabard Inn				21.75
4153	106.00	03/10/04 Cab from ECOS to EPA				8.00
		03/10/04 Cab from EPA to Dulles Airport				45.00
		03/10/04 PDX Airport Parking 3/8-3/10				24.00
Totals					443.00	\$127.75

24. I did/will did not/will not *NA* accept travel awards as a result of, or associated with this state business trip. Initials.
Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
Stephanie was invited by the EPA to attend the EPA FY 2005 Performance and Accountability Meeting. Stephanie will also met with EPA Administrator Leavitt and members of ECOS. This trip is being reimbursed by the EPA.

26. Grand Total Amount	\$443.00
27. Travel Advance Amount	
28. Amount Due Employee/State	\$443.00
29. Received Training	Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.

30. Signature of Employee
Stephanie Hallock

32. Approved By
Debra L. ...

31. Title
Director
Date: 03/17/04

33. Title
MSD
Date: 3-23-04

✓ for done

5A Bus Roslin Metro Station

Taxi \$50 or

Request #1061 — Approved

State of Oregon Department of Administrative Services — Director's Office Out-of-State Travel Authorization

Name Stephanie Hallock **Agency** Department of Environmental Quality

Phone 503-229-5990 **Email** hallock.stephanie@deq.state.or.us

Fax 503-229-6762 **Date of Request** 2/26/2004

Departure Date 3/8/2004 **Return Date** 3/10/2004

Destinations (City, State)
Washington, D.C.

Purpose of trip and value to the state:

Stephanie has been invited by the Environmental Protection Agency to attend the EPA FY 2005 Performance and Accountability Meeting. Stephanie will also be meeting with EPA Administrator Leavitt and members of the Environmental Council of the States. This trip is being fully reimbursed by the EPA.

Travel priority criteria for requests to be expended from General/Lottery Funds:
No General/Lottery Fund dollars — Criteria Reference

All travel conforms to State law and the Department of Administrative Services travel rules with the exception of the following:
No exceptions.

Delegate Name Andrea Crozier **Delegate Email** crozier.andrea@deq.state.or.us

[Submit Another Request](#)

[Exit](#)

[<-- Back](#)

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock	2. AGENCY/OFFICIAL STATION: DEQ/HQ	3. REQUEST #: 251-04 ✓
-------------------------------------------	---------------------------------------	---------------------------

4. AGENCY ACCOUNTING INFORMATION: 05-10001-42004 m20000/00	5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
---------------------------------------------------------------	----------------------------------------------------------------------------------------------------------

6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference)
Stephanie has been invited to attend EPA's FY 2005 Performance & Accountability Meeting. She will also be meeting w/ EPA Administrator, Mike Leavitt, and ECOS staff. EPA will be fully reimbursing DEQ for all travel expenses.

7. ITINERARY:

Destination city/state: Washington, D.C.

Departure date/time: March 8, 7:00 am *m*

Return date/time: March 10, ^{8:00}5:45 pm *w*

8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11)
Air travel arrangements will be made for by EPA. They will cover all travel costs.

TOTAL: \$0.00

9. LODGING: Lodging per diem rate: \$150.00 ✓

Amount per night: 150.00

Room tax per night: 22.50

of nights: 1

TOTAL: ~~\$150.00~~ 172.50

10. MEALS: Daily meal per diem rate: \$51.00 ✓

	Rate	# Meals	Total
Breakfast: (25%)	12.75	2	25.50
Lunch: (25%)	12.75	3	38.25
Dinner: (50%)	25.50	2 3	51.00 76.5
			140.25
TOTAL:			<u>\$114.75</u>

11. CAR RENTAL: (See OAM 40.10.00, PO, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed).
Days @ \$37 plus tax, gas TOTAL: _____

12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.)

a. Vehicle Mileage _____ 0.00

b. Shuttle (# of miles) _____ 50.00

c. Other (specify below) _____ 25.00

1 night of lodging at friends & family rate of \$25.00, for 3/9. TOTAL: \$75.00

13. TRAINING RELATED? (if yes, attach agenda)

Yes No

14. STATUS:

Executive/Mgmt Svc:

AFSCME:

Other: Explain: _____

15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.

16. ESTIMATED COST OF TRIP:

Transportation:	\$0.00
Lodging:	\$150.00 172.50
Meals:	\$114.75 140.25
Car Rental:	\$0.00
Misc:	<u>\$75.00</u>
TOTAL:	<u>\$339.75 365.25</u> 387.75

17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.

18. EMPLOYEE SIGNATURE: *Stephanie Hallock* DATE: 3-1-04

19. SUPERVISOR SIGNATURE: *Dale Johnson for EDC* DATE: 3-8-04

20. DA/EMT SIGNATURE: _____ DATE: _____

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: March 8-10, 2004

Travel Destination: Washington, D.C.

Estimated Cost of Trip: ~~\$365.25~~ ^{\$387.75}, will be reimbursed by EPA

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

Agency Approval Required

DAS and Agency Approval Required

Client Related

Reimbursed Travel

Required by Federal Grant

Specialized Technical Training

For Economic Development

Other (Please explain)

Below is documentation of our justification for seeking this exception:

Stephanie has been invited by the EPA to attend the EPA FY 2005 Performance and Accountability Meeting. Stephanie will also be meeting with EPA Administrator Leavitt and members of the Environmental Council of the States. This trip will be reimbursed by the EPA.

Submitted by:

Stephanie Hallock
(Signature of Employee)

3-1-04
(Date)

Recommended by:

(Signature of EMT Member)

(Date)

Approved by:

Eden Lottidge for ERC
(Signature of Agency Head or Delegate)

3-2-04
(Date)

Approved by:

SCC attached
(Department of Administrative Services)

3-5-04
(Date)



300/VRT 18206

STATE OF OREGON TRAVEL EXPENSE DETAIL SHEET

1. Name of Employee: 9340000295 Stephanie Hallock Cummins
2. Agency: DEQ
3. Period (Month and Year): April-04
4. Official Station: HQ
5. Division/ Work Unit: OD
6. Regular Schedule Work Shift: 8:00 am - 5:00 pm
7. Unrepresented, Management Service, Executive Service, Board/Commission, Volunteer, Bargaining Unit Name: AFSCME

25/43/31

Table with columns: 8. Date, 9. Time of Departure, 10. Time of Arrival, 11. Destination, 12. Per Diem/Hourly Allowance, Individual Meal Reimbursement (Breakfast, Lunch, Dinner), 13. Lodging, 14. Total Meals and Lodging. Includes entries for Bend, OR and Prineville, OR.

15. Totals 47.75 10.75 10.75 135.00 110.00 \$131.50 182.75

Table with columns: 16. Accounting Codes, 17. Date, 18. Miscellaneous Expenses (Fares, Private Mileage, Room Tax, Telephone, Other Expenses), 19. Training Related?, 20. Rate Per Mile, 21. Private Car Miles, 22. Amount. Includes Hotel Tax entries.

Totals 193.21 23. Section Total \$10.46

24. I did/will did not/will not X accept travel awards as a result of, or associated with this state business trip. Initials: SH

25. REASON FOR TRAVEL: (Be specific.) Attended April GERT field trip and EQC meeting.

26. Grand Total Amount 193.21 \$141.96
27. Travel Advance Amount
28. Amount Due Employee/State 193.21 \$141.96
29. Received Training Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.

30. Signature of Employee Stephanie Hallock

31. Title Director Date 04/26/04

I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.

32. Approved By Ellen Lottridge for EQC

33. Title MSD Admin Date 4-29-04



322/UPT18327

STATE OF OREGON TRAVEL EXPENSE DETAIL SHEET

1. Name of Employee 9340000295 Stephanie Hallock <i>Commis</i>		2. Agency DEQ		3. Period (Month and Year) April-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift <input checked="" type="checkbox"/> 8:00 am - 5:00 pm Other to	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

6/30

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
4/03/17/04	9:00 am		Hot Springs, AK	26.25		8.75	17.50	60.00	86.25
4/03/18/04				—	provided	provided	provided	60.00	60.00
4/03/19/04				—	provided	provided	provided	60.00	60.00
4/03/20/04		11:00 pm	Portland, OR	17.50	provided	provided	17.50		17.50
15. Totals						8.75	35.00	180.00	\$223.75

16. Accounting Codes	17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
1400-41002	04/17/04	Shuttle from LIT to Hotel				20.00
	04/17/04	Room Tax				8.10
HIS1 249.05	04/18/04	Room Tax				8.10
HIS3 20.00	04/19/04	Room Tax				8.10
	04/20/04	Telephone				0.50
	04/20/04	Telephone				0.50

Totals 269.05	23. Section Total \$45.30
----------------------	----------------------------------

24. I did/will did not/will not accept travel awards as a result of, or associated with this state business trip. *SH* Initials.
 Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.) Attended the ECOS 2004 Spring Meeting.	26. Grand Total Amount \$269.05
	27. Travel Advance Amount
	28. Amount Due Employee/State to \$269.05
	29. Received Training <input type="checkbox"/> Conducted Training <input checked="" type="checkbox"/>

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director Date 04/29/04
I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By <i>Eden Lottidge for</i>	33. Title MSD Admin Date 5-6-04

5/10 Andrea to send e-mail, 5/16 e-mail to SH

ERC

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: April 17-20, 2004

Travel Destination: Hot Springs National Park, Arkansas

Estimated Cost of Trip: ~~\$923.90~~ ~~\$915.15~~ \$194.15

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

Agency Approval Required

DAS and Agency Approval Required

Client Related

Reimbursed Travel

Required by Federal Grant

Specialized Technical Training

For Economic Development

Other (Please explain)

Below is documentation of our justification for seeking this exception:

Stephanie would like to attend the ECOS 2004 Spring Meeting. Travel expenses to be reimbursed by ECOS.

Submitted by: Stephanie Hallock
(Signature of Employee)

4-12-04
(Date)

Recommended by: _____
(Signature of EMT Member)

(Date)

Approved by: [Signature]
(Signature of Agency Head or Delegate)

4-12-04
(Date)

Approved by: N/A
(Department of Administrative Services)

(Date)

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock		2. AGENCY/OFFICIAL STATION: DEQ/ HQ		3. REQUEST #: 331-04 ✓																					
4. AGENCY ACCOUNTING INFORMATION: OS-10001-42004 M20000/00 14010-41002			5. TRAVEL JUSTIFICATION ATTACHED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																						
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Attending the ECOS 2004 Spring Meeting.																									
7. ITINERARY: Destination city/state: <u>Gordard County</u> Hot Springs, AKAR Departure date/time: <u>4/17, noon</u> Return date/time: <u>4/20, 10:00 pm</u>			8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) Airfare, \$563.40 TOTAL: <u>592.40</u> 563.40																						
9. LODGING: Lodging per diem rate: <u>\$60.00</u> ✓ Amount per night: <u>72.00</u> Room tax per night: _____ # of nights: <u>3</u> TOTAL: <u>\$216.00</u> ✓			10. MEALS: Daily meal per diem rate: <u>\$35.00</u> ✓ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;"># Meals</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">8.75</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">8.75</td> <td style="text-align: center;">1</td> <td style="text-align: center;">8.75</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">17.50</td> <td style="text-align: center;">2</td> <td style="text-align: center;">35.00</td> </tr> <tr> <td colspan="3" style="text-align: right;">TOTAL:</td> <td style="text-align: center;"><u>\$43.75</u> ✓</td> </tr> </tbody> </table>				Rate	# Meals	Total	Breakfast: (25%)	8.75	0	0.00	Lunch: (25%)	8.75	1	8.75	Dinner: (50%)	17.50	2	35.00	TOTAL:			<u>\$43.75</u> ✓
	Rate	# Meals	Total																						
Breakfast: (25%)	8.75	0	0.00																						
Lunch: (25%)	8.75	1	8.75																						
Dinner: (50%)	17.50	2	35.00																						
TOTAL:			<u>\$43.75</u> ✓																						
11. CAR RENTAL: (See OAM 40.10.00, PO, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____			12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.) <table style="width: 100%;"> <tr> <td>a. Vehicle Mileage</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td>b. Shuttle (# of miles)</td> <td style="text-align: right;">92.00</td> </tr> <tr> <td>c. Other (specify below)</td> <td style="text-align: right;"><u>50.00</u></td> </tr> <tr> <td colspan="2" style="text-align: right;">TOTAL: <u>142.00</u></td> </tr> <tr> <td colspan="2" style="text-align: right;">TOTAL: <u>\$92.00</u> ✓</td> </tr> </table>			a. Vehicle Mileage	0.00	b. Shuttle (# of miles)	92.00	c. Other (specify below)	<u>50.00</u>	TOTAL: <u>142.00</u>		TOTAL: <u>\$92.00</u> ✓											
a. Vehicle Mileage	0.00																								
b. Shuttle (# of miles)	92.00																								
c. Other (specify below)	<u>50.00</u>																								
TOTAL: <u>142.00</u>																									
TOTAL: <u>\$92.00</u> ✓																									
13. TRAINING RELATED? (if yes, attach agenda) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																									
14. STATUS: <input checked="" type="checkbox"/> Executive/Mgmt Svc: <input type="checkbox"/> AFSCME: <input type="checkbox"/> Other: Explain: _____			16. ESTIMATED COST OF TRIP: <table style="width: 100%;"> <tr> <td>Transportation:</td> <td style="text-align: right;">563.40 <u>592.40</u> ✓</td> </tr> <tr> <td>Lodging:</td> <td style="text-align: right;"><u>216.00</u> ✓</td> </tr> <tr> <td>Meals:</td> <td style="text-align: right;"><u>43.75</u> ✓</td> </tr> <tr> <td>Car Rental:</td> <td style="text-align: right;"><u>0.00</u></td> </tr> <tr> <td>Misc:</td> <td style="text-align: right;">92.00 <u>142.00</u> ✓</td> </tr> <tr> <td colspan="2" style="text-align: right;">TOTAL: <u>\$915.15</u> <u>994.15</u></td> </tr> </table>			Transportation:	563.40 <u>592.40</u> ✓	Lodging:	<u>216.00</u> ✓	Meals:	<u>43.75</u> ✓	Car Rental:	<u>0.00</u>	Misc:	92.00 <u>142.00</u> ✓	TOTAL: <u>\$915.15</u> <u>994.15</u>									
Transportation:	563.40 <u>592.40</u> ✓																								
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Misc:	92.00 <u>142.00</u> ✓																								
TOTAL: <u>\$915.15</u> <u>994.15</u>																									
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																									
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																									
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>				DATE: 4-12-04																					
19. SUPERVISOR SIGNATURE: <i>[Signature]</i>				DATE: 4-12-04																					
20. DA/EMT SIGNATURE:				DATE:																					

861.45

4/12 04

EP-344

04-25-04

Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 04/17/2004 to 04/20/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE						
Actual:	\$563.40	Savings:	\$1,579.60	Val Carrier: DELTA (DL)	Account: OR State Dept. of Enviromental	
Lowest:	\$563.40	Lost Amt:	\$0.00	Ticket #: 7590633280	Break 1: 34000	
Service Fees:	\$29.00			Invoice #: 475079786	Break 2: ANDREA	
Exception: GOVERNMENT CITY PAIR USED				Inv Date: 04/09/2004	Break 3: 5032295990	
Itinerary				Airline	Flt #	Class
PORTLAND,OR	CINCINNATI,OH	04/17/2004	10:50-18:03	DELTA (DL)	0890	K
CINCINNATI,OH	LITTLE ROCK,AR	04/17/2004	18:50-19:27	DELTA (DL)	5740	K
LITTLE ROCK,AR	DALLAS-FT WORTH,TX	04/20/2004	19:15-20:32	DELTA (DL)	4140	K
DALLAS-FT WORTH,TX	PORTLAND,OR	04/20/2004	21:10-23:13	DELTA (DL)	1739	K
Total Cost of Trip:		\$592.40				

Report Totals					
Air Totals		Car Rental Totals		Hotel Booking Totals	
# of Air Trips:	1	# of Rentals:	0	# of Stays:	0
Air Charges:	\$563.40	# of Days Rented:	0	# of RoomNights:	0
Average Cost/Trip:	\$563.40	Car Rental Charges:	\$0.00	Hotel Booking Charges:	\$0.00
Total Svc Fees:	\$29.00	Avg # of Days Rented:	0	Avg # of Nights:	0
Total All Charges:	\$592.40	Avg Booked Rate:	\$0.00	Avg Booked Rate:	\$0.00
		Avg Cost/Day:	\$0.00	Avg Cost/RoomNight:	\$0.00

STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET



340/UPT18412

1. Name of Employee 9340000295 Stephanie Hallock <i>Cummings</i>		2. Agency DEQ		3. Period (Month and Year) May-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 <input checked="" type="checkbox"/> pm Other to	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
05/06/04	7:00 am		Portland > Seattle						
			*per diem ended at 5:00 pm 5/6/04 stayed in Seattle for vacation.						
15. Totals									\$0.00

16. Accounting Codes	17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
14010-41002		Personal Vehicle Mileage		0.360		
	05/06/04	Airport Shuttle				8.50
HISS	16.50	05/06/04 Airport Parking				8.00
Totals						16.50
23. Section Total						\$16.50

24. I did/will did not/will not accept travel awards as a result of, or associated with this state business trip. *SH* Initials.
Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
Attended the Pacific NW Directors Group.

26. Grand Total Amount	\$16.50
27. Travel Advance Amount	
28. Amount Due Employee/State	\$16.50
29. Received Training	Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director	Date 05/18/04
	I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By <i>Debra Lathrop</i>	33. Title MSD Admin Deputy Director

✓ for dup.

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock	2. AGENCY/OFFICIAL STATION: OD/ HQ	3. REQUEST #: 360-04 ✓																				
4. AGENCY ACCOUNTING INFORMATION: 05-14010-41002		5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Attending Pacific Northwest Director's Group Meeting. Travel status ended at 8:00 am on 5/7/04, stayed for personal vacation. Not claiming any travel reimbursement on 5/7/04.																						
7. ITINERARY: Destination city/state: Seattle, WA Departure date/time: 5/6/04, 6:30 am Return date/time: 5/7/04, 6:00 pm	8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) 1-way Airfare. \$144.10 <div style="text-align: right;">TOTAL: <u>\$144.10</u> ✓</div>																					
9. LODGING: Lodging per diem rate: <u>\$136.00</u> ✓ Amount per night: <u>136.00</u> Room tax per night: <u>21.22</u> # of nights: <u>1</u> <div style="text-align: right;">TOTAL: <u>\$157.22</u> ✓</div>	10. MEALS: Daily meal per diem rate: <u>\$51.00</u> ✓ <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 15%; text-align: center;">Rate</th> <th style="width: 15%; text-align: center;"># Meals</th> <th style="width: 10%; text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">12.75</td> <td style="text-align: center;"></td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">12.75</td> <td style="text-align: center;">1</td> <td style="text-align: center;">12.75</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">25.50</td> <td style="text-align: center;">1</td> <td style="text-align: center;">25.50</td> </tr> <tr> <td colspan="3" style="text-align: right;">TOTAL:</td> <td style="text-align: center;"><u>\$38.25</u></td> </tr> </tbody> </table>			Rate	# Meals	Total	Breakfast: (25%)	12.75		0.00	Lunch: (25%)	12.75	1	12.75	Dinner: (50%)	25.50	1	25.50	TOTAL:			<u>\$38.25</u>
	Rate	# Meals	Total																			
Breakfast: (25%)	12.75		0.00																			
Lunch: (25%)	12.75	1	12.75																			
Dinner: (50%)	25.50	1	25.50																			
TOTAL:			<u>\$38.25</u>																			
11. CAR RENTAL: (See OAM 40.10.00, PO, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____	12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.) a. Vehicle Mileage 0.00 b. Shuttle (# of miles) <u>8.50</u> c. Other (specify below) _____ <div style="text-align: right;">TOTAL: <u>\$8.50</u></div>																					
13. TRAINING RELATED? (if yes, attach agenda) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																						
14. STATUS: <input checked="" type="checkbox"/> Executive/Mgmt Svc: <input type="checkbox"/> AFSCME: <input type="checkbox"/> Other: Explain: _____	16. ESTIMATED COST OF TRIP: Transportation: <u>\$144.10</u> ✓ Lodging: <u>\$157.22</u> ✓ Meals: <u>\$38.25</u> ✓ Car Rental: <u>\$0.00</u> Misc: <u>\$8.50</u> ✓ <div style="text-align: right;">TOTAL: <u>\$348.07</u> ✓</div>																					
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																						
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																						
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>	DATE: 5-3-04																					
19. SUPERVISOR SIGNATURE: <i>Paula Lotndgen for EOC</i>	DATE: 5-6-04																					
20. DA/EMT SIGNATURE:	DATE:																					

183.10 + 16.50 = 199.60

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: 5/6/04-5/7/04

Travel Destination: Seattle, WA

Estimated Cost of Trip: \$348.07 ✓

Fund Code: 05-14010-41002 (indirect)

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

- | | |
|---------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Legal | <input type="checkbox"/> Specialized Technical Training |
| <input type="checkbox"/> Public Safety and Health | <input type="checkbox"/> Required Class/Certification |
| <input type="checkbox"/> Financial | <input type="checkbox"/> Revenue Generating |
| <input type="checkbox"/> Reimbursed Travel | <input checked="" type="checkbox"/> Other (Please explain) |

Justification for seeking this exception:

Stephanie is traveling to Seattle to attend the Pacific NW Directors Meeting.

Submitted by: *Stephanie Hallock* 5-3-04
(Signature of Employee) (Date)

Recommended by: _____
(Signature of EMT Member) (Date)

Approved by: *Dale Lottidge for EAC* 5-14-04
(Signature of Agency Head or Delegate) (Date)

Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 05/05/2004 to 05/10/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE HA							
Actual:	\$157.10	Savings:	\$392.90	Val Carrier: ALASKA AIR (AS)	Account: OR State Dept. of Enviromental		
Lowest:	\$157.10	Lost Amt:	\$0.00	Ticket #: 7592026878	Break 1: 34000		
Service Fees:	\$26.00			Invoice #: 475080317	Break 2: ANDREA		
Exception: GOVERNMENT CITY PAIR USED				Inv Date: 04/28/2004	Break 3: 5032295990		
Itinerary				Airline	Flt #	Class	
PORTLAND,OR	SEATTLE TACOMA,WA	05/06/2004	07:30-08:22	ALASKA AIR (AS)	2092	Y	
Total Cost of Trip:		\$183.10					

Report Totals					
Air Totals		Car Rental Totals		Hotel Booking Totals	
# of Air Trips:	1	# of Rentals:	0	# of Stays:	0
Air Charges:	\$157.10	# of Days Rented:	0	# of RoomNights:	0
Average Cost/Trip:	\$157.10	Car Rental Charges:	\$0.00	Hotel Booking Charges:	\$0.00
Total Svc Fees:	\$26.00	Avg # of Days Rented:	0	Avg # of Nights:	0
Total All Charges:	\$183.10	Avg Booked Rate:	\$0.00	Avg Booked Rate:	\$0.00
		Avg Cost/Day:	\$0.00	Avg Cost/RoomNight:	\$0.00

STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET



339/VPT18406

1. Name of Employee 9340000295 Stephanie Hallock Cummins		2. Agency DEQ		3. Period (Month and Year) May-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 X pm Other to	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
05/11/04	6:00 am	5:00 pm	Portland>Seattle> Portland		12.75				12.75
			*taxable meal allowance						
15. Totals									\$0.00 12.75

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
14010-41002			Personal Vehicle Mileage		0.360		
		05/11/04	Airport Shuttle				14.00
	4151	12.75	Airport Parking				8.00
	4153	22.00					
Totals		34.75					\$22.00

24. I did/will did not/will not accept travel awards as a result of, or associated with this state business trip. Initials: *SH*
Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
Attended the Regional Agricultural Forum with EPA and state Directors.

26. Grand Total Amount	34.75 \$22.00
27. Travel Advance Amount	
28. Amount Due Employee/State	34.75 \$22.00 <i>4</i>
29. Received Training	Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director	Date 05/18/04
	I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By <i>Karen Lottidge for EAC</i>	33. Title MSD Admin Deputy Director

5/25 am met. / for cert.

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock	2. AGENCY/OFFICIAL STATION: OD/ HQ	3. REQUEST #: 352-047																				
4. AGENCY ACCOUNTING INFORMATION: 05-14010-41002		5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Attending Regional Agricultural Forum with EPA Region 10 and neighboring states.																						
7. ITINERARY: Destination city/state: Seattle, WA Departure date/time: 5/11/2004, 6:00 AM Return date/time: 5/11/200, 5:00 PM	8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) Airfare, \$272.20 <div style="text-align: right;">TOTAL: <u>\$272.20</u></div>																					
9. LODGING: Lodging per diem rate: <u>\$0.00</u> Amount per night: <u>0.00</u> Room tax per night: <u>0.00</u> # of nights: <u>0</u> <div style="text-align: right;">TOTAL: <u>\$0.00</u></div>	10. MEALS: Daily meal per diem rate: <u>\$0.00</u> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 15%; text-align: center;">Rate</th> <th style="width: 15%; text-align: center;"># Meals</th> <th style="width: 10%; text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;"></td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;"></td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;"></td> <td style="text-align: center;">0.00</td> </tr> <tr> <td colspan="3" style="text-align: right;">TOTAL:</td> <td style="text-align: center;"><u>\$0.00</u></td> </tr> </tbody> </table>			Rate	# Meals	Total	Breakfast: (25%)	0.00		0.00	Lunch: (25%)	0.00		0.00	Dinner: (50%)	0.00		0.00	TOTAL:			<u>\$0.00</u>
	Rate	# Meals	Total																			
Breakfast: (25%)	0.00		0.00																			
Lunch: (25%)	0.00		0.00																			
Dinner: (50%)	0.00		0.00																			
TOTAL:			<u>\$0.00</u>																			
11. CAR RENTAL: (See OAM 40.10.00, PO, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____	12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.) a. Vehicle Mileage <u>0.00</u> (# of miles) 14.00 b. Shuttle c. Other (specify below) <u>8.00</u> Airport Parking <div style="text-align: right;">TOTAL: <u>\$22.00</u></div>																					
13. TRAINING RELATED? (if yes, attach agenda) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	16. ESTIMATED COST OF TRIP: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Transportation:</td> <td style="text-align: right;"><u>\$272.20</u></td> </tr> <tr> <td>Lodging:</td> <td style="text-align: right;"><u>\$0.00</u></td> </tr> <tr> <td>Meals:</td> <td style="text-align: right;"><u>\$0.00</u></td> </tr> <tr> <td>Car Rental:</td> <td style="text-align: right;"><u>\$0.00</u></td> </tr> <tr> <td>Misc:</td> <td style="text-align: right;"><u>\$22.00</u></td> </tr> <tr> <td>TOTAL:</td> <td style="text-align: right;"><u>\$294.20</u></td> </tr> </table>		Transportation:	<u>\$272.20</u>	Lodging:	<u>\$0.00</u>	Meals:	<u>\$0.00</u>	Car Rental:	<u>\$0.00</u>	Misc:	<u>\$22.00</u>	TOTAL:	<u>\$294.20</u>								
Transportation:	<u>\$272.20</u>																					
Lodging:	<u>\$0.00</u>																					
Meals:	<u>\$0.00</u>																					
Car Rental:	<u>\$0.00</u>																					
Misc:	<u>\$22.00</u>																					
TOTAL:	<u>\$294.20</u>																					
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																						
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																						
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>		DATE: 5/10/04																				
19. SUPERVISOR SIGNATURE:		DATE:																				
20. DA/EMT SIGNATURE: <i>[Signature]</i>		DATE: 5/10/04																				

300.20 + 34.75 = 334.95

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: 5/11/04

Travel Destination: Seattle, WA

Estimated Cost of Trip: \$294.20

Fund Code: 05-14010-41002 (indirect)

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

- | | |
|---------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Legal | <input type="checkbox"/> Specialized Technical Training |
| <input type="checkbox"/> Public Safety and Health | <input type="checkbox"/> Required Class/Certification |
| <input type="checkbox"/> Financial | <input type="checkbox"/> Revenue Generating |
| <input type="checkbox"/> Reimbursed Travel | <input checked="" type="checkbox"/> Other (Please explain) |

Justification for seeking this exception:

Stephanie is traveling to Seattle to attend the Regional Agricultural Forum with EPA Region 10 and neighboring states.

Submitted by: *Stephanie Hallock* / 5/10/04
(Signature of Employee) (Date)

Recommended by: _____ / _____
(Signature of EMT Member) (Date)

Approved by: *[Signature]* / 5/10
(Signature of Agency Head or Delegate) (Date)

Revised by Dale Chipman April, 2004

Form not necessary on day trip

Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 05/11/2004 to 05/11/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE							
Actual:	\$271.20	Savings:	\$0.00	Val Carrier: ALASKA AIR (AS)	Account: OR State Dept. of Enviromental		
Lowest:	\$271.30	Lost Amt:	\$0.00	Ticket #: 7593421573	Break 1: 34000		
Service Fees:	\$29.00			Invoice #: 475080562	Break 2: ANDR		
Exception:	GOVERNMENT CITY PAIR USED			Inv Date: 05/10/2004	Break 3: 5032295990		
Itinerary				Airline	Flt #	Class	
PORTLAND,OR	SEATTLE TACOMA,WA	05/11/2004	07:00-07:52	ALASKA AIR (AS)	2386	Y	
SEATTLE TACOMA,WA	PORTLAND,OR	05/11/2004	16:00-16:49	ALASKA AIR (AS)	2189	L	
Total Cost of Trip:		\$300.20					

Report Totals								
Air Totals			Car Rental Totals			Hotel Booking Totals		
# of Air Trips:	1		# of Rentals:	0		# of Stays:	0	
Air Charges:	\$271.20		# of Days Rented:	0		# of RoomNights:	0	
Average Cost/Trip:	\$271.20		Car Rental Charges:	\$0.00		Hotel Booking Charges:	\$0.00	
Total Svc Fees:	\$29.00		Avg # of Days Rented:	0		Avg # of Nights:	0	
Total All Charges:	\$300.20		Avg Booked Rate:	\$0.00		Avg Booked Rate:	\$0.00	
			Avg Cost/Day:	\$0.00		Avg Cost/RoomNight:	\$0.00	

STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET



320/VPT18516

1. Name of Employee 9340000295 Stephanie Hallock <i>Cummins</i>		2. Agency DEQ		3. Period (Month and Year) May-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 pm Other _____ to _____	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
05/19/04	7:00 am		Hermiston, OR	23.25	na	7.75	15.50	55.00	78.25
05/20/04				15.50	provided	provided	15.50	55.00	70.50
05/21/04			stayed in Hermiston end travel status at 2:00 pm, 5/21		provided	provided	na		—
15. Totals						7.75	31.00	110.00	\$148.75

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
14010 - 41002		05/19/04	Hotel Tax				4.95
4101		05/20/04	Hotel Tax				4.95
		158.65					
Totals		158.65					\$9.90

24. I did/will _____ did not/will not accept travel awards as a result of, or associated with this state business trip. *SH* Initials.
Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.) Attended May EQC meeting.	26. Grand Total Amount	\$158.65
	27. Travel Advance Amount	
	28. Amount Due Employee/State	\$158.65
	29. Received Training	Conducted Training <i>SH</i>

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director	Date 6-8-04
	I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By <i>Glenn Lothridge for SAC</i>	33. Title MSD Admin

**STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET**



304/VPT19043

1. Name of Employee Stephanie Hallock		2. Agency DEQ		3. Period (Month and Year) July, 2004	
4. Official Station HQ		5. Division/ Work Unit 41002 OD 27344		6. Regular Schedule Work Shift 8:00 am - 5:00 pm Other to	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME <input checked="" type="checkbox"/> Other <input type="checkbox"/>			

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
06/30/04	2:00 pm		Hermiston, OR	15.50			15.50	55.00	70.50
07/01/04		8:00 pm	Portland, OR	31.00					31.00
				46.50					
				15. Totals	31.00		15.50	55.00	\$101.50

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount	
14010-41002-4101		06/30/04	Hotel Tax				4.95	
							106.45	
Totals							106.45	
							23. Section Total	\$4.95

24. I did/will _____ did not/will not accept travel awards as a result of, or associated with this state business trip. Initials: *SH*
 Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to , airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

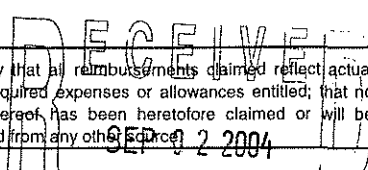
25. REASON FOR TRAVEL: (Be specific.)
 Attended ERP meeting and had meetings with local officials.

26. Grand Total Amount	\$106.45
27. Travel Advance Amount	
28. Amount Due Employee/State	\$106.45
29. Received Training	Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.
 I certify that the above claimed expenses are authorized by the State of Oregon Dept. of Environmental Quality and have been allotted for expenditure.

30. Signature of Employee
Stephanie Hallock
 32. Approved By
[Signature]

31. Title
 Director
 Date
 08/31/04
 33. Title
 Deputy
 Date
 9/1



STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET



308/VKT18802

1. Name of Employee <u>10R0084689</u> Stephanie Hallock <i>Ammins</i>		2. Agency DEQ		3. Period (Month and Year) July-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 X pm Other to	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

112
47

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
07/13/04	6:00 am		Denver, CO	47.00				112.00	159.00
07/14/04		8:00 pm	Portland, OR	47.00					47.00
			*per diem began at breakfast on 7/13.						
15. Totals				94.00				112.00	\$206.00

16. Accounting Codes	17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
10001-42004	M20000	Personal Vehicle Mileage		0.360		
	07/13/04	Room Tax				15.07
4151	221.07	07/14/04 Taxi				20.00
4153	20.00					
Totals						\$35.07

24. I did/will did not/will not accept travel awards as a result of, or associated with this state business trip. Initials. SH
Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
Attended Environmental Council of the States Meeting in Denver.

26. Grand Total Amount	\$241.07
27. Travel Advance Amount	
28. Amount Due Employee/State	\$241.07
29. Received Training	Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director	Date 07/19/04
	I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By <i>Kela Lottidge for EDC</i>	33. Title

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: July 13-14, 2004

Travel Destination: Denver, Colorado

Estimated Cost of Trip: ~~\$472.45~~ \$517.45

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

Agency Approval Required

DAS and Agency Approval Required

Client Related

Reimbursed Travel

Required by Federal Grant

Specialized Technical Training

For Economic Development

Other (Please explain)

Below is documentation of our justification for seeking this exception:

ECOS

Stephanie would like to attend the Alignment-PPA Workgroup Co-chair Meeting in Denver, Colorado. *Stephanie is an officer in ECOS and is one of the Workgroup Co-Chairs. This is a joint State/EPA Workgroup.*

Submitted by: *Stephanie Hallock* 6-14-04
 (Signature of Employee) (Date)

Recommended by: _____
 (Signature of EMT Member) (Date)

Approved by: *Helen Lottridge* 6/21/04
 (Signature of Agency Head or Delegate) (Date)

Approved by: N/A _____
 (Department of Administrative Services) (Date)

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock	2. AGENCY/OFFICIAL STATION: OD/ HQ	3. REQUEST #: A-05 <i>X</i>																				
4. AGENCY ACCOUNTING INFORMATION: 05-10001-42004 M20000/00 (ELCS)		5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Stephanie would like to attend the Alignment-PPA Workgroup Co-chair Meeting in Denver, Colorado. Only on travel status July 13-14, July 10-morning of the 13th on vacation status.																						
7. ITINERARY: Destination city/state: Denver, CO Departure date/time: 7/10/04, 11:30 am <i>Sat</i> Return date/time: 7/14/04, 8:00 pm <i>Wed</i>	8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) Airfare, \$278.20 <div style="text-align: right;">TOTAL: <u>\$278.20</u></div>																					
9. LODGING: Lodging per diem rate: <u>\$112.00</u> Amount per night: <u>112.00</u> Room tax per night: <u>20.00</u> <u>0.00</u> # of nights: <u>1</u> TOTAL: <u>\$112.00 132.00</u>	10. MEALS: Daily meal per diem rate: <u>\$47.00</u> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 15%; text-align: center;">Rate</th> <th style="width: 15%; text-align: center;"># Meals</th> <th style="width: 10%; text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">11.75</td> <td style="text-align: center;">1</td> <td style="text-align: center;">11.75</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">11.75</td> <td style="text-align: center;">2</td> <td style="text-align: center;">23.50</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">23.50</td> <td style="text-align: center;">2</td> <td style="text-align: center;">47.00</td> </tr> <tr> <td colspan="3" style="text-align: right;">TOTAL:</td> <td style="text-align: center;"><u>\$82.25</u></td> </tr> </tbody> </table>			Rate	# Meals	Total	Breakfast: (25%)	11.75	1	11.75	Lunch: (25%)	11.75	2	23.50	Dinner: (50%)	23.50	2	47.00	TOTAL:			<u>\$82.25</u>
	Rate	# Meals	Total																			
Breakfast: (25%)	11.75	1	11.75																			
Lunch: (25%)	11.75	2	23.50																			
Dinner: (50%)	23.50	2	47.00																			
TOTAL:			<u>\$82.25</u>																			
11. CAR RENTAL: (See OAM 40.10.00, PO, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____	12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.) a. Vehicle Mileage _____ 0.00 b. Shuttle (# of miles) _____ 0.00 c. Other (specify below) _____ <u>25.00</u> TOTAL: <u>25.00 \$0.00</u>																					
13. TRAINING RELATED? (if yes, attach agenda) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																						
14. STATUS: <input checked="" type="checkbox"/> Executive/Mgmt Svc: <input type="checkbox"/> AFSCME: <input type="checkbox"/> Other: Explain: _____	16. ESTIMATED COST OF TRIP: Transportation: \$278.20 <i>-</i> Lodging: \$112.00 <i>132.00</i> Meals: \$82.25 <i>-</i> Car Rental: \$0.00 Misc: <u>\$0.00 25.00</u> TOTAL: <u>\$472.45 517.45</u>																					
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																						
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																						
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>	DATE: <i>6-14-04</i>																					
19. SUPERVISOR SIGNATURE: <i>Salts for Helen Lottidge</i>	DATE: <i>6/21/04</i>																					
20. DATE SIGNATURE: _____ DATE: _____																						

Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 07/10/2004 to 07/15/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE					
Actual:	\$278.20	Savings:	\$340.00	Val Carrier: ALASKA AIR (AS)	Account: OR State Dept. of Enviromental
Lowest:	\$278.20	Lost Amt:	\$0.00	Ticket #: 7597348283	Break 1: 34000
Service Fees:	\$29.00			Invoice #: 475081587	Break 2: ANDREA
Exception:	GOVERNMENT CITY PAIR USED			Inv Date: 06/24/2004	Break 3: 5032295990
Itinerary					
				Airline	Flt # Class
PORTLAND,OR	DENVER,CO	07/10/2004	13:40-17:07	ALASKA AIR (AS)	0508 L
DENVER,CO	PORTLAND,OR	07/14/2004	17:40-19:15	ALASKA AIR (AS)	0505 L
Total Cost of Trip:		\$307.20			

Report Totals					
Air Totals		Car Rental Totals		Hotel Booking Totals	
# of Air Trips:	1	# of Rentals:	0	# of Stays:	0
Air Charges:	\$278.20	# of Days Rented:	0	# of RoomNights:	0
Average Cost/Trip:	\$278.20	Car Rental Charges:	\$0.00	Hotel Booking Charges:	\$0.00
Total Svc Fees:	\$29.00	Avg # of Days Rented:	0	Avg # of Nights:	0
Total All Charges:	\$307.20	Avg Booked Rate:	\$0.00	Avg Booked Rate:	\$0.00
		Avg Cost/Day:	\$0.00	Avg Cost/RoomNight:	\$0.00



318/VPT18912

STATE OF OREGON TRAVEL EXPENSE DETAIL SHEET

1. Name of Employee 1020084689 Stephanie Hallock <i>Gummins</i>		2. Agency DEQ		3. Period (Month and Year) July-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 <input checked="" type="checkbox"/> pm Other _____ to _____	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

150
51

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
07/20/04	5:00 am		Washington, D.C.	51.00				*170.00	221.00
07/21/04		3:00 pm	Portland, OR	38.25	12.75	12.75	12.75		38.25
			* See attached						
				89.25					
15. Totals				51.00	12.75	12.75		170.00	\$221.00 259.25

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
14010 - 41002			Personal Vehicle Mileage		0.360		
		07/20/04	Metro Tickets (no receipt)				5.00
H151	283.90	07/20/04	Taxi (no receipt)				7.50
H153	28.50	07/20/04	Room Tax				24.65
		07/21/04	Parking at PDX				16.00
Totals		312.40					23. Section Total \$53.15

24. I did/will _____ did not/will not accept travel awards as a result of, or associated with this state business trip. *SH* Initials.
 Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
 Attended Environmental Council of the States Meeting in D.C., ECOS paid for airfare.

26. Grand Total Amount	312.40	\$274.15
27. Travel Advance Amount		
28. Amount Due Employee/State	312.40	\$274.15
29. Received Training	Conducted Training	

3 claims
\$461.91

30. Signature of Employee <i>Stephanie Hallock</i>	31. Title	Date
	Director	08/11/04
32. Approved By <i>[Signature]</i>	33. Title	Date
	Deputy	08/10/04

8/13 C.M. Hart

CONFERENCE/MEETING LODGING COMPARISON WORKSHEET

DIRECTIONS: For out-of-state travel, complete form and attach it to out-of-state travel authorization.
 For in-state travel, complete form and attach it to your travel expense claim.
 Be sure to attach all supporting documentation.
 For full text of OAM 40.10.00.PO, Section 110c, see page 2.

NAME OF TRAVELER: Stephanie Hallock **DATES OF TRAVEL:** 7/20/2004
CONF/MEETING CITY: Washington, D.C. **LODGING PER DIEM:** 150

Conference/Meeting Site Lodging Rate(s) (Attach documentation)		
Hotel Name and Address:	Lodging: (___# of nights x ___ room rate)	\$170.00
	Shuttle:	_____
	Car rental/fuel/parking:	_____
	Other:	_____
Hotel Tabard Inn, 1739 N Street NW, Washington, D.C., 202-785- 1277	(if necessary) TOTAL	\$170.00
If conference rate is equal to or lower than per diem rate, STOP here.		

*Hotel Tabard
was sold out of
our rate rooms
but had a room
for \$170.00*

To gather the necessary information you can either:

1. Use the Internet to search travel websites such as www.expedia.com
(Print the travel resource web page for documentation of search)
- OR
2. Call Away Travel at 1-800-289-2959
(Document the date of the call, the name of the travel agent and the results)

Lodging within 1-2 blocks of conference site

Hotel Name and Address:	Lodging: (___# of nights x ___ room rate)	
Jw Marriott Pennsylvania Ave1331 Pennsylvania Ave NW Washington DC 20004 *No Government Rates, SOLD OUT	(if necessary) TOTAL	_____

Hotel Name and Address:	Lodging: (___# of nights x ___ room rate)	
1401 Pennsylvania Ave NW Washington DC 20004-1010 SOLD OUT	(if necessary) TOTAL	_____

Lodging more than 1-2 blocks of conference site

Hotel Name and Address:	Lodging: (___# of nights x ___ room rate)	
Sofitel Lafayette Square 806 15th St NW Washington DC 20005 SOLD OUT	(if necessary) TOTAL	_____

415 New Jersey Avenue NW. Washington DC 20001 SOLD OUT	(if necessary) TOTAL	_____
-----------------------------------------------------------------	--------------------------------	-------

*Judy -
OK to reimp
excess per diem?
OK per
attached
documentation*

Lodging Comparison Worksheet Prepared by:

Name: Andrea Bonard **Phone #:** 503-229-5990

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

RECEIVED
JUL 26 2004

25-052

1. NAME OF EMPLOYEE: Stephanie Hallock		2. AGENCY/OFFICIAL STATION: OD/ HQ		3. REQUEST #: Dept. of Environmental Quality																					
4. AGENCY ACCOUNTING INFORMATION: 05-14010-41002			5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																						
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Stephanie will be meeting with EPA Administrator Leavitt and members of the Environmental Council of the States. Airfare was purchased by Environmental Council of the States.																									
7. ITINERARY:			8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11)																						
Destination city/state: Washington, D.C.			TOTAL: <u>\$0.00</u> Paid directly																						
Departure date/time: 7/20/04, 4:00 am																									
Return date/time: 7/21/04, 2:30 pm																									
9. LODGING: Lodging per diem rate: <u>\$150.00</u>			10. MEALS: Daily meal per diem rate: <u>\$51.00</u>																						
Amount per night: <u>170.00</u>			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;"># Meals</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">12.75</td> <td style="text-align: center;">2</td> <td style="text-align: center;">25.50</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">12.75</td> <td style="text-align: center;">2</td> <td style="text-align: center;">25.50</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">25.50</td> <td style="text-align: center;">1</td> <td style="text-align: center;">25.50</td> </tr> <tr> <td colspan="3" style="text-align: right;">TOTAL:</td> <td style="text-align: center;"><u>\$76.50</u></td> </tr> </tbody> </table>				Rate	# Meals	Total	Breakfast: (25%)	12.75	2	25.50	Lunch: (25%)	12.75	2	25.50	Dinner: (50%)	25.50	1	25.50	TOTAL:			<u>\$76.50</u>
	Rate	# Meals	Total																						
Breakfast: (25%)	12.75	2	25.50																						
Lunch: (25%)	12.75	2	25.50																						
Dinner: (50%)	25.50	1	25.50																						
TOTAL:			<u>\$76.50</u>																						
Room tax per night: <u>25.00</u>																									
# of nights: <u>1</u>																									
TOTAL: <u>\$170.00 195.00</u>																									
11. CAR RENTAL: (See OAM 40.10.00.P.O, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____			12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.)																						
			a. Vehicle Mileage _____ 0.00 b. Shuttle _____ (# of miles) 0.00 c. Other (specify below) _____ 66.00 parking-\$16.00, cab fare est-\$50.00																						
			TOTAL: <u>\$66.00</u>																						
13. TRAINING RELATED? (if yes, attach agenda) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																									
14. STATUS: <input checked="" type="checkbox"/> Executive/Mgmt Svc: <input type="checkbox"/> AFSCME: <input type="checkbox"/> Other: Explain: _____			16. ESTIMATED COST OF TRIP: Transportation: <u>\$0.00</u> Lodging: <u>\$170.00 195.00</u> Meals: <u>\$76.50</u> Car Rental: <u>\$0.00</u> Misc: <u>\$66.00</u> TOTAL: <u>\$312.50 337.50</u>																						
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																									
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																									
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>				DATE: 7-19-04																					
19. SUPERVISOR SIGNATURE:				DATE:																					
20. DA/EMT SIGNATURE: <i>Dele J. Johnson for EMT</i>				DATE: 7-23-04																					

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: July 20-21, 2004

Travel Destination: Washington, D.C.

Estimated Cost of Trip: ~~\$312.50~~ \$337.50

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

Agency Approval Required

Client Related

Required by Federal Grant

For Economic Development

DAS and Agency Approval Required

Reimbursed Travel

Specialized Technical Training

Other (Please explain)

Below is documentation of our justification for seeking this exception:

Stephanie will be meeting with EPA Administrator Leavitt and members of the Environmental Council of the States. Airfare was purchased by Environmental Council of the States.

Submitted by:

Stephanie Hallock
(Signature of Employee)

7-19-04
(Date)

Recommended by:

(Signature of EMT Member)

(Date)

Approved by:

Alex Lottidge for EQC
(Signature of Agency Head or Delegate)

7-19-04
(Date)

Approved by:

(Department of Administrative Services)

(Date)



**STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET**

318/VP718912

1. Name of Employee Stephanie Hallock			2. Agency DEQ			3. Period (Month and Year) July-04		
4. Official Station HQ			5. Division/ Work Unit OD			6. Regular Schedule Work Shift 8:00 am - 5:00 pm <input checked="" type="checkbox"/> pm Other _____ to _____		
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>			Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>					

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
07/29/04	9:00 am	6:00 pm	Seattle, WA *day trip no per diem						
15. Totals									\$0.00

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
14010-41002			Personal Vehicle Mileage		0.360		
		07/29/04	Airport Shuttle				8.50
4153		07/29/04	Airport Parking				8.00
Totals		110.50					
23. Section Total							\$16.50

24. I did/will _____ did not/will not accept travel awards as a result of, or associated with this state business trip. Initials: SH
 Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
 Attended meeting w/ EPA Region 10 Administrators in Seattle

26. Grand Total Amount \$16.50 27. Travel Advance Amount 28. Amount Due Employee/State \$16.50 29. Received Training Conducted Training	30. Signature of Employee <u>Stephanie Hallock</u> Director 08/11/04
I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	31. Title Director
I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By <u>[Signature]</u> Deputy 7/29/04
	33. Title Deputy 7/29/04

✓ for map

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock		2. AGENCY/OFFICIAL STATION: OD/ HQ		3. REQUEST #: 39-05 ✓																					
4. AGENCY ACCOUNTING INFORMATION: 05-14010 - 41002			5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																						
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Meeting with John Iani, Administrator of EPA Reigon 10.																									
7. ITINERARY: Destination city/state: Seattle, WA Departure date/time: 7/29/2004, 7:00 am Return date/time: 7/29/2004, 6:00 pm			8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) Airfare. \$292.20 <div style="text-align: right;">TOTAL: <u>\$292.20</u></div>																						
9. LODGING: Lodging per diem rate: <u>\$0.00</u> Amount per night: <u>0.00</u> Room tax per night: <u>0.00</u> # of nights: <u>0</u> TOTAL: <u>\$0.00</u>			10. MEALS: Daily meal per diem rate: <u>\$51.00</u> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;"># Meals</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">12.75</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">12.75</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">25.50</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td colspan="3"></td> <td style="text-align: right;">TOTAL: <u>\$0.00</u></td> </tr> </tbody> </table>				Rate	# Meals	Total	Breakfast: (25%)	12.75	0	0.00	Lunch: (25%)	12.75	0	0.00	Dinner: (50%)	25.50	0	0.00				TOTAL: <u>\$0.00</u>
	Rate	# Meals	Total																						
Breakfast: (25%)	12.75	0	0.00																						
Lunch: (25%)	12.75	0	0.00																						
Dinner: (50%)	25.50	0	0.00																						
			TOTAL: <u>\$0.00</u>																						
11. CAR RENTAL: (See OAM 40.10.00.P.O, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____			12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.) a. Vehicle Mileage _____ 0.00 b. Shuttle _____ (# of miles) 8.50 c. Other (specify below) _____ 8.00 Airport Parking - \$8 TOTAL: <u>\$16.50</u>																						
13. TRAINING RELATED? (if yes, attach agenda) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			16. ESTIMATED COST OF TRIP: Transportation: \$292.20 — Lodging: \$0.00 Meals: \$0.00 Car Rental: \$0.00 Misc: <u>\$16.50</u> — TOTAL: <u>\$308.70</u> —																						
14. STATUS: <input checked="" type="checkbox"/> Executive/Mgmt Svc: <input type="checkbox"/> AFSCME: <input type="checkbox"/> Other: Explain: _____																									
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																									
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																									
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>				DATE: 7-26-04																					
19. SUPERVISOR SIGNATURE:				DATE:																					
20. DA/EMT SIGNATURE: <i>Felicia Johnson for DEQ ERC</i>				DATE: 7-27-04																					

16.50 + 300.20 = 316.70

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: 7/29/04

Travel Destination: Seattle, WA

Estimated Cost of Trip: \$308.70

Fund Code: 05-14010-41002

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

- | | |
|---------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Legal | <input type="checkbox"/> Specialized Technical Training |
| <input type="checkbox"/> Public Safety and Health | <input type="checkbox"/> Required Class/Certification |
| <input type="checkbox"/> Financial | <input type="checkbox"/> Revenue Generating |
| <input type="checkbox"/> Reimbursed Travel | <input checked="" type="checkbox"/> Other (Please explain) |

Justification for seeking this exception:

Stephanie is traveling to Seattle for a meeting with John Iani, Administrator of EPA Reigon 10.

Submitted by: *Stephanie Hallock* 7-26-04
(Signature of Employee) (Date)

Recommended by: _____
(Signature of EMT Member) (Date)

Approved by: *Alan Lutzke for EAC* 7-27-04
(Signature of Agency Head or Delegate) (Date)

Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 07/29/2004 to 07/29/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE							
Actual:	\$271.20	Savings:	\$61.00	Val Carrier: ALASKA AIR (AS)	Account: OR State Dept. of Enviromental		
Lowest:	\$271.20	Lost Amt:	\$0.00	Ticket #: 1210646125	Break 1: 34000		
Service Fees:	\$29.00			Invoice #: 475082350	Break 2: ANDREA		
Exception: GOVERNMENT CITY PAIR USED				Inv Date: 07/28/2004	Break 3: 5032295990		
Hinerary				Airline	Flt #	Class	
PORTLAND,OR	SEATTLE TACOMA,WA	07/29/2004	10:30-11:25	ALASKA AIR (AS)	2236	Y	
SEATTLE TACOMA,WA	PORTLAND,OR	07/29/2004	19:00-19:47	ALASKA AIR (AS)	2465	L	
Total Cost of Trip:		\$300.20					

Report Totals					
Air Totals		Car Rental Totals		Hotel Booking Totals	
# of Air Trips:	1	# of Rentals:	0	# of Stays:	0
Air Charges:	\$271.20	# of Days Rented:	0	# of RoomNights:	0
Average Cost/Trip:	\$271.20	Car Rental Charges:	\$0.00	Hotel Booking Charges:	\$0.00
Total Svc Fees:		Avg # of Days Rented:		Avg # of Nights:	
		0		0	
		Avg Booked Rate:		Avg Booked Rate:	
		\$0.00		\$0.00	
Total All Charges:		Avg Cost/Day:		Avg Cost/RoomNight:	
\$300.20		\$0.00		\$0.00	

**STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET**



318/VPT 18912

1. Name of Employee Stephanie Hallock		2. Agency DEQ		3. Period (Month and Year) August-04	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 <input checked="" type="checkbox"/> pm Other _____ to _____	
7. Unrepresented <input type="checkbox"/>		Management Service <input type="checkbox"/>		Executive Service <input checked="" type="checkbox"/>	
Bargaining Unit Name <input type="checkbox"/>		AFSCME		Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/> Other <input type="checkbox"/>	

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging	
					Breakfast	Lunch	Dinner			
08/05/04	7:30 am		Eugne, OR	<i>32.25</i>		10.75	21.50	62.00	94.25	
08/06/04		2:00 pm	Portland, OR	<i>32.25</i>	10.75	10.75	10.75		21.50 <i>32.25</i>	
				15. Totals	<i>64.50</i>	<i>10.75</i>	<i>21.50</i>	<i>21.50</i>	<i>62.00</i>	\$115.75 / 2650

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
<i>14010 - 4100Z</i>			Personal Vehicle Mileage		0.360		
		08/05/04	Room Tax (<i>62 x 10.5%</i>)				<i>6.82 - 6.51</i>
	<i>4101</i>	<i>133.01</i>					
Totals		<i>133.01</i>					6.51 - \$6.82

24. I did/will _____ did not/will not accept travel awards as a result of, or associated with this state business trip. *SH* Initials.
Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
Meet with Eugene and Roseburg offices and local officials.

26. Grand Total Amount	<i>133.01</i>	\$122.57
27. Travel Advance Amount		
28. Amount Due Employee/State	<i>133.01</i>	\$122.57 <i>SH</i>
29. Received Training	Conducted Training	

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.

30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director	Date 08/11/04
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I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.

32. Approved By <i>[Signature]</i>	33. Title Deputy	Date 8/11/04
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62/43

318/VPT 18912



**STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET**

304/VPT19043

1. Name of Employee <i>10R0084689</i> Stephanie Hallock/ <i>Cummins</i>		2. Agency DEQ		3. Period (Month and Year) August, 2004	
4. Official Station HQ		5. Division/ Work Unit <i>41002</i> OD <i>27344</i>		6. Regular Schedule Work Shift 8:00 am - 5:00 pm Other _____ to _____	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	12. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging	
					Breakfast	Lunch	Dinner			
08/19/04	5:30 am		<i>59/47</i> Medford, OR	<i>47</i>	11.75	11.75	23.50	59.00 ✓	106.00	
08/20/04		4:30 pm	Portland, OR	<i>35.25</i>	11.75	11.75	11.75		35.25	
08/23/04	6:30 am		Hines, OR	<i>23.25</i>		7.75	15.50	55.00 ✓	78.25	
08/24/04		7:30 pm	Portland, OR	<i>31</i>	7.75	7.75	15.50		31.00	
15. Totals					<i>134.50</i>	19.50	27.25	66.25	114.00	\$250.50 ✓

16. Accounting Codes	17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
<i>14010-41002</i>	08/19/04	Hotel Tax				5.31 ✓
<i>4101</i>	08/20/04	Parking				16.00 ✓
<i>4103</i>	08/23/04	Hotel Tax				4.40 ✓
Totals	<i>276.21</i>					\$25.71

24. I did/will _____ did not/will not accept travel awards as a result of, or associated with this state business trip. *SH* Initials.
Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.)
1st trip, visited WR offices in Medford and Grants Pass and had meetings with local officials. 2nd trip, attended GERT field trip in Eastern Oregon.

26. Grand Total Amount	\$276.21 ✓
27. Travel Advance Amount	
28. Amount Due Employee/State	\$276.21 \$
29. Received Training	Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled that no part thereof has been previously claimed or will be claimed from any other source.

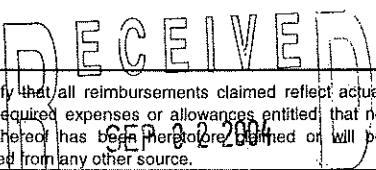
I certify that the above claimed expenses are authorized duty required expenses if found to be true and this claim are available in the approved budget for the period covered and have been allotted for expenditure.

30. Signature of Employee
Stephanie Hallock

32. Approved By
Phyllis

31. Title
Director
Date
08/31/04

33. Title
Deputy
Date
9/1



Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 08/19/2004 to 08/20/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE HA							
Actual:	\$168.21	Savings:	\$235.98	Val Carrier:	ALASKA AIR (AS)	Account: OR State Dept. of Enviromental	
Lowest:	\$168.21	Lost Amt:	\$0.00	Ticket #:	1212649885	Break 1: 34000	
Service Fees:	\$12.00			Invoice #:	401421275	Break 2: ANDREA	
Exception:	GOVERNMENT CITY PAIR USED			Inv Date:	08/16/2004	Break 3: 5032295990	
Itinerary				Airline	Flt #	Class	
PORTLAND,OR	MEDFORD,OR	08/19/2004	06:50-07:55	ALASKA AIR (AS)	2125	L	
MEDFORD,OR	PORTLAND,OR	08/20/2004	14:55-15:55	ALASKA AIR (AS)	2082	L	
Total Cost of Trip:		\$180.21					

Report Totals					
Air Totals		Car Rental Totals		Hotel Booking Totals	
# of Air Trips:	1	# of Rentals:	0	# of Stays:	0
Air Charges:	\$168.21	# of Days Rented:	0	# of RoomNights:	0
Average Cost/Trip:	\$168.21	Car Rental Charges:	\$0.00	Hotel Booking Charges:	\$0.00
Total Svc Fees:	\$12.00	Avg # of Days Rented:	0	Avg # of Nights:	0
Total All Charges:	\$180.21	Avg Booked Rate:	\$0.00	Avg Booked Rate:	\$0.00
		Avg Cost/Day:	\$0.00	Avg Cost/RoomNight:	\$0.00



337/NPT19192

STATE OF OREGON TRAVEL EXPENSE DETAIL SHEET

1. Name of Employee 1020084689 Stephanie Hallock Cummins		2. Agency DEQ		3. Period (Month and Year) September, 2004	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 pm Other to	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Bargaining Unit Name <input type="checkbox"/> AFSCME <input type="checkbox"/> Other <input type="checkbox"/>			

9/31

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
09/08/04	8:30 am		Coos Bay, OR	23.25		7.75	15.50	55.00	78.25
09/09/04		8:00 pm	Portland, OR	23.25	7.75	provided	15.50		23.25
15. Totals					7.75		31.00	55.00	\$101.50

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
14010-41002		09/08/04	Hotel Tax				4.40
		09/09/04	Parking				16.00
4101	105.90						
4103	11.00						
Totals		121.90					\$20.40

24. I did/will did not/will not accept travel awards as a result of, or associated with this state business trip. Initials: *SH*

Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.) Attended EQC meeting in Coos Bay, Oregon.	26. Grand Total Amount	\$ 121.90
	27. Travel Advance Amount	
	28. Amount Due Employee/State	\$ 121.90
	29. Received Training	Conducted Training

 I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director	Date <i>[Signature]</i>
	32. Approved By <i>[Signature]</i>	33. Title Deputy	Date 9/27

I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.

Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 09/08/2004 to 09/08/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE							
Actual:	\$268.19	Savings:	\$56.00	Val Carrier:	ALASKA AIR (AS)	Account:	OR State Dept. of Enviromental
Lowest:	\$268.19	Lost Amt:	\$0.00	Ticket #:	1213697174	Break 1:	34000
Service Fees:	\$29.00			Invoice #:	475083081	Break 2:	ANDREA
Exception:	GOVERNMENT CITY PAIR USED			Inv Date:	08/26/2004	Break 3:	5032295990
<u>Itinerary</u>				<u>Airline</u>		<u>Flt #</u>	<u>Class</u>
PORTLAND,OR	NORTH BEND,OR	09/08/2004	10:20-11:15	ALASKA AIR (AS)	2208	Y	
NORTH BEND,OR	PORTLAND,OR	09/09/2004	18:15-19:10	ALASKA AIR (AS)	2147	L	
Total Cost of Trip:		\$297.19					

Report Totals					
Air Totals		Car Rental Totals		Hotel Booking Totals	
# of Air Trips:	1	# of Rentals:	0	# of Stays:	0
Air Charges:	\$268.19	# of Days Rented:	0	# of RoomNights:	0
Average Cost/Trip:	\$268.19	Car Rental Charges:	\$0.00	Hotel Booking Charges:	\$0.00
Total Svc Fees:	\$29.00	Avg # of Days Rented:	0	Avg # of Nights:	0
Total All Charges:	\$297.19	Avg Booked Rate:	\$0.00	Avg Booked Rate:	\$0.00
		Avg Cost/Day:	\$0.00	Avg Cost/RoomNight:	\$0.00



328/VPT 19313

STATE OF OREGON TRAVEL EXPENSE DETAIL SHEET

1. Name of Employee: 10R0084689 Stephanie Hallock Cummins
2. Agency: DEQ
3. Period (Month and Year): October, 2004
4. Official Station: HQ
5. Division/ Work Unit: OD
6. Regular Schedule Work Shift: 8:00 am - 5:00 pm
7. Unrepresented, Management Service, Executive Service, Board/Commission, Volunteer, Bargaining Unit Name: AFSCME

Table with columns: 8. Date, 9. Time of Departure, 10. Time of Arrival, 11. Destination, 12. Per Diem/Hourly Allowance, Individual Meal Reimbursement (Breakfast, Lunch, Dinner), 13. Lodging, 14. Total Meals and Lodging. Includes rows for Oklahoma City, OK and Portland, OR.

Table with columns: 16. Accounting Codes, 17. Date, 18. Miscellaneous Expenses (Fares, Private Mileage, Room Tax, Telephone, Other Expenses), 19. Training Related?, 20. Rate Per Mile, 21. Private Car Miles, 22. Amount. Includes entries for Room Tax, Telephone call, Airport Shuttle.

24. I did/will did not/will not X accept travel awards as a result of, or associated with this state business trip. Initials: SH

25. REASON FOR TRAVEL: (Be specific.) Attended Fall ECOS Meeting in Oklahoma City.
26. Grand Total Amount \$ 340.15
27. Travel Advance Amount
28. Amount Due Employee/State \$ 340.15
29. Received Training Conducted Training

30. Signature of Employee: Stephanie Hallock
31. Title: Director Date: 10/13/04
32. Approved By: [Signature]
33. Title: Deputy Director Date: 10/13/04

66/43

RECEIVED OCT 14 2004 Accounting Office Dept. of Environmental Quality

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock		2. AGENCY/OFFICIAL STATION: DEQ/HQ		3. REQUEST #: 84-05 ✓																					
4. AGENCY ACCOUNTING INFORMATION: 05-14010-41002			5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																						
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Attending the Environmental Council of the States Fall meeting in Oklahoma City, October 2-5.																									
7. ITINERARY: Destination city/state: Oklahoma City, OK Departure date/time: 10/2/05, 6:00 am Return date/time: 10/5/05, 7:30 pm			8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) Estimated Airfare \$228.00 NK ticket - see attached e-mail TOTAL: <u>\$228.00</u>																						
9. LODGING: Lodging per diem rate: <u>\$104.00</u> 67.00 Amount per night: <u>104.00</u> 66.00 Room tax per night: <u>10.00</u> # of nights: <u>3</u> TOTAL: <u>\$342.00</u> 198.00 228.00			10. MEALS: Daily meal per diem rate: <u>\$43.00</u> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Rate</th> <th># Meals</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td>10.75</td> <td>1</td> <td>10.75</td> </tr> <tr> <td>Lunch: (25%)</td> <td>10.75</td> <td>1</td> <td>10.75</td> </tr> <tr> <td>Dinner: (50%)</td> <td>21.50</td> <td>3</td> <td>64.50</td> </tr> <tr> <td colspan="3">TOTAL:</td> <td><u>\$86.00</u></td> </tr> </tbody> </table>				Rate	# Meals	Total	Breakfast: (25%)	10.75	1	10.75	Lunch: (25%)	10.75	1	10.75	Dinner: (50%)	21.50	3	64.50	TOTAL:			<u>\$86.00</u>
	Rate	# Meals	Total																						
Breakfast: (25%)	10.75	1	10.75																						
Lunch: (25%)	10.75	1	10.75																						
Dinner: (50%)	21.50	3	64.50																						
TOTAL:			<u>\$86.00</u>																						
11. CAR RENTAL: (See OAM 40.10.00.P0, section .115. The state has a price agreement with Enterprise Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____			12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.) a. Vehicle Mileage _____ 0.00 b. Shuttle (# of miles) _____ 30.00 c. Other (specify below) _____ 20.00 TOTAL: <u>\$50.00</u> \$30.00																						
13. TRAINING RELATED? (if yes, attach agenda) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																									
14. STATUS: <input checked="" type="checkbox"/> Executive/Mgmt Svc: <input type="checkbox"/> AFSCME: <input type="checkbox"/> Other: Explain: _____			16. ESTIMATED COST OF TRIP: Transportation: <u>\$228.00</u> Lodging: <u>228.00</u> \$312.00 198.00 Meals: <u>\$86.00</u> Car Rental: <u>\$0.00</u> Misc: <u>\$30.00</u> 50.00 TOTAL: <u>\$656.00</u> 542.00 592.00																						
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																									
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																									
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>				DATE: 9-9-04																					
19. SUPERVISOR SIGNATURE: <i>Dale Joffe for EDC</i>				DATE: 9-15-04																					
20. DA/EMT SIGNATURE:				DATE:																					

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: October 2-5, 2004

Travel Destination: Oklahoma City, OK

Estimated Cost of Trip: ~~\$656.00~~ \$592.00

Fund Code: 05-14040-MSD02

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

- | | |
|---------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Legal | <input type="checkbox"/> Specialized Technical Training |
| <input type="checkbox"/> Public Safety and Health | <input type="checkbox"/> Required Class/Certification |
| <input type="checkbox"/> Financial | <input type="checkbox"/> Revenue Generating |
| <input type="checkbox"/> Reimbursed Travel | <input checked="" type="checkbox"/> Other (Please explain) |

Justification for seeking this exception:

I would like to attend the Environmental Council of the States (ECOS) Fall meeting. ECOS is a national non-profit, non-partisan association of state environmental directors that works to improve coordination between states and EPA. I serve as ECOS Secretary-Treasurer, and am a member of the ECOS Planning Committee, Cross Media Committee and Environmental Compliance Committee.

Submitted by: Stephanie Hallock 9-9-04
(Signature of Employee) (Date)

Recommended by: Helen Lott for EDC 9-15-04
(Signature of EMT Member) (Date)

Approved by: Helen Lott for EDC 9-15-04

Full Traveler Detail (History)

OR State Dept. of Enviromental

Trip Departures from 10/02/2004 to 10/05/2004

Report Parameters: Passenger = CUMMINS

CUMMINS/STEPHANIE							
Actual:	\$297.90	Savings:	\$0.00	Val Carrier: UNITED (UA)	Account: OR State Dept. of Enviromental		
Lowest:	\$297.90	Lost Amt:	\$0.00	Ticket #: 1216047652	Break 1: 34000		
Service Fees:	\$29.00			Invoice #: 475083742	Break 2: ANDREA		
Exception:	LOWEST FARE ACHIEVED			Inv Date: 09/21/2004	Break 3: 5032295990		
Itinerary				Airline	Flt #	Class	
PORTLAND,OR	DENVER,CO	10/02/2004	07:52-11:15	UNITED (UA)	0598	S	
DENVER,CO	OKLAHOMA CITY,OK	10/02/2004	12:31-15:00	UNITED (UA)	0754	S	
OKLAHOMA CITY,OK	DENVER,CO	10/05/2004	15:45-16:17	UNITED (UA)	0763	S	
DENVER,CO	PORTLAND,OR	10/05/2004	17:05-18:39	UNITED (UA)	0333	S	
Total Cost of Trip:		\$326.90					

Report Totals					
Air Totals		Car Rental Totals		Hotel Booking Totals	
# of Air Trips:	1	# of Rentals:	0	# of Stays:	0
Air Charges:	\$297.90	# of Days Rented:	0	# of RoomNights:	0
Average Cost/Trip:	\$297.90	Car Rental Charges:	\$0.00	Hotel Booking Charges:	\$0.00
Total Svc Fees:	\$29.00	Avg # of Days Rented:	0	Avg # of Nights:	0
Total All Charges:	\$326.90	Avg Booked Rate:	\$0.00	Avg Booked Rate:	\$0.00
		Avg Cost/Day:	\$0.00	Avg Cost/RoomNight:	\$0.00



310/VPT1945Z

**STATE OF OREGON
TRAVEL EXPENSE DETAIL SHEET**

1. Name of Employee <i>1020084689</i> Stephanie Hallock <i>Cummins</i>		2. Agency DEQ		3. Period (Month and Year) October, 2004	
4. Official Station HQ		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 pm Other _____ to _____	
7. Unrepresented <input type="checkbox"/> Management Service <input type="checkbox"/> Executive Service <input checked="" type="checkbox"/> Board/Commission <input type="checkbox"/> Volunteer <input type="checkbox"/>		Baigaining Unit Name <input type="checkbox"/> AFSCME Other <input type="checkbox"/>			

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	13. Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
10/22/04	6:30 am	6:30 pm	Seattle day trip		X	X	X		
15. Totals									\$0.00

16. Accounting Codes		17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses		19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
14010 - 41002			Parking Garage Fee					19.00
4153		19.00						
Totals		19.00						\$19.00

24. I did/will _____ did not/will not accept travel awards as a result of, or associated with this state business trip. *SHC* Initials.
 Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.) Regional Agricultural Forum	26. Grand Total Amount	\$ 19.00
	27. Travel Advance Amount	
	28. Amount Due Employee/State	\$ 19.00
	29. Received Training Conducted Training	

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee <i>Stephanie Hallock</i>	31. Title Director	Date 11/1/04
	I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By <i>[Signature]</i>	33. Title Deputy Director

✓ for dup.

**STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION**

1. NAME OF EMPLOYEE: Stephanie Hallock	2. AGENCY/OFFICIAL STATION: OD/ HQ	3. REQUEST #: 150-05 <i>X</i>																				
4. AGENCY ACCOUNTING INFORMATION: 05-14010-41002		5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Attending Regional Agricultural Forum with EPA Region 10 and neighboring states.																						
7. ITINERARY: Destination city/state: Seattle, WA Departure date/time: 10/22/2004, 6:30 AM Return date/time: 10/22/2004, 5:00 PM	8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) Using state car. Will carpool with Holly Schroeder. TOTAL: _____																					
9. LODGING: Lodging per diem rate: \$0.00 Amount per night: 0.00 Room tax per night: 0.00 # of nights: 0 TOTAL: \$0.00	10. MEALS: Daily meal per diem rate: \$0.00 <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;"># Meals</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;"> </td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;"> </td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;"> </td> <td style="text-align: center;">0.00</td> </tr> <tr> <td colspan="3" style="text-align: right;">TOTAL:</td> <td style="text-align: center;">\$0.00</td> </tr> </tbody> </table>			Rate	# Meals	Total	Breakfast: (25%)	0.00		0.00	Lunch: (25%)	0.00		0.00	Dinner: (50%)	0.00		0.00	TOTAL:			\$0.00
	Rate	# Meals	Total																			
Breakfast: (25%)	0.00		0.00																			
Lunch: (25%)	0.00		0.00																			
Dinner: (50%)	0.00		0.00																			
TOTAL:			\$0.00																			
11. CAR RENTAL: (See OAM 40.10.00.P.O, section .115. The state has a price agreement with Budget Rent-A-Car. Optional insurance will not be reimbursed). Days @ \$37 plus tax, gas TOTAL: _____	12. MISCELLANEOUS COSTS: (Identify specific expenses - taxis, shuttles, phone, vehicle mileage, etc.) a. Vehicle Mileage _____ 0.00 b. Shuttle _____ 0.00 c. Other (specify below) _____ 20.00 Parking, estimated \$20.00 TOTAL: \$20.00																					
13. TRAINING RELATED? (if yes, attach agenda) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																						
14. STATUS: <input checked="" type="checkbox"/> Executive/Mgmt Svc: <input type="checkbox"/> AFSCME: <input type="checkbox"/> Other: Explain: _____	16. ESTIMATED COST OF TRIP: <table style="width: 100%; margin-top: 10px;"> <tr><td>Transportation:</td><td style="text-align: right;">\$0.00</td></tr> <tr><td>Lodging:</td><td style="text-align: right;">\$0.00</td></tr> <tr><td>Meals:</td><td style="text-align: right;">\$0.00</td></tr> <tr><td>Car Rental:</td><td style="text-align: right;">\$0.00</td></tr> <tr><td>Misc:</td><td style="text-align: right;">\$20.00 -</td></tr> <tr><td>TOTAL:</td><td style="text-align: right;">\$20.00 -</td></tr> </table>		Transportation:	\$0.00	Lodging:	\$0.00	Meals:	\$0.00	Car Rental:	\$0.00	Misc:	\$20.00 -	TOTAL:	\$20.00 -								
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Misc:	\$20.00 -																					
TOTAL:	\$20.00 -																					
15. TRAVEL AWARDS: Agencies are mandated to maintain records on employee accumulation of travel awards as reported on their travel expense detail sheets. Travel awards include, but may not be limited to airline frequent flyer miles and hotel or car rental frequent customer awards or miles.																						
17. I certify that this trip is necessary and essential to the normal discharge of DEQ responsibilities; that required monies are budgeted and allotted for expenditure; that the trip meets all the requirements mandated by ORS 292.230, OAM Policy 40.10.00, and DEQ policy.																						
18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>		DATE: 10/21/04																				
19. SUPERVISOR SIGNATURE: <i>[Signature]</i>		DATE: 10/19/04																				
20. DEPT SIGNATURE: <i>[Signature]</i>		DATE: 10/26/04																				

State of Oregon
Department of Environmental Quality

Memorandum

Date: November 24, 2004

To: Environmental Quality Commission

From: Stephanie Hallock, Director *S. Hallock*

Subject: Agenda Item N, Action Item: Proposed settlement of *Northwest Environmental Defense Center et al. v. Oregon EQC et al.* pertaining to Confined Animal Feeding Operation program rules and implementation
December 10, 2004 EQC Meeting

Proposed Action The Department of Environmental Quality (Department or DEQ) recommends that the Environmental Quality Commission (EQC or Commission) approve the proposed settlement agreement for *Northwest Environmental Defense Center et al. v. Oregon EQC et al.*, Oregon Court of Appeals No. A1228110.

Background In October 2003, a petition for judicial review of rules adopted by the Commission and the Oregon Department of Agriculture (ODA) for confined animal feeding operations (CAFO) was filed with the Oregon Court of Appeals. The petitioners included Northwest Environmental Defense Center, Mark Riskedahl (individually), Oregon Natural Resources Council, Wendell Wood (individually), Headwaters, Oregon Toxics Alliance, and Columbia Riverkeepers.

The rules under challenge were adopted in August 2003 by the Commission and ODA to facilitate the transfer of the National Pollutant Discharge Elimination System (NPDES) CAFO permit program from DEQ to ODA (the transfer was authorized and directed by the 2001 Oregon Legislature upon approval by the Environmental Protection Agency). These rules included the clarification of program requirements and definitions and adoption of NPDES Oregon CAFO General Permit #1.

(Note: A "general permit" is used to cover a category of similar discharges, rather than a specific site. DEQ may issue a general permit when there are several minor sources or activities involved in similar operations that can be adequately regulated with a standard set of conditions. A general permit is issued once and expires within five years of issuance. Any facility that qualifies for a general permit may be "registered" under the permit during its five-year term.)

Key Settlement Issues	The proposed settlement provides for: <ul style="list-style-type: none">• Increased opportunity for public comment prior to registering CAFOs defined by federal regulation as “large concentrated” animal feeding operations under the general permit, and• Clarification of CAFO permit program implementation procedures (i.e., written documentation of complaints and inspections, potential instream monitoring requirements for recurring violators, submittal requirements for CAFO annual reports, consistent enforcement policies between both agencies, guidance development on manure application to saturated or frozen ground, fee waivers for public records access and reproduction for qualified parties, and other procedures).
EQC Action Alternatives	The Commission’s alternative to approval is to disapprove the settlement. If the Commission rejects this proposal, the parties will either engage in further negotiations or resolve the matter through the pending court case.
Department Recommendation	DEQ recommends that the Commission approve the proposed settlement agreement.
Attachments	A copy of the proposed settlement agreement will be provided to the Commissioners by legal counsel under a separate mailing.
Available Upon Request	A. 2002 DEQ and ODA Memorandum of Understanding B. DEQ and ODA CAFO Oregon Administrative Rules, including NPDES CAFO General Permit #1 C. NEDC et al. petition filed October 14, 2003

Approved:

Section:



Mark D. Charles, Manager
Surface Water Management

Division:



Holly R. Schroeder, Administrator
Water Quality Division

Report Prepared By: Ranei Nomura
Phone: (503) 229-5657

State of Oregon
Department of Environmental Quality

Memorandum

Date: December 8, 2004
To: Environmental Quality Commission
From: Paul Slyman, Deputy Director *Michelle O'Leary for*
Subject: Agenda Item N, Action Item.: Director's Transactions for Commission Review
December 10, 2004 EQC meeting.

This supplements the information previously provided on November 18, 2004 concerning the Director's Transactions. This updated summary includes information not available on that date concerning leave taken in November 2004 and travel reimbursed in November 2004. Please add it to your packet.

Attachments A. Summary of Director's Financial Transactions as defined by OAM
10.90.00 for the period 12/1/2003 – 11/31/2004.

Approved:

Section:

Laura Arcidiacono

Division:

Dem. Kid for Helen Lottridge.

**Summary of Director's Financial Transactions
as defined by OAM 10.90.00.PO
12/1/03 - 11/30/04**

TIME REPORTING

Summary of leave taken:

Sick Leave	90
Vacation	180
Holiday	72
Personal Business	24
Misc. Paid Leave	13 (inclement weather)

VACATION LEAVE PAYOFF: None

EXCEPTIONAL PERFORMANCE LEAVE TAKEN: 40 hours

TRAVEL EXPENSE REIMBURSEMENTS

<u>Date</u>	<u>Destination</u>	<u>Reason for Travel</u>	<u>Amount</u>
3/8 - 3/10/04	Washington DC	EPA 2005 Performance & Accountability Meeting / Meet with Mike Leavitt and members of the Environmental Council of States (ECOS)	\$443.00 *
4/6 - 4/9/04	Bend/Prineville, OR	Attended April Governor's Economic Revitalization Team (GERT) field trip and EQC meeting	\$193.21
4/17 - 4/20/04	Hot Springs, AK	ECOS 2004 Spring Meeting	\$861.45
5/6/04	Seattle, WA	Pacific NW Directors Group	\$199.60
5/11/04	Seattle, WA	Regional Agricultural Forum	\$334.95
5/19 - 5/21/04	Hermiston, OR	EQC Meeting	\$158.65
6/30 - 7/1/04	Hermiston, OR	Executive Review Panel (ERP) Meeting and meet with local officials	\$106.45
7/13 - 7/14/04	Denver, CO	ECOS Meeting	\$548.27 *
7/20 - 7/21/04	Washington DC	ECOS Meeting	\$312.40
7/29/04	Seattle, WA	Meet with EPA Region 10 Administrators	\$316.70

**Summary of Director's Financial Transactions
as defined by OAM 10.90.00.PO
12/1/03 - 11/30/04**

TRAVEL EXPENSE REIMBURSEMENTS (continued)

<u>Date</u>	<u>Destination</u>	<u>Reason for Travel</u>	<u>Amount</u>
8/5 - 8/6/04	Eugene, OR	Meet with Eugene and Roseburg offices and local officials	\$133.01
8/19 - 8/20/04	Medford, OR	Meet with Medford and Grants Pass offices and local officials	\$342.77
8/23 - 8/24/04	Hines, OR	GERT field trip	\$113.65
9/8 - 9/9/04	Coos Bay, OR	EQC Meeting	\$419.09
10/2 - 10/5/04	Oklahoma City, OK	Fall ECOS Meeting	\$667.05
10/22/04	Seattle, WA	Regional Agricultural Forum	\$19.00
10/27 - 10/28/04	Phoenix, AZ	Co-chair ECOS Meeting	\$182.96
		TOTAL:	<u>\$5,352.21</u>

* - travel reimbursed by 3rd party

USE OF SMALL PURCHASE ORDER TRANSACTION SYSTEM (SPOTS) PURCHASING CARD: None

OREGON STATE PAYROLL SYSTEM

EMPLOYEE MONTHLY TIMESHEET

FINAL COPY

ROLL # 34000 PERSONNEL AGENCY # 34000 SHIFT 1 CHECK DISTRIBUTN 11000 SECURITY # CUMMINS, STEPHANIE H 541-56-1012 CONC JOB 1 POSITION # 0000001 CLASS MESN 27014 PAY BASIS S APPT TYPE P WOI SCHEU AA7 TIME SHEET # 2-1

O/T BEN PKG COST CENTER DISTRIBUTION PERIOD ENDING

00 NE XX 054100214010 100.00 % % % % 11/30/0

																															DATE - DAY				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	PAY TYPE	REG HRS	LWOP	MISC HRS	
MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU		RG				
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																															OT				
																															HP				
																															SDE				
																															CTA				
PRELIMINARY AND FINAL TOTALS																																			

ADJUSTMENTS, BASED ON NUMBER OF INCIDENTS:

BALANCES SHEET

START DATE 11/01/04 END DATE 11/30/04 FULL TIME HOURS 176.0

EMPLOYEE: *[Signature]*

SIGNED, CERTIFYING TRUE AND ACCURATE

OF DAYS WORKED: 20 SUPERVISOR: *[Signature]* 12/3

FORECAST PRELIM FINAL

326/VPT19531



STATE OF OREGON TRAVEL EXPENSE DETAIL SHEET

1. Name of Employee Stephanie Hallock		2. Agency DEQ		3. Period (Month and Year) October-04	
4. Official Station Portland		5. Division/ Work Unit OD		6. Regular Schedule Work Shift 8:00 am - 5:00 pm	
7. Unrepresented <input type="checkbox"/>		Management Service <input type="checkbox"/>		Executive Service <input checked="" type="checkbox"/>	
Bargaining Unit Name <input type="checkbox"/>		AFSCME		Other <input type="checkbox"/>	

103/47

8. Date	9. Time of Departure	10. Time of Arrival	11. Destination	12. Per Diem/ Hourly Allowance	Individual Meal Reimbursement			13. Lodging	14. Total Meals and Lodging
					Breakfast	Lunch	Dinner		
10/27/04	06:30 am		Phoenix, AZ - (ECOS mtg)	35.25		11.75	23.50	90.00	125.25
10/28/04				11.75	(none)	11.75	23.50		35.25 11.75
15. Totals				47.00		23.50	47.00	90.00	\$160.50 137.00

16. Accounting Codes	17. Date	18. Miscellaneous Expenses Fares, Private Mileage, Room Tax, Telephone, Other Expenses	19. Training Related?	20. Rate Per Mile	21. Private Car Miles	22. Amount
17010-41002		Personal Vehicle Mileage		0.375		
	10/27/04	Taxi Phoenix Airport to hotel				19.10
4151	14786	State Tax (room)				6.54
4153	3510	City Tax (room)				4.32
	10/30/04	Parking lot fee at PDX				16.00
Totals						45.96

24. I did/will did not/will not accept travel awards as a result of, or associated with this state business trip. *JHC* Initials.
 Completion of this block is mandatory. Travel expense reimbursement claims will not be processed if this block is left blank. Travel awards included, but may not be limited to, airline frequent flyer miles and hotel or car rental frequent customer awards or miles. Review instructions on reverse of the form.

25. REASON FOR TRAVEL: (Be specific.) Co-chair meeting for Environmental Council of the States in Phoenix AZ on Oct 27 and Oct 28, 2004.	26. Grand Total Amount	182.96 \$206.45
	27. Travel Advance Amount	
	28. Amount Due Employee/State	182.96 \$206.45
	29. Received Training	Conducted Training

I certify that all reimbursements claimed reflect actual duty required expenses or allowances entitled; that no part thereof has been heretofore claimed or will be claimed from any other source.	30. Signature of Employee	31. Title	Date
	<i>Stephanie Hallock</i>	Director	11/03/04
I certify that the above claimed expenses are authorized duty required expenses. Funds for payment of this claim are available in the approved budget for the period covered and have been allotted for expenditure.	32. Approved By	33. Title	Date
	<i>[Signature]</i>	Deputy Director	11/03/04

11/10/04

[Signatures]

11-10-04

STATE OF OREGON
DEPT OF ENVIRONMENTAL QUALITY
OUT-OF-STATE TRAVEL AUTHORIZATION

1. NAME OF EMPLOYEE: Stephanie Hallock		2. AGENCY/OFFICIAL STATION: OD/ HQ		3. REQUEST #: 151-05 ✓																					
4. AGENCY ACCOUNTING INFORMATION: DS-14010-41002 (GEIFF/DF/LF-indirect)			5. TRAVEL JUSTIFICATION ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																						
6. PURPOSE OF TRIP: (Be specific, include dates/times of meeting or conference) Attending ECOS PPA Co-chairs Meeting in Phoenix, AZ, ECOS will cover cost of airfare.																									
7. ITINERARY:			8. TRANSPORTATION: (Airfare, train fare or state motor pool vehicle. For rental cars, see #10, for misc. ground transportation, see #11) ECOS pays for airfare, \$326.00																						
Destination city/state: Phoenix, AZ			TOTAL: <u>\$326.00</u>																						
Departure date/time: 10/27/2004, 6:00 am W																									
Return date/time: 10/28/2004, 5:00 pm Th																									
9. LODGING: Lodging per diem rate: <u>\$90.00 / 103 -</u>			10. MEALS: Daily meal per diem rate: <u>\$47.00</u>																						
Amount per night: <u>90.00</u>			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;"># Meals</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Breakfast: (25%)</td> <td style="text-align: center;">11.75</td> <td style="text-align: center;">2</td> <td style="text-align: center;">23.50</td> </tr> <tr> <td>Lunch: (25%)</td> <td style="text-align: center;">11.75</td> <td style="text-align: center;">2</td> <td style="text-align: center;">23.50</td> </tr> <tr> <td>Dinner: (50%)</td> <td style="text-align: center;">23.50</td> <td style="text-align: center;">1</td> <td style="text-align: center;">23.50</td> </tr> <tr> <td colspan="3" style="text-align: right;">TOTAL:</td> <td style="text-align: center;"><u>\$70.50</u></td> </tr> </tbody> </table>				Rate	# Meals	Total	Breakfast: (25%)	11.75	2	23.50	Lunch: (25%)	11.75	2	23.50	Dinner: (50%)	23.50	1	23.50	TOTAL:			<u>\$70.50</u>
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Room tax per night: <u>10 0.00</u>																									
# of nights: <u>1</u>																									
TOTAL: <u>\$90.00 / 100.00 -</u>																									
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			a. Vehicle Mileage _____ 0.00																						
			b. Shuttle _____ (# of miles) 50.00																						
			c. Other (specify below) _____ 0.00																						
13. TRAINING RELATED? (if yes, attach agenda)			Taxi and shuttle service, approx \$50.00																						
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			TOTAL: <u>\$50.00</u>																						
14. STATUS:			16. ESTIMATED COST OF TRIP:																						
<input checked="" type="checkbox"/> Executive/Mgmt Svc:			Transportation: <u>\$326.00</u>																						
<input type="checkbox"/> AFSCME:			Lodging: <u>\$90.00 / 100.00</u>																						
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			TOTAL: <u>\$536.50 / 220.50</u>																						
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18. EMPLOYEE SIGNATURE: <i>Stephanie Hallock</i>				DATE: 10/21/04																					
19. SUPERVISOR SIGNATURE: _____				DATE: _____																					
20. DA/EMT SIGNATURE: <i>[Signature]</i>				DATE: 10/19/04																					

Out-of-State Travel Freeze Exception Request Form

Name of Traveler: Stephanie Hallock

Dates of Travel: October 27-28, 2004

Travel Destination: Phoenix, AZ

Estimated Cost of Trip: ~~\$536.50~~ \$220.⁵⁰

I request review and approval of an exception to the BI 03-05 Administrative Restrictions that place a freeze on all employee out-of-state travel. Approval is based on applicability to the following criteria (check all that apply):

Agency Approval Required

Client Related

Required by Federal Grant

For Economic Development

DAS and Agency Approval Required

Reimbursed Travel

Specialized Technical Training

Other (Please explain)

Below is documentation of our justification for seeking this exception:

Attending Environmental Council of the States PPA Co-chairs Meeting in Phoenix, AZ, ECOS will cover cost of airfare (\$ 326.00).

Submitted by: Stephanie Hallock 10/21/04
(Signature of Employee) (Date)

Recommended by: [Signature] 10/19/04
(Signature of BMT Member) (Date)

Approved by: [Signature] for EDC 10-26-04
(Signature of Agency Head or Delegate) (Date)

Approved by: X —
(Department of Administrative Services) (Date)