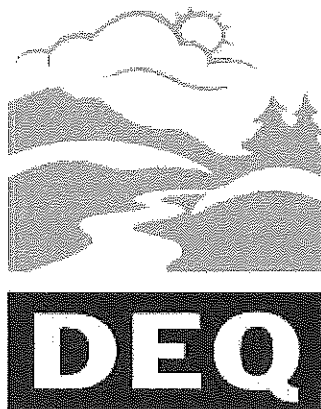


**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 11/07/1991**



**State of Oregon
Department of
Environmental
Quality**

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State of Oregon
ENVIRONMENTAL QUALITY COMMISSION

A G E N D A

WORK SESSION -- November 7, 1991
Smullin Center - Lecture Hall 2
(on the Rogue Valley Medical Center Campus)
2825 Barnett Road
Medford, Oregon

4:00 p.m.

1. Continuation of Work Session Discussion of Proposed Rules for Mining Operations using Chemicals to Extract Metals from Ores

NOTE: The purpose of the work session is to provide an opportunity for informal discussion of the above item. The Commission may give direction to the Department, but will not be taking final action on the proposed rules at this work session.

PUBLIC FORUM SESSION -- November 7, 1991
Smullin Center - Lecture Hall 2
(on the Rogue Valley Medical Center Campus)
2825 Barnett Road
Medford, Oregon

7:30 p.m.

This is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of the agenda for the meeting on Friday, November 8, 1991. Individual presentations will be limited to 5 minutes. The Commission has specifically invited comment from selected individuals, and will hear from these individuals first. The Commission may discontinue this forum after a reasonable time if an exceptionally large number of speakers wish to appear.

State of Oregon
ENVIRONMENTAL QUALITY COMMISSION

A G E N D A

REGULAR MEETING -- November 8, 1991
Smullin Center - Auditorium
(on the Rogue Valley Medical Center Campus)
2825 Barnett Road
Medford, Oregon

9:00 a.m.

- A. Approval of Minutes of the July 24-25, 1991, August 22, 1991, and September 18, 1991 EQC Meetings
- B. Director's Report (Oral Report)
- C. Commission Member Reports: (Oral Reports)
- Governor's Watershed Enhancement Board
- D. Approval of Tax Credit Applications

Rule Adoptions

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

- E. Proposed Adoption of Air Contaminant Discharge Permit Fee Rules Amendments
- F. Proposed Adoption of Rules to Increase the Vehicle Inspection Program Fees
- G. Proposed Adoption of Rules Relating to Waste Tires
- H. Proposed Adoption of Rules to Establish Program Administration and Compliance Fees for Oil Spill Prevention Act (SB 242)
- I. Proposed Adoption of New and Amended Industrial Rules to Address PM₁₀ Air Quality Problems (New Industrial PM₁₀ Emission Standard Rules and Other Related Housekeeping Rule Amendments)

- J. Proposed Adoption of New Rules Relating to Wood Stoves and Residential Wood Heating to Address PM₁₀ Air Quality Problems
- K. Proposed Adoption of Open Burning Rule Amendments for the Rogue Basin Special Control Area
- L. Proposed Adoption of PM₁₀ Control Strategy for the LaGrande Air Quality Nonattainment Area
- M. Proposed Adoption of Revised PM₁₀ Control Strategy for Grants Pass
- N. Proposed Adoption of Revised PM₁₀ Control Strategy for the Klamath Falls Air Quality Nonattainment Area
- O. Proposed Adoption of Revised PM₁₀ Control Strategy for the Medford-Ashland Air Quality Maintenance Area
- P. Proposed Adoption of Revised PM₁₀ Control Strategy for the Eugene/Springfield Area

The Commission may change the order of the agenda during the meeting, and deal with any item at any time in the meeting except those set for a specific time. Anyone wishing to be heard on any item not having a set time should arrive at the beginning of the meeting to avoid missing any item of interest.

The next Commission meeting is currently scheduled for Friday, December 13, 1991, in the Portland area.

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

October 23, 1991

Approved _____
Approved with corrections _____
Corrections made _____

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the Two Hundred and Fifteenth Meeting
September 18, 1991

Regular Meeting

The regular meeting of the Environmental Quality Commission was convened at about 8:40 a.m. on Wednesday, September 18, 1991, in Conference Room 3a of the Department of Environmental Quality Offices at 811 S. W. 6th Avenue in Portland, Oregon. Commission members present were: Chair Bill Hutchison, and Commissioners Bill Wessinger, Carol Whipple and Henry Lorenzen. Vice Chair Emery Castle was out of the state and not able to attend the meeting. Also present were Larry Knudsen of the Attorney General's Office, Director Fred Hansen of the Department of Environmental Quality and Department staff.

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

Public Forum was the first item scheduled on the agenda. No one signed up to speak.

The following items were listed on the agenda as **Consent Items**:

- A. Approval of Minutes of the June 13-14, 1991, July 24-25, 1991, and Telephone Conference Meetings

Drafts of the minutes for the following meetings were circulated to the Commission prior to the meeting:

April 30, 1991	Telephone Conference Meeting
May 7, 1991	Telephone Conference Meeting
May 14, 1991	Telephone Conference Meeting
May 21, 1991	Telephone Conference Meeting
May 28, 1991	Telephone Conference Meeting
June 4, 1991	Telephone Conference Meeting
June 13-14, 1991	Regular Commission Meeting

June 18, 1991 Telephone Conference Meeting
June 25, 1991 Telephone Conference Meeting

Minutes for the July 24-25, 1991, meeting were not completed for approval at this meeting.

B. Approval of Tax Credit Applications

The Department recommended that approval be granted on Pollution Control Facility Tax Credit applications as follows:

TC-2187	Praegitzer Industries, Inc.	Wastewater spill containment and treatment facility.
TC-2264	Coast Wide Ready Mix Co.	Wastewater settling pond.
TC-2387	Delta Engineering and Manufacturing Co.	Modification of wastewater treatment system.
TC-2488	A. Edward & Betty Hemenway	Wastewater control facility.
TC-2732	Willamette Industries, Inc.	Wastewater treatment system.
TC-2793	Charles T. Collins Colsper Corp.	Baler, hogger and conveyor belt system.
TC-2871	Steinfeld's Products Co.	Modification of wastewater pretreatment system.
TC-3106	Glenbrook Nickel Co.	Large duct to stacks of electrostatic precipitator.
TC-3250	Precision Castparts Corp.	pH monitoring system.
TC-3413	Parson's Pine Products, Inc.	Modifications to cyclone and conveyance systems.
TC-3436	Anodizing, Inc.	Wastewater treatment system.
TC-3501	Clemens Automotive	Auto air conditioner recycling equipment.
TC-3503	Mike McCarter Ford's Automotive	Auto air conditioner recycling equipment.
TC-3505	Fisher's Arco	Auto air conditioner recycling equipment.
TC-3506	Roe Motors, Inc.	Auto air conditioner recycling equipment.

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September 18, 1991
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TC-3513	Hillsboro Chevron Service Center	Auto air conditioner recycling equipment.
TC-3517	Kenneth W. Darrow	Auto air conditioner recycling equipment.
TC-3518	Roberson Shell	Auto air conditioner recycling equipment.
TC-3523	Jim Doran Chevrolet-Olds, Inc.	Auto air conditioner recycling equipment.
TC-3524	Paul D. Parker	Two terex front end loaders.
TC-3530	Teledyne Ind., Inc.	Modification of furnace seals.
TC-3532	Sandra Powell	Auto air conditioner recycling equipment.
TC-3533	Dean and Kathleen Schrock	Rear's 12' grass vac; John Deere 27 flail chopper; Rear's 30' propane flamer; John Deere 4450 140 HP tractor.
TC-3536	Lucas Mack Sales & Service, Inc.	Auto air conditioner recycling equipment.
TC-3537	McCullum's Texaco Service, Inc.	Auto air conditioner recycling equipment.
TC-3538	Steve's Automotive	Auto air conditioner recycling equipment.
TC-3539	Kuschnick Bros. Farms	Used propane field flamer.
TC-3540	Steven J. Rohner	John Deere 14' flail chopper.
TC-3541	Nyquist Country Farms	New Holland 505 baler. TC-3542
TC-3545	Johnson Creek Texaco	Auto air conditioner recycling equipment.
TC-3546	American Auto Recycling, Inc.	Auto air conditioner recycling equipment.
TC-3547	Buck Medical, Inc.	Auto air conditioner recycling equipment.
TC-3548	McCullum's Texaco, Inc.	Installation of four STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, automatic shutoff valves, overflow alarm and monitoring wells.

TC-3549	Albina Fuel Company	Installation of epoxy lining in thirteen tanks, double wall fiberglass piping, spill containment basins, tank monitor, line leak detectors, oil/water separator and Stage I vapor recovery equipment.
TC-3555	Quentin & Lola Probst	Installation of three STI-P3 tanks, fiberglass piping, spill containment basins, tank monitor, turbine leak detectors, automatic shutoff valves, monitoring wells, Stage I vapor recovery equipment, sumps and an overflow alarm.
TC-3556	Bi Mart Corp.	Auto air conditioner recycling equipment.
TC-3557	Chambers Plumbing & Heating, Inc.	Auto air conditioner recycling equipment.
TC-3558	Elliot's Auto Service, Inc.	Auto air conditioner recycling equipment.
TC-3559	Ted's Collision Repairs, Inc.	Auto air conditioner recycling equipment.
TC-3561	Don Rasmussen Co.	Auto air conditioner recycling equipment.
TC-3570	Troutdale Chevron, Inc.	Auto air conditioner recycling equipment.
TC-3574	McCall Heating Co.	Installation of three fiberglass tanks and piping, spill containment basins, tank monitor, monitoring wells, sumps, oil/water separator, automatic shutoff valves and line leak detectors.
TC-3577	Jantzen Beach Chevron	Auto air conditioner recycling equipment.
TC-3578	Dennis Thompson	Installation of two fiberglass tanks, fiberglass piping, spill containment basins, line leak detectors and monitoring wells.
TC-3579	Capital City Co., Inc.	Installation of four STI-P3 tanks, fiberglass piping, spill containment basins, tank monitor, line leak detectors, overflow alarm, monitoring wells, sumps, automatic shutoff valves and Stage I and II vapor recovery equipment and piping.
TC-3581	Capital City Co., Inc.	Installation of three STI-P3 tanks and double wall fiberglass piping, spill containment basins, tank monitor, line leak detectors, overflow alarm, monitoring wells, sumps, automatic shutoff valves and Stage I and II vapor recovery equipment and piping.
TC-3583	C.T. Auto Repair	Auto air conditioner recycling equipment.

TC-3584	Daily's Tire & Wheel	Auto air conditioner recycling equipment.
TC-3608	Estacada Oil Co.	Installation of six STI-P3 tanks, double wall fiberglass piping, spill containment basins, tank monitor, line leak detectors and an oil/water separator.

C. Authorization for Rulemaking Hearing: Revisions to Drug Lab Cleanup Rules to Eliminate Cost Share Requirements

This agenda item requested authorization to hold a public rulemaking hearing on Illegal Drug Lab Cleanup Rules as presented in Attachment A of the staff report. The proposed amendments were necessary to incorporate changes mandated by the 1991 legislature. The proposed amendments would eliminate the requirement in current rules that local law enforcement agencies share in the cost of cleanups. Provisions of existing rules requiring cost share for federal agencies will remain. Minor housekeeping amendments were also proposed in the rule package.

A revised draft of Attachment D to the agenda item was distributed to the Commission. The revision to the hearing notice was intended to better describe the issue and did not alter the recommendation to authorize the rulemaking hearing

D. Authorization for Rulemaking Hearing: Proposed Increase in Solid Waste Tipping Fee (1) as Required by SB 66, and (2) to Initiate Funding for Orphan Site Cleanup Account (contingent upon E-Board action to authorize spending on orphan sites)

This agenda item requested authorization to hold a public rulemaking hearing on proposed rules to implement a fee increase for solid waste disposal facilities. The proposed rules were presented in Attachment A of the staff report. A \$0.35 per ton disposal fee increase for the period from January 1, 1992, to December 31, 1993, was required by SB 66 enacted by the 1991 legislature. The proposed amendments revise the current rules and fee collection procedures to correspond with the new legislation. An additional \$0.15 per ton was proposed to implement the orphan site cleanup account. These fees would add to the existing \$0.50 per ton fee to bring the total fee to \$1.00 per ton.

Director Hansen noted that the fee to initiate the orphan site cleanup account would not go forward unless the Emergency Board approves the budget for the cleanups at its November meeting. He also noted that the date of the proposed hearing may change in response to new information from the Attorney General's office.

Action on Consent Items

It was MOVED by Commissioner Wessinger that the Department recommendations on Consent Agenda Items A, B, C, and D as noted above be approved. The motion was seconded by Commissioner Whipple and unanimously approved.

E. Proposed Adoption of Rule Amendments to Incorporate National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos

This agenda item recommended that the Commission adopt proposed asbestos program rule amendments and rule additions as presented in Attachment A of the staff report. The Department's delegation agreement with the Environmental Protection Agency requires that all NESHAP regulations that are more stringent than the Department's existing asbestos regulations be incorporated into the Department's regulations. The proposed rule amendments accomplish this purpose, and in addition simplify existing rules to achieve greater clarity. The Department proposed to maintain a state rule regarding demolition involving non-friable asbestos that is more stringent than the federal rule because the existing standard is more protective of public health. Public Hearings were held on July 16 and 17, 1991, in Pendleton, Bend, Medford, and Portland. The rule proposal originally taken to public hearing was modified in response to hearing testimony. Portions of the rule were renumbered to achieve greater clarity.

Sarah Armitage, Manager of the Asbestos Program, and John Mathews of the Asbestos program staff, explained that the proposed rule amendments adopt federal requirements and do not alter one existing provision that is more stringent than new federal requirements. They noted that the rules require cradle to grave tracking for asbestos and that the rules were re-arranged to follow that path. They stated that the NESHAP requirements focus mostly on disposal. The rule amendments also revise notice requirements for asbestos abatement jobs that last for more than a year, deal with handling of asbestos, and change licensing and certification requirements to assure access to job sites for inspectors.

Ms. Armitage noted that the most controversial provision was the proposal to maintain the existing rule requirement for removal of non-friable asbestos prior to demolition. This provision is more stringent than EPA rules which provide for two categories of non-friable asbestos and a decision to either leave it or remove it prior to demolition. One company (Armstrong World Industries) commented on this proposal and expressed strong preference that the existing rule be relaxed to be consistent with the new federal rules. The Department provided a memo to the Commission summarizing the positions on this issue.

Commissioner Whipple asked if asbestos must be removed from a building before it is burned for fire practice by a fire department. Mr. Mathews responded that removal is

required to protect the public from exposure to asbestos. Director Hansen noted that it is the responsibility of building owners to remove many things that are considered a threat to public health and safety before building demolition (asbestos, solvents, etc.).

Duane Bosworth, an attorney representing Michael Otchet, counsel for Armstrong World Industries, Inc., urged the Commission to delay action on this item and provide more time for the Asbestos Advisory Board to study the issue. He stated that the rules are contrary to EPA rules, and are contrary to rules applicable in the other 49 states. He indicated that the proposed rule is a substantial change from the draft that went to public hearing, and that his client had a lot to say on the proposed changes but was unable to attend because the meeting was being held on an important religious holiday for his faith.

Chair Hutchison asked for a response from staff. Ms. Armitage advised that Mr. Otchet had presented his concerns in the hearing, and that the Department had responded. The Department did not propose to relax its current rule, which is more stringent than new EPA rules. Mr. Otchet urged that the rule be relaxed to be consistent with the EPA rule. The Department believes the existing rule is necessary to protect public health and does not propose to relax it. The Advisory Board met to, among other issues, consider this issue. A quorum was not present. After discussion, the board members present decided to take no position and defer to the Department on the matter.

Ms. Armitage noted that Mr. Bosworth had called their attention to one error in the proposed rules on page 9, rule OAR 340-25-466(1)(b). The Department had intended to change the word "or" back to "and" and this change mistakenly did not occur in Attachment A. Therefore, the Department recommended that this change be made. She also stated that final rule recommendation looks different because of renumbering and minor changes, but is not significantly different in substance from the rules taken to hearing.

Commissioner Lorenzen expressed concern that Mr. Otchet apparently wanted to testify on changes made to the rules following the hearing and was unable to do so. Commissioner Lorenzen therefore MOVED that the matter be deferred until the next meeting. There was no second for the motion.

It was MOVED by Commissioner Wessinger that the Department recommendation, with the word "or" changed back to "and" in OAR 340-25-466(1)(b) be approved. The motion was seconded by Commissioner Whipple and approved with three yes votes and Commissioner Lorenzen voting no. The Commission asked that the Advisory Board be invited to comment on the matter and that the matter be returned to the Commission if there are any suggestion for modification.

F. Proposed Adoption of Rule to Authorize Enforcement Section Staff to Represent Department in Contested Case Hearings

This agenda item recommended that the Commission adopt proposed rules that would authorize the Department's Enforcement Section staff to represent the Department in contested case hearings involving civil penalties and/or Department orders. The proposed rules were presented in Attachment A of the staff report. ORS 183.450(7) allows an agency to be represented by employees of the agency if the Attorney General consents to the representation and if the agency has authorized the practice through rulemaking. The Attorney General has consented to the agency lay representation through a letter dated April 29, 1991. A public hearing was held on July 24, 1991. No oral or written comments were received on the proposal.

Director Hansen noted that the authority sought provides flexibility and is permissive, and not mandatory. He also noted that the Departments of Forestry and Fish and Wildlife already have this authority.

Commissioner Whipple asked about the effect on the other side in such cases. Director Hansen noted that the feeling would be better in those cases where the other side chooses to represent themselves rather than be represented by counsel.

It was MOVED by Commissioner Wessinger that the Department recommendation be approved. The motion was seconded by Commissioner Whipple and unanimously approved.

G. Proposed Adoption of Amendments to the Water Quality Standard for Antidegradation
(deferred from July meeting)

This agenda item proposed adoption of amendments to the provisions of the state Water Quality Standards dealing with antidegradation. The proposed rule amendments were presented in Attachment A of the staff report. Proposed revisions to the antidegradation rules were considered in eight public hearings held in January 1991. The Commission discussed the matter at a work session in April 1991. This item was deferred from the July meeting with the request that staff take the comments and concerns of the Commission into account and return the matter to the Commission for consideration in September.

Specifically, the Commission asked for additional detail on current rules on wilderness areas and state scenic waterways, the intent of the Congressional designation of Wild and Scenic Rivers with respect to protection of water quality, the Department's nomination process and timing of public requests for designation, the Department's resources for reviewing and forwarding nominations to the Commission, and more specific information about approaches

for how Outstanding Resource Waters could be managed to protect existing water quality without a moratorium on all human activities.

The proposed rule in Attachment A of the staff report would provide the Commission and Department with policy language to comply with federal requirements. It would establish three categories for designation of waterbodies: High Quality Waters, Water Quality Limited Waters, and Outstanding Resource Waters (ORW). All waters would be considered High Quality Waters unless specifically classified as Water Quality Limited Waters or Outstanding Resource Waters. The proposed rule provided a process for evaluation and designation of ORWs. It did not automatically place any waterbodies in the ORW classification.

Neil Mullane and Krystyna Wolniakowski of the Water Quality Division staff briefed the Commission on this item. They noted that rules already provide for designation of water quality limited waters and development of improvement programs. All other waters would be designated as high quality waters, and that affords a very high level of protection. Beneficial uses must be protected. Quality can be lowered only in very limited circumstances where the Commission finds that no options are available, and all existing uses will be protected. The ORW category was intended for those very few situations where extraordinary circumstances justify a policy of allowing no changes to water quality, and thus essentially no change in development status or no new activities.

Commissioner Wessinger expressed concern about the magnitude of the evaluation program required for ORWs and the adequacy of staff resource to handle it. Mr. Mullane responded that additional resources would be required.

Chair Hutchison expressed concern about the application process for ORWs in the proposed rules. He indicated he would be more comfortable with some form of an annual or biennial review process where the Commission could see if added protection is needed for some waters. He preferred something that would generate a priority list for evaluation and be subject to comment as part of the periodic review process. He was concerned that the application process would be unmanageable. Mr. Mullane indicated that a list of waterbodies that are candidates for evaluation for ORW designation could be developed as part of the 305b report process. He suggested that the application process on page A-2 of the rule could be deleted, and in place of it provide for handling through the 305b report and triennial review process.

Director Hansen noted the need for a clearly delineated process that meshes with the limited available resources.

Karl Anuta, representing Northwest Environmental Defense Center, urged the Commission not to back away from the current rule. He supported automatic designation of state parks and scenic waterways as ORWs.

Mary Scurlock, representing the Oregon Rivers Council, urged protection of the wild and scenic rivers. She endorsed Alternative 3 of the staff report which included automatic designation of ORWs and would not require time and resources to be expended in evaluation of these waterbodies prior to designation.

Commissioner Lorenzen expressed concern that existing designations of wild and scenic rivers were driven by values other than water quality, and that automatic designation as ORWs would impose conditions and criteria not contemplated.

Director Hansen noted again that the High Quality Waters policy provides a very high level of protection of water quality.

Following a brief recess, Ms. Wolniakowski presented proposed amendments to address the Commission concerns as follows:

- Page A-1 340-41-026(1)(a)(A) -- correct the wording as follows:

HIGH QUALITY WATERS POLICY: Where existing water quality meets or exceeds those

- Page A-2 340-41-026(1)(a)(D) -- amend the proposal as follows:

Delete the language beginning with the words "The Commission, either on their own initiative or through...." and continuing to the end of the page.

Add the following language after the first two sentences of paragraph D:

The Department will develop a screening process and establish a list of nominated waterbodies for Outstanding Resource Waters designation in the Biennial Water Quality Status Assessment Report (305(b) Report). The priority waterbodies for nomination include:

- i National Parks;
- ii National Wild and Scenic Rivers;
- iii National Wildlife Refuges;

- iv State Parks; and
- v State Scenic Waterways.

The Department will bring to the Commission a list of waterbodies which are proposed for designation as Outstanding Resource Waters at the time of the Triennial Water Quality Standards Review.

The final paragraph of the section which appears on page A-3 would be retained unchanged.

Chair Hutchison expressed the sense of the Commission that there is a reluctance to automatically designate ORWs, that the High Quality Waters designation provides good protection, and that a systematic process would be available for consideration of potential ORWs.

It was MOVED by Commissioner Wessinger that the Department recommendation as amended by the above recommendation be approved. The motion was seconded by Commissioner Lorenzen and unanimously approved.

H. Approval of Sewer Safety Net Funding Applications for FY 92

This agenda item recommended approval of individual community Sewer Safety Net (Assessment Deferral Loan) Programs and the overall Funding Allocation Plan for the 1991-93 biennium as presented in Attachments A and B of the staff report. Existing Commission rules require applications from eligible communities before the start of the biennium. Each community plan must be approved by the Commission to receive an allocation of available funds. Renewal applications were received from Portland, Gresham and Eugene. New applications were received from (1) the Marion County Service District for the Brooks Health Hazard Area, (2) the City of Albany for the North Albany Health Hazard Annexation Area, (3) the City of Oregon City for the Holcomb-Outlook-Park Place Health Hazard Annexation Area, and (4) The City of Corvallis for the West Philomath Boulevard, Skyline West, and West Hills Health Hazard Annexation Areas.

The Department recommended that all seven applications be approved with the exception of any program elements that exceed the scope of a 1991 budget note, and with approval for the Department to make fund allocation and program changes during the biennium within the limits of the budget note. (The 1991 legislative Ways and Means Committee adopted a budget note which was intended to limit the scope of eligibility to currently approved programs or standards that are not more lenient than current approved programs.)

The Commission considered this item at the July 24, 1991, Commission meeting. By consensus, the Commission agreed to defer action on this item until the next meeting so that the Department could do more research on legislative intent relative to the budget note and concerns raised by the City of Eugene regarding their program to assist owners of large lots. The question was whether Eugene's program change was an approved program or a change which was beyond the scope of what would be allowed under the budget note.

Martin Loring of the Water Quality Division staff reported that staff had researched the budget note more fully. The matter remained unclear, with opinions of the intent in relation to the Eugene proposal falling on both sides. The Department therefore recommended that the Commission support all seven Assessment Deferral Loan Program Applications as submitted by the applicant communities, including Eugene.

It was **MOVED** by Commissioner Lorenzen that the Department recommendation be approved. The motion was seconded by Commissioner Whipple and unanimously approved.

I. Pollution Control Bonds: Authorization to Issue State of Oregon Pollution Control Bonds (approval by State Treasurer also required)

This agenda item proposed that the Commission authorize the sale of Pollution Control Bonds in the amount of \$35,350,000 for purposes of funding (1) sewer construction in Mid-Multnomah County, (2) the Assessment Deferral Loan Program, and (3) orphan site cleanup. A proposed **Resolution Authorizing and Requesting Issuance of Bonds** was attached to the staff report as Attachment A.

Director Hansen noted that this item was an effort to get the "ducks" in a row for when the State Treasurer lifts the moratorium on issuance of bonds.

It was **MOVED** by Commissioner Wessinger that the Department recommendation be approved. The motion was seconded by Commissioner Whipple and unanimously approved.

J. Pollution Control Bonds: Review and Approval of Amendments to the Intergovernmental Agreement with the City of Portland; Review of Bond Purchase Agreement; and Authorization of Special Assessment Improvement Bond Purchases from Portland

This agenda item recommended that the Commission approve amendments to the Intergovernmental Agreement and approve the Bond Purchase Agreement between the Department and the City of Portland. The Commission initially approved the Intergovernmental Agreement at its June 29, 1990, meeting. This agreement establishes a mechanism for financing sewer construction in Mid-Multnomah County whereby DEQ purchases Special

Assessment Bonds issued by the City with proceeds of simultaneously issued State of Oregon Pollution Control Bonds. As part of the risk sharing arrangement between the parties, the agreement required the City to provide \$30 million of general obligation Bancroft financing for the affected area. Ballot measure 5 has made this requirement virtually impossible to fulfill. The Department and the City negotiated amendments to the Intergovernmental Agreement that temporarily relieved the City from that obligation.

It was MOVED by Commissioner Whipple that the Department recommendation be approved. The motion was seconded by Commissioner Lorenzen and unanimously approved.

The Commission then moved to Agenda Item L.

L. Background Discussion: Eligibility of Agricultural Practices for Pollution Control Tax Credit Certification

This agenda item requested Commission guidance on the issue of eligibility of agricultural practices for pollution control tax credits and the applicability of the sole purpose and principal purpose criteria. The Department presented information on the issue in a memorandum to the Commission.

Roberta Young of the Department staff presented background information to the Commission and responded to questions about the interpretation and application of the principal and sole purpose terms.

John Charles, representing Oregon Environmental Council urged the Commission to not treat agricultural practices and other industries any differently.

John Rossner, representing the Oregon Farm Bureau, expressed support for tax credits for agricultural facilities that benefit the public by controlling or reducing pollution.

Commissioner Lorenzen expressed the view that the principal purpose category penalizes voluntary preventative practices and is inequitable. He noted that many agricultural pollution control techniques are expensive with no benefit to crop yield. He suggested that tax credits should be used to encourage innovation and methods to reduce pollution. He suggested perhaps that they could be brought in under the sole purpose criteria.

Director Hansen noted that sole purpose has been used for solid waste recycling facilities. Commissioner Lorenzen noted that perhaps groundwater management areas could be considered under principal purpose, but others under sole purpose.

Commissioner Wessinger indicated that he would prefer to see the tax credit program eliminated if that were possible. Director Hansen explained that the Governor had proposed to eliminate tax credits during the last legislative session, but the legislature saw fit to continue the availability of tax credits. The Governor has therefore indicated that the Commission should exercise its discretion to use the program as it sees fit to aid in achieving the mission of the agency.

Commissioner Lorenzen again stated that he thought tax credits should be given at the voluntary stage and not wait until mandatory requirements kick in. There was discussion about the role that the Soil Conservation Service could play in determining the extent of pollution control purpose of agricultural practices.

The Department agreed to consider the discussion, seek input from others, and return at a later Commission meeting for further discussion on the application of sole and principal purpose to specific agricultural situations and measures.

K. Background Discussion: Risk Analysis in Environmental Programs (initial phase of a multi-stage discussion)

Brendon Doyle, representing the Environmental Cleanup Division, made a presentation to the Commission on Risk Analysis in Environmental Programs. The presentation covered Risk Assessment, Risk Management, Risk Communication, Public Perception of Risks, Acceptable Risk, Comparative Risk Analysis and Risk Based Strategic Planning. The purpose of the presentation was to provide background information to the Commission. The Commission thanked Mr. Doyle for the presentation.

M. Commission Member Reports (Oral Reports)

Commissioner Whipple reported on the Governor's Watershed Enhancement Board. She noted that it was a good opportunity for the Natural Resource Agencies to get together and be involved in a joint "educational" effort.

N. Director's Report (Oral Report)

Director Hansen reported on the following items:

- Governor's Task Force Review -- DEQ will be reviewed in a quasi-Ways and Means setting before a Committee looking at the structure of state government. The

Department will present information on DEQ programs and budget during a two day session scheduled October 24-25.

- SOLV Partnership -- DEQ and other state agencies (OSHA, ODF&W) have joined with SOLV (Stop Oregon Litter and Vandalism) to provide training to oil spill volunteers. The program is the first we know of that trains volunteers before the oil hits the beach. The volunteers are taking in a 2 1/2 hour class now, and will be required to take an additional 1 1/2 hour of training on-site. Classes are scheduled in Portland, Salem, Eugene, Astoria, Newport and North Bend. 200 people are expected to attend.
- E-Board -- The Department appeared before the Emergency Board in the beginning of September on several issues including an update on the Willamette study, and securing the needed budget approval to operate the on-site sewage program in Josephine County following their decision to return the program to the state.
- Governor's Award -- Awards were presented this week at the Hazardous Materials Conference and Trade Show to recognize companies that have taken positive steps to reduce the use of toxic materials. The awards went to Wacker Siltronics for elimination of TCE and to Consolidated Freightways for replacing solvents, reducing hazardous waste by 33,000 pounds a year. An award was also given to Portland General Electric for their extraordinary efforts in cleaning up the OMSI site.
- Reidel Order -- The Department and Reidel reached agreement on an order that sets out a schedule with stipulated penalties for solving the odor problem at its solid waste compost facility. The order has escalating penalties starting at \$300 per day in December, increasing to \$10,000 per day on June 1. If the company chooses to address the problem by constructing a facility, the penalties will be set aside during construction.

Director Hansen then presented a plaque to Chair Hutchison and thanked him for his dedication and service to the State of Oregon as Member and Chair of the Environmental Quality Commission. Commissioner Wessinger thanked Chair Hutchison on behalf of the Commission for his extraordinary efforts and leadership. Harold Sawyer presented Chair Hutchison with a photograph as a reminder of his efforts to protect the states waters.


Chair Hutchison thanked the Commission and staff for their dedication and efforts during his tenure as Chair. He indicated he would miss the meetings and the association with members and staff.

The meeting was then adjourned.

State of Oregon
Department of Environmental Quality

Memorandum

Date: October 25, 1991

To: Environmental Quality Commission
From: Harold Sawyer 
Subject: Review Materials for the November 7-8 EQC Meeting

Enclosed are the following items for your review prior to the November 7-8 EQC meeting:

Agenda for the Work Session, Public Forum, and Regular Meeting

The plan is to begin the Work Session on Mining at 4:00 p.m., adjourn to go to dinner by about 5:45 p.m., and then have a "Public Forum" in the evening beginning at 7:00 p.m. Carolyn Young is taking care of notifying local people of the forum and the opportunity to talk to the Commission on issues they are concerned about.

We plan to gather as a group for breakfast (informal) on Friday Morning at 7:00 a.m. Gary Grimes, Manager of our Southwest Region will brief the Commission on issues and activities in the Southwest Region, and will introduce his key staff members. The Regular meeting will begin at 9:00 a.m.

- **Staff Reports for Agenda Items E, F, G, and H.**
These reports are enclosed. The remaining reports will be forwarded as soon as possible next week. As you may recall, the schedule for the Air Quality issues is driven by the November 15, 1991 federal deadline for adoption and, as a result, the time available for Commission review was planned to be less than the "normal" 2 weeks.
- **Letter from Karl Anuta regarding Klamath Falls Motion for Reconsideration**
Please note that the Klamath Falls Motion for Reconsideration of the Salt Caves decision has not been placed on the agenda. Legal Counsel has advised that the Commission should not receive arguments on the motion unless all parties are present, and Mr. Anuta, counsel for the consolidated environmental parties will be unable to attend the November meeting. Mr. Glick, counsel for Klamath Falls has indicated to Larry Knudsen that the City will not object to the matter not being considered on November 7-8, but that the City may request consideration earlier than the next regularly scheduled meeting on December 12-13. You have already received a memo from Larry on your options for dealing with the motion. He will be prepared to advise you further at the meeting. You may also contact Larry at 229-5725 if you have questions.
- **Letter from the Wilderness Society on the Mining Rules**


State of Oregon

Department of Environmental Quality

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STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: November 6, 1991

TO: Environmental Quality Commission

FROM: Fred Hansen, Director

SUBJECT: Chemical Mining Rules

Please find attached for your consideration at the November work session, "Recommended Provisions for Proposed Chemical Mining Rules (OAR 340-43)".

RECOMMENDED PROVISIONS FOR PROPOSED CHEMICAL MINING RULES (OAR 340-43)

<u>As Addressed in 6/14 Draft</u>	<u>As Addressed in 10/10 Draft</u>	<u>Recommended</u>
DEQ plan approval required prior to construction.	Same as 6/14	Same as 6/14
Department can waive certain requirements by granting variance.	No variance provision.	Same as 10/10
Wastewaters to be regulated by permit.	Same as 6/14	Same as 6/14
Siting not allowed in wetlands, 100-year floodplains, areas of seismic instability, with waste disposal not closer than 200 feet from surface waters.	Siting not allowed in wetlands, 100-year floodplains, with waste disposal not closer than 200 feet from surface waters.	Same as 10/10
Containment of all chemicals.	Same as 6/14	Same as 6/14
Control acid generation in open pits.	Same as 6/14	Same as 6/14
Construction of surface impoundment liners to follow EPA/600/2-88/052.	Same as 6/14	Same as 6/14
Surface runoff (100-year flood) to be controlled.	Same as 6/14	Same as 6/14

As Addressed in 6/14 Draft

As Addressed in 10/10 Draft

Recommended

Retaining structures, foundations and mined materials emplacements shall be designed by an independent, qualified, registered professional and be constructed for long-term stability under anticipated loading and seismic conditions.

Applicants must demonstrate that design of chemical processing facilities and waste disposal facilities is adequate to ensure stability of all structural components during operation, closure and post closure.

Same as 10/10

Retaining structures to be designed by a qualified, registered professional.

Same as 10/10

Positive exclusion of wildlife from contact with chemical processing solutions, contaminated surface waters or wastewaters toxic to wildlife. Hazing not acceptable.

Positive exclusion of wildlife from processing solutions and wastewaters containing chemicals unless the solutions can be shown to pose no threat to wildlife under ODF&W rules. Hazing may be used in addition to positive exclusion but not as a substitute.

Same as 10/10

Guidelines for tanks and vessels.

Omitted; will be handled by plan review.

Same as 10/10

Heap leach pad liners to consist of 36 inches of clay, two membrane liners and leak collection system between two membrane liners.

Heap leach pad liners to consist of 18 inches of clay, one membrane liner in contact with the clay and a leak collection system between the clay and membrane. Thickness of clay liner may be reduced if an additional membrane liner is used.

Heap leach pad liners to consist of 36 inches of clay, two membrane liners and leak collection system between two membrane liners.

Emergency pond liners shall consist of 12 inches of clay at $10E-7$ cm/sec plus one membrane liner.

Emergency pond liners shall consist of 12 inches of clay at $10E-6$ cm/sec plus one membrane liner.

Remove provision for emergency ponds constructed to a lesser standard.

As Addressed in 6/14 Draft

Heap leach pad constructed so that process chemicals within the heap will not exceed 24 inches in depth.

Leaks detected in excess of a rate for free flow through 0.05 square inches of hole per acre shall be repaired.

Mill tailings shall be treated to remove or detoxify process chemicals, available toxic metals and minimize potential formation of acid leachate in disposal system.

Non-acid-generating tailings shall be disposed of to a system with 12 inches of 10E-6 cm/sec clay liner.

Acid-generating tailings shall be disposed of to a system with 36 inches of 10E-7 clay liner, plus a membrane liner in tight contact with the clay.

As Addressed in 10/10 Draft

Same as 6/14

Leaks detected shall be responded to in accordance with TABLE 2.

Mill tailings shall be treated by cyanide removal, chemical oxidation, or other means to reduce the WAD cyanide level in the liquid fraction to the lowest practicable concentration as demonstrated by column tests, but in no case shall the tailings have more than 30 ppm WAD cyanide in the liquid fraction.

The permittee shall determine the acid formation potential. If acid formation will occur, basic materials shall be added in the amount of three times that necessary to neutralize the material. A composite liner shall be used which consists of 12 inches of 10E-7 clay plus full synthetic membrane in tight contact with the clay.

Recommended

Same as 6/14

Same as 10/10

Mill tailings shall be treated by cyanide removal and re-use and chemical oxidation or other means if necessary, to reduce the WAD cyanide level in the liquid fraction to the lowest practicable concentration as demonstrated by laboratory tests but in no case shall the tailings have more than 30 ppm WAD cyanide in the liquid fraction.

The permittee shall determine the acid formation potential. If acid formation will occur, basic materials shall be added in the amount of three times that necessary to neutralize the material or to give a net neutralization potential of 20 tons of CaCO₃ per 1000 tons of material, whichever is greater. A composite liner of 12 inches of 10E-7 clay plus membrane in tight contact with the clay required.

As Addressed in 6/14 Draft

Not addressed.

Heap shall be detoxified to the requirements of TABLE 4.

Cyanide processing ponds shall be closed by removing residual solids and liners and filling in with inert materials. Sludge may be disposed on-site if it meets the criteria for the disposal facility.

Closure of non-acid tailings ponds shall be with composite covering consisting of a low permeability layer and a suitable soil layer to prevent erosion and sustain vegetation growth, in accordance with DOGAMI rules.

As Addressed in 10/10 Draft

Waste rock and low-grade ore shall be checked for acid generation.

Heap shall be detoxified to a point that rinsate will not exceed 0.2 ppm WAD cyanide.

Spent ore shall pass EPA TCLP or be considered hazardous waste and disposed appropriately.

Cyanide processing ponds shall be closed by folding in the liners and filling in with inert materials. Sludge may be disposed on-site if it meets the criteria for the disposal facility.

See below.

Recommended

Waste rock and low-grade ore shall be checked for acid generation and disposal plan shall be submitted for approval.

Same as 10/10

Spent ore shall pass Oregon's hazardous waste rules or be considered hazardous waste and disposed appropriately.

Same as 10/10

See below.

As Addressed in 6/14 Draft

Closure of acid tailings ponds shall be by covering with a composite cover designed to prevent water infiltration and be environmentally stable for an indefinite period of time.

Post-closure monitoring for a nominal period of 30-years.

As Addressed in 10/10 Draft

Closure of the tailings facility shall be by covering with a composite cover designed to be environmentally stable for an indefinite period of time. Construction to generally follow EPA/530-SW-89-047.

Post-closure monitoring may be continued for 30 years.

Recommended

Same as 10/10

Same as 10/10

JET 11/5

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 23, 1991

TO: Environmental Quality Commission

FROM: Fred Hansen, Director 

SUBJECT: November 8, 1991 Meeting, Overview of PM₁₀ Agenda Items

The five PM₁₀ control strategies and three related rule agenda items are proposed for adoption to meet requirements of the new Clean Air Act. This brief overview will help you identify the issues and guide your actions.

HEARING TESTIMONY

Public Hearings were held on the entire PM₁₀ control strategy/rule package in the Grants Pass, Medford, Klamath Falls and La Grande PM₁₀ nonattainment areas and in Portland. The Lane Regional Air Pollution Authority held hearings on behalf of the EQC in Eugene on the Eugene/Springfield PM₁₀ control strategy amendment. Your hearings officer has summarized and categorized testimony by agenda item topic. You will find a complete summary of all pertinent testimony in the hearing officer reports included as attachment H in each agenda item. Detailed responses by the Department to the issues identified by the hearings officer are contained in attachment I in each agenda item. Major issues have been repeated in the staff reports along with Department responses. All original written testimony is attached to this memo in case the Commission wishes to review certain original testimony.

MAJOR ISSUES

The following summary of major issues and Department responses is provided in order to highlight some of the points the Commission should focus on.

Agenda Item I, Industrial Rules

1. RACT/BACT Requirement - The Department's original proposal to combine the Clean Air Act requirements for application of Reasonably Available Control Technology (RACT) and Best Available Control Technology (BACT) into one emission limit and compliance time in the PM₁₀ contingency plan was strongly objected to by industry, government and many members of the public. The Department is now proposing to follow the specific Clean Air Act/EPA minimum requirement of establishing RACT emission limits now as part of the industrial contingency plan and delaying

establishment of BACT until the 18 month period following the time

EPA may redesignate an area as a "serious" PM₁₀ nonattainment area for failure to meet the attainment deadline. This requirement primarily affects industry in the Eugene/Springfield and Klamath Falls areas as industry in other PM₁₀ nonattainment areas meet or will meet RACT requirements by the PM₁₀ attainment date.

2. Plywood Veneer Average Opacity Limit - The Department originally proposed to address EPA's concern about the enforceability of the 10% average opacity limit by specifying that three visible emission readings be taken on three different days to determine compliance. Industry objected to this proposal on the grounds that the three days could be consecutive and thus the emission limit would be more stringent than the original intent of the rule which was a long term average. The Department is now proposing three opacity readings separated by at least 30 days each to address both EPA and industry concerns about the 10% average opacity requirement. The present 20% maximum opacity limit would be maintained in order to provide an enforcement tool to immediately address excessive emissions.

3. Industrial Dual Fuel Study Requirements - There was mixed testimony on whether the industrial dual fuel feasibility study for the Medford area should be done in the period before or after the attainment date. Also, some testimony favored implementing the use of cleaner fuels as part of the attainment strategy. The Department is proposing to maintain the requirement that the study be completed prior to potential triggering of the contingency plan to insure that the requirement could be implemented as soon as possible after triggering of the contingency plan, if found feasible and needed by the Commission. Criteria has been added to insure study credibility.

Agenda Item J, Residential Woodheating Rules

No major issues were raised in hearings that necessitate consideration of revisions.

Agenda Item K, Rogue Valley Open Burning Rules

Orchardists objected to the Department's proposed tightening of the ventilation criteria used to allow open burning. Jackson County in its local ordinance has recently provided some additional flexibility for burning orchard prunings in February of 1992 and 1993. The Department is proposing to follow Jackson County's action which will still provide some further protection (safety margin for the attainment strategy) of PM₁₀ air quality in the critical winter months when PM₁₀ standards are most likely to be exceeded.

Agenda Item L, La Grande PM₁₀ Control Strategy

After revising the attainment demonstration calculations per EPA comment, the Department found a shortfall in the control strategy's ability to bring the area into attainment. This has required the Department to propose moving the industrial RACT requirement from the contingency plan to the attainment strategy per Clean Air Act/EPA, requirements and requiring the State Highway Department to increase their road sanding dust control program from a 10% to 36% control efficiency level. The one industry affected and the State Highway Division have agreed to these new requirements.

Agenda Item M, Grants Pass PM₁₀ Control Strategy

The major issue raised at the hearing dealt with the industrial RACT/BACT and Veneer Dryer average opacity requirements which have been addressed in agenda item I.

Agenda Item N, Klamath Falls PM₁₀ Control Strategy

The major issue raised at the hearing dealt with the industrial RACT/BACT issue which has been addressed in agenda item I. EPA requested some changes to the attainment demonstration calculations. These changes did not affect the ability to demonstrate attainment with the proposed control strategy.

Agenda Item O, Medford Area PM₁₀ Control Strategy

1. Including Phoenix and Talent in the Mandatory Curtailment Program - Some testimony favored including Phoenix and Talent in the Medford area mandatory curtailment program. The Department has concluded that mandatory curtailment in the Phoenix and Talent area is not required to demonstrate attainment even though it is desirable from a strategy safety margin and regional consistency basis. However, if the area fails to meet the attainment deadline, the Department views the Clean Air Act as requiring mandatory curtailment throughout the entire PM₁₀ nonattainment area (including Phoenix and Talent) at that time.

2. Industrial Enforcement - Some concern was raised about the adequacy of enforcement of industrial rules. The Department points out that the PM₁₀ control strategy is on track; that is, improvements in PM₁₀ air quality have occurred as projected. Additionally, in the future, new requirements for continuous emission monitoring, implementation of the federal operating permit program and expected new field staff supported from new emission fees all will help to improve the industrial compliance program.

Agenda Item P, Eugene/Springfield PM₁₀ Control Strategy

The major issue raised related to the combined industrial RACT/BACT requirement. The LRAPA Board adopted the separated RACT/BACT approach now being proposed by the Department. If the Commission were to adopt something more stringent, LRAPA would have to further revise their PM₁₀ control strategy to conform to Oregon Statutes that require regional authority programs to be no less stringent than state rules. This could cause LRAPA to miss the plan submission deadline in the Act unless they take some action within the week between the Commission meeting and the Act deadline of November 15, 1991 for plan submission.

FOREST SLASH BURNING

Significant public comments were made on the issue of providing greater protection from forest slash burning smoke to PM₁₀ nonattainment areas. The present Department of Forestry Smoke Management Plan, which is a part of the State Implementation Plan, meets the minimum requirements of the Clean Air Act. The Department feels that greater protection is necessary because of past and potential future smoke impacts from forestry burning practices near PM₁₀ nonattainment areas. The Department should reach agreement with the Department of Forestry on a new and improved plan by the November 8 Commission meeting. It may be useful to have staff make a presentation on this new plan at the meeting to demonstrate, particularly to the people in the Medford area, that slash burning smoke is being further addressed even though nothing new is proposed in the PM₁₀ control strategies. A revised smoke management plan is expected to be taken to hearing and proposed for adoption by the Commission in the near future.

The draft revised smoke management plan currently being negotiated with the Department of Forestry is attached to this memo for your information. The major provisions of this new plan are expected to include curtailment of any slash burning within a 20 mile boundary of the PM₁₀ nonattainment areas during woodstove curtailment days and a prohibition on such burning during the entire November through February period as a contingency plan in any area that fails to meet the attainment deadline of the Act (and slash burning impacts continue to be significant).

RESOURCES FOR IMPLEMENTING CONTROL STRATEGIES

State and local government resources to implement PM₁₀ control strategies, particularly the residential woodheating elements, are considered adequate for at least the next year or two. Uncertainty of future local government resources because of measure 5 and reductions in timber taxes as well as potential

reductions in future federal air grants raises concern about the long-term ability to adequately fund critical control strategy efforts, particularly operation of curtailment programs. Adequate funding for financial incentive programs to insure a reasonable replacement rate of uncertified woodstoves is also an issue. The cordwood emission fee proposed but not adopted in HB 2175 would have adequately addressed the long term resource needs to insure continued effective implementation of residential woodheating control strategies. The Department will continue to explore funding options and may propose new legislation to address this need.

EPA APPROVABILITY

The Department has gone to extra lengths to insure EPA approvability of the PM₁₀ package. Pre-hearing authorization, hearing, and proposed adoption drafts of each agenda item have been provided to EPA Region X for comment. EPA region X staff have intensively reviewed drafts at each of the three steps in the process with the objective of trying to insure the package will be found approvable by EPA headquarters when it is officially submitted. The Department has revised drafts as necessary and believes that the package before the Commission will meet all requirements of the Clean Air Act and will be approved by EPA.

TIMING OF COMMISSION ACTION

The three related PM₁₀ rules dealing with industry, open burning and woodheating are integral parts of the PM₁₀ control strategies. Any changes in these rules made by the Commission at the adoption meeting will need to be reflected in the control strategy documents. Therefore, the Commission should take action on these rules before considering adopting the control strategies. The agenda item listing has been structured accordingly.

If the Commission identifies an issue that cannot be easily resolved at the Commission meeting, scheduling has been planned to allow a week for resolving the matter. A Commission conference call could be held by November 15, 1991 to adopt any final loose ends and still allow the state to meet the plan submittal deadline of the Clean Air Act. The Department does not foresee any issues falling into this situation and would not encourage the Commission to exercise this option unless there is absolutely no alternative.

Attachments: Draft revised Slash Smoke Management Plan Provisions
Hearings Testimony (Provided to Commission Only)

DRAFT

Smoke Management Plan Revisions (September 16, 1991)

Department of Environmental Quality Air Quality Division & Oregon Department of Forest

I. Current Plan

* No special protection afforded to PM-10 Nonattainment areas.

II. DEQ\DOF Proposed Revisions

A. Base Program Improvements (maintains all current program elements)

1. Establishes SPZs with 20 mile boundaries of NAA between Nov. 15 & Feb. 15th.

- Burning within SPZ allowed only if there is no chance of impact;

- No burning on Red days during December through February 15th

- Landowners to monitor burns for 2 days following ignition; mop-up required where needed to prevent smoke impacts; waivers provided when storm events would extinguish smoldering residues.

- No pile burns if a chance of significant smoke after 2 days following ignition;

- Establishes voluntary smoke management programs around Klamath Falls and La Grande organized by ODOF;

- Five year program review cycle rather than 3 years

- SPZs implemented for Klamath Falls, Medford and Oakridge as of January 1, 1992; Eugene, Grants Pass and La Grande on November 15, 1993.

- SPZ's to apply to all new PM₁₀ nonattainment areas as they are designated by EPA and deleted around areas that are redesignated by EPA to attainment.

2. Revises audit program to specify 1% of burn day and pre-burn audits, totalled.

B. Contingency Measures:

1. SPZ boundaries to be expanded to include the area within which burning can potentially have a significant impact on the nonattainment area during the nonattainment period. The analysis is to be based on modeling analysis per EPA BACM guidance. Note: this provision is currently included in EPA's BACM Guidance.

2. Burning would be prohibited within the expanded SPZ boundary between Dec. 1 to Feb. 1 if an impact of 5 to 10 $\mu\text{g}/\text{m}^3$ is demonstrated by air quality monitoring.

3. Burning will be prohibited within the expanded SPZ during Nov. 1 to March 1 if an impact of 10 $\mu\text{g}/\text{m}^3$ or more is demonstrated by air monitoring.

4. SPZs will apply Nov. 1 to March 1 for all area except Klamath Falls which will apply Nov. 1 to April 1.

5. Klamath Falls and La Grande as well as all future PM_{10} nonattainment areas subject to these contingency measures will have mandatory smoke management programs during the period of time within which SPZ's restrictions are in effect. Each new nonattainment area will be set aside as a Designated Area under the smoke management plan.

--- ### ---

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: D
Division: MSD
Section: Administration

SUBJECT:

Approval of Tax Credit Applications.

ACTION REQUESTED:

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

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Public Notice Attachment

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment

- Approve Department Recommendation
 - Variance Request Attachment
 - Exception to Rule Attachment
 - Informational Report Attachment
 - Other: (specify) Attachment

Tax credit application review report.



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



Meeting Date: November 8, 1991
Agenda Item: B
Page 3

TC-3588 Bear Creek Operations, Inc.	Installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.
TC-3589 Bear Creek Operations, Inc.	Installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.
TC-3590 Bear Creek Operations, Inc.	Installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.
TC-3591 Bear Creek Operations, Inc.	Installation of leak detection for one regulated oil tank and one unregulated lime sulphur tank in the form of a vapor monitoring well system.
T-3599 Lee's Shell Service	Automobile air conditioner coolant recycling machine.
T-3600 Jomae Inc. dba Star Bodyworks	Automobile air conditioner coolant recycling machine.
T-3601 Sandy Auto Body, Inc.	Automobile air conditioner coolant recycling machine.
T-3603 Oregon Rootstock & Tree Co., Inc. dba TRECO	Automobile air conditioner coolant recycling machine.
T-3604 Alto Automotive, Inc. dba Six Corners Chevron	Automobile air conditioner coolant recycling machine.
T-3605 Crater Lake Chevron	Automobile air conditioner coolant recycling machine.
T-3609 Lavia Enterprises dba Front St. Automotive	Automobile air conditioner coolant recycling machine.
T-3610 Sargent Automotive	Automobile air conditioner coolant recycling machine.

T-3612 A.J.'s Auto Repair	Automobile air conditioner coolant recycling machine.
T-3614 Ernst Hardware Co., Inc.	Automobile air conditioner coolant recycling machine.
T-3615 TNT Reddaway Truck Line	Automobile air conditioner coolant recycling machine.
T-3616 Nine T Nine Towing, Inc.	Automobile air conditioner coolant recycling machine.
T-3620 Baird's Auto Repair	Automobile air conditioner coolant recycling machine.
T-3621 Ditchen Bros.	Straw storage shed.
T-3622 Jim Arendell's Arco Service Center, Inc.	Automobile air conditioner coolant recycling machine.
T-3623 Nu Way Body & Fender Works, Inc.	Automobile air conditioner coolant recycling machine.
T-3624 Marshall Darris Jr., dba Darris Tire & Automotive Service	Automobile air conditioner coolant recycling machine.
T-3625 Decker's Radiator	Automobile air conditioner coolant recycling machine.
T-3626 Dustin's Mechanical Repair & Fabricating	Automobile air conditioner coolant recycling machine.
T-3627 Brad's Body & Fender Service, Inc.	Automobile air conditioner coolant recycling machine.
T-3628 Cascade Tractor Co.	Automobile air conditioner coolant recycling machine.
T-3629 Sharp Autobody & Paintworks, Inc.	Automobile air conditioner coolant recycling machine.

Meeting Date: November 8, 1991
Agenda Item: B
Page 5

T-3630 Scholls Ferry Chevron	Automobile air conditioner coolant recycling machine.
T-3631 Williams' Bakery	Automobile air conditioner coolant recycling machine.
T-3632 Les & Terry's Chevron Service, Inc.	Automobile air conditioner coolant recycling machine.
T-3633 DuFresne's Auto Service, Inc.	Automobile air conditioner coolant recycling machine.
T-3634 C & W Auto Body, Inc.	Automobile air conditioner coolant recycling machine.
T-3635 Cleveland Auto Repair, Inc.	Automobile air conditioner coolant recycling machine.
T-3636 J.S.G., Inc.	John Deere #555 Disk
T-3637 Cone's Automotive	Automobile air conditioner coolant recycling machine.
T-3638 Tool Box	Automobile air conditioner coolant recycling machine.
T-3639 Rexius Forest By-Products, Inc.	Automobile air conditioner coolant recycling machine.
T-3640 Koble's Automotive Service	Automobile air conditioner coolant recycling machine.
T-3641 Mike O'Hara Service	Automobile air conditioner coolant recycling machine.
T-3642 Chuck Barber, Inc. dba Chuck's Body & Fender	Automobile air conditioner coolant recycling machine.
T-3645 Northwest Truck & Equipment Repair, Inc.	Automobile air conditioner coolant recycling machine.
T-3646 Metro Tire & Auto Repair	Automobile air conditioner coolant recycling machine.

Meeting Date: November 8, 1991
Agenda Item: B
Page 6

DESCRIPTION OF REQUESTED ACTION:

Issue Tax Credit Certificates for Pollution Control Facilities.

AUTHORITY/NEED FOR ACTION:

<input checked="" type="checkbox"/> Required by Statute: <u>ORS 468.150-468.190</u>	Attachment	___
Enactment Date: _____		
<input type="checkbox"/> Statutory Authority: _____	Attachment	___
<input type="checkbox"/> Pursuant to Rule: <u>OAR 340 Division 16</u>	Attachment	___
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment	___
<input type="checkbox"/> Other:	Attachment	___
<input type="checkbox"/> Time Constraints:		

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment	___
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment	___
<input type="checkbox"/> Response to Testimony/Comments	Attachment	___
<input type="checkbox"/> Prior EQC Agenda Items: (list)		
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment	___
<input type="checkbox"/> Supplemental Background Information	Attachment	___

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

PROGRAM CONSIDERATIONS:

None.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

None.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the Environmental Quality Commission approve certification for tax credit applications identified above.

Meeting Date: November 8, 1991
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CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Yes.

Note - Pollution Tax Credit Totals:

Proposed November 8, 1991 Totals

	<u>Certified Costs*</u>	<u># of Certificates</u>
Air Quality	\$ 112,929	2
CFC - AQ	103,712	35
Hazardous Waste	0	0
Noise	0	0
Plastics	0	0
Solid Waste	0	0
Underground Storage Tanks	310,650	9
Water Quality	<u>251,447</u>	<u>4</u>
TOTAL	\$ 778,738	50

1991 Calendar Year Totals through September, 1991

	<u>Certified Costs*</u>	<u># of Certificates</u>
Air Quality	\$14,982,240	92
CFC - AQ	111,427	40
Hazardous	0	0
Noise	106,655	2
Plastics	118,168	1
Solid Waste	200,652	5
Underground Storage Tanks	8,501,047	154
Water Quality	<u>5,054,654</u>	<u>22</u>
TOTAL	\$29,074,843	316

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

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INTENDED FOLLOWUP ACTIONS:

Notify applicants of Environmental Quality Commission actions.

Approved:

Section: Roberta Young
Division: H. A. Dalke
Director: Bill Hansen

Report Prepared By: Roberta Young

Phone: 229-6408

Date Prepared: October 11, 1991

RY:y
MY102045
October 11, 1991

Application No. T-3488

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

GREGORY FOREST PRODUCTS, INC.
P.O. Box "C"
303 Mehlwood Lane
Glenwood, Oregon 97442

The applicant, Gregory Forest Products, Inc., is a wholly-owned subsidiary of Gregory Affiliates, Inc., an Oregon corporation. The applicant operates a wood products manufacturing plant (lumber, veneer and plywood) located at the above address, which is owned by Gregory Affiliates, Inc. and leased to Gregory Forest Products, Inc.

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

2. Description of Facility

The facility consists of secondary containment to prevent soil and water contamination by chemicals from a dip tank used to apply sapstain control chemicals to green lumber.

Claimed facility cost: \$49,454.96
(Accountant's certification was provided)

The eligible cost is different from the claimed cost because of the following adjustments that were arrived at through discussion and concurrence by the applicant.

The portions of the facility which are considered eligible for tax-credit are:

Dip-tank Secondary Containment	\$ 5,118.99
Sump Pump	1,258.95
Drip Pad	12,353.17
Building	21,407.96
Project Management	2,495.00
	=====
Total Eligible Costs	\$42,634.07

Portions considered to be ineligible because the Department regards them as production-related costs are:

Dip-tank	\$ 3,200.00
Lumber Hoist	15,601.70
Project Management	1,005.00
	=====
Total Ineligible Costs	\$19,806.70
Total Project Cost	\$62,440.77

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

- a. Plans were reviewed and approved under the previous preliminary certification process on December 16, 1988.
- b. The facility met the statutory deadline in that construction of the facility was substantially completed on May 8, 1989 and the application for final certification was filed on May 8, 1991, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of the facility is to prevent a substantial quantity of water pollution.

This prevention is accomplished by elimination of industrial waste as defined in ORS 468.700.

Before the facility was installed, five to ten gallons per day of sapstain-control solution was soaked up with hog fuel and burned in the boiler. On rainy days, some of the solution washed off into the storm sewer.

Drainage from treated lumber is now being caught on the contoured concrete slab and diverted to a sump where it is pumped through a filter and back into the dip tank. The solid waste from the filter is stored in barrels to be shipped to a licensed disposal facility.

b. Eligible Cost Findings

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

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

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

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

The new facility could be expected to produce some savings relative to the old facility through reduced wastage of anti-sapstain chemical. The amount of chemical and its value is negligible, however, compared to the capital and operating costs of the facility and the net return on investment (ROI) would be negative. The entire cost of the facility is eligible for tax credit under this factor.

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

The applicant considered digging a pit for the tank and pouring concrete re-enforcement around it, with the contoured drip pad sloped to drain back into the tank. This design was abandoned in favor of the claimed facility because solid wastes would be washed into the tank and there would have been no leak detection means for determining whether or not the tank was leaking.

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

See ROI discussion above.

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

The claimed facility cost was adjusted by subtracting those costs considered to be ineligible (see discussion under 2, above). The eligible costs are thus $\$42,634.07 \times 100/\$49,454.96 = 86.2\%$ of the claimed costs.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 86.2 percent.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to prevent a substantial quantity of water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the claimed cost that is properly allocable to pollution control is 86.2 percent.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$49,454.96 with 86.2 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3488.

Jerry E. Turnbaugh
IW\WC9\WC9084
(503) 229-5374
(9-25-91)

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

1. Applicant

Teledyne Industries, Inc.
Teledyne Wah Chang Albany
1600 Old Salem Road/P.O. Box 460
Albany, OR 97321

The applicant owns and operates a zirconium, hafnium, tantalum and niobium metals manufacturing and forming plant located on Old Salem Road in Albany, Oregon.

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

2. Description of Facility

The claimed facility is a covered secondary containment system for storage of ammonium chloride at the Albany Research Center.

The facility consists of a 14' x 12' reinforced concrete pad with a 6" high curb. A wood frame building with fiberglass siding and roof, to eliminate generation of contaminated rainwater, will enclose the pad.

Claimed facility cost eligible for tax credit: \$6,115.00.
(Accountant's Certification was provided).

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction of the facility was substantially completed in April 1990, and the application for final certification was found to be complete on May 28, 1991, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of the facility is to prevent a substantial quantity of water pollution.

This prevention is accomplished by redesign to eliminate industrial waste as defined in ORS 468.700.

The applicant reports that the system for collection and storage of dilute ammonium chloride was obsolete as it was not adequately contained. This presented conditions which could result in a significant release of ammonia to the nearby creek.

The Willamette Valley Region reports that there have not been any reported problems with the facility since it was completed.

- b. Eligible Cost Findings

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

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

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

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

The claimed facility does not generate income or savings, so the ROI is zero.

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

The applicant reports that the existing supply and storage system could have remained as it existed. However, the future potential for an environmental incident was not acceptable. Therefore, the area was upgraded using state-of-the-art technology and equipment.

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

There are no savings from the facility and the applicant did not estimate the annual operating costs.

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to comply with a requirement imposed by the Department to reduce water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 percent.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$6,115.00 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3528.

Jerry E. Turnbaugh
(503) 229-5374
September 26, 1991
IW\WC9\WC9058

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Teledyne Industries, Inc.
Teledyne Wah Chang Albany
1600 Old Salem Road/P.O. Box 460
Albany, OR 97321

The applicant owns and operates a zirconium, hafnium, tantalum and niobium metals manufacturing and forming plant located on Old Salem Road in Albany, Oregon.

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

2. Description of Facility

The claimed facility is a renovation of the acid handling, containment and wastewater collection system in the Nonferrous Metals Forming area of the plant. The new system consists of a concrete trench for the chemical supply and wastewater piping, a new 8-inch diameter wastewater drain line, acid resistant coatings and gratings, double containment piping, a drip pan and other improvements to the existing system.

Claimed facility cost eligible for tax credit: \$172,795.18
(Accountant's Certification was provided).

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction of the facility was substantially completed in December, 1990, and the application for final certification was found to be complete on May 28, 1991, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to prevent water pollution.

This prevention is accomplished by redesign to eliminate industrial waste as defined in ORS 468.700.

The applicant reports that the system for transfer of wastewater and the supply of acid and caustic to the process area was obsolete as it was not adequately contained or easy to inspect to determine if a pipe failure or leak had occurred. The supply lines were single wall consisting of stainless steel or lined steel pipe. The concrete trench was not coated with a chemical-resistant coating. The trench also was not adequately sloped so as to easily remove any spilled material and direct it to the wastewater treatment system. The trench was covered with 4x4 wood grating that did not allow a thorough routine inspection of the transfer lines. As a result of these conditions when a pipe failure did occur in July 1991, the leak was not easily detected resulting in a significant release of acid to the environment.

The Department issued a Notice of Noncompliance (ENF-HW-WVR-90-300) related to the system and consulted with the applicant to make corrective improvements.

The Willamette Valley Region reports that there have not been any reported problems with the facility since it was completed.

- b. Eligible Cost Findings

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

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

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

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

The claimed facility does not generate income or savings, so the ROI is zero.

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

The applicant reports that the existing supply and wastewater collection system could have been repaired as it existed. However, the future potential for an environmental incident was not acceptable. Therefore, the area was upgraded using state-of-the-art technology and equipment.

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

There are no savings from the facility and the applicant did not estimate the annual operating costs.

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 percent.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$172,795.18 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3529.

Jerry E. Turnbaugh
(503) 229-5374
September 26, 1991
IW\WC9\WC9059

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Teledyne Industries, Inc.
Teledyne Wah Chang Albany
1600 Old Salem Road/P.O. Box 460
Albany, OR 97321

The applicant owns and operates a zirconium, hafnium, tantalum and niobium metals manufacturing and forming plant located on Old Salem Road in Albany, Oregon.

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

2. Description of Facility

The claimed facility is a renovation of the acid and caustic handling and containment system for the Nonferrous Metals Continuous Conditioning Metals Forming area of the plant. The new system consists of a concrete trench for the nitric acid supply pipe, new acid and wastewater transfer lines, acid resistant coatings and gratings, drip trays and containment berms.

Claimed facility cost eligible for tax credit: \$23,082.13.
(Accountant's Certification was provided).

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction of the facility was substantially completed in February, 1991, and the application for final certification was found to be complete on May 28, 1991, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of the facility is to prevent a substantial quantity of water pollution.

This prevention is accomplished by redesign to eliminate industrial waste as defined in ORS 468.700.

The applicant reports that the system for transfer and supply of nitric and caustic to the process area was obsolete as it was not adequately contained or easy to inspect to determine if a pipe failure or leak had occurred. The nitric acid supply line was an underground single wall pipe without double containment. Portable acid and caustic supply tanks were located outside the building without any containment. This presented conditions which were susceptible to a pipe or tank failure which would result in a significant release of acid or caustic to the environment. Since the pipe was underground, it would be difficult to detect a release if it had occurred.

The Willamette Valley Region reports that there have not been any reported problems with the facility since it was completed.

- b. Eligible Cost Findings

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

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

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

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

The claimed facility does not generate income or savings, so the ROI is zero.

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

The applicant reports that the existing supply and storage system could have remained as it existed. However, the future potential for an environmental incident was not acceptable. Therefore, the area was upgraded using state-of-the-art technology and equipment.

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

There are no savings from the facility and the applicant did not estimate the annual operating costs.

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to comply with a requirement imposed by the Department to reduce water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 percent.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$23,082.13 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3531.

Jerry E. Turnbaugh
(503) 229-5374
September 26, 1991
IW\WC9\WC9060

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
2000 Alameda de las Pulgas
San Mateo, CA 94402

The applicant owns and operates a service station at 1890 NW 6th St., Grants Pass OR, facility no. 3977.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four double wall fiberglass tanks and piping, interstitial monitoring, spill containment basins, Stage I and II vapor recovery equipment and piping, automatic shut off valves and continuous leak detection monitoring in piping.

Claimed facility cost \$ 132,553
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed on December 12, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on December 12, 1990.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of four bare steel underground storage tanks, which have been removed, with no corrosion protection and no spill and overflow prevention or leak detection equipment.

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

- 1) For corrosion protection - Double wall fiberglass tanks & piping.
- 2) For spill and overflow prevention - Spill containment basins and automatic shutoff valves.
- 3) For leak detection - Interstitial monitors & continuous monitoring in piping.

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

The applicant did not indicate if any soil assessment or tank tightness testing was accomplished before undertaking the project.

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

The Department concludes that all of the costs claimed by the applicant (\$132,553) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection:			
Double wall fiberglass tanks & piping	\$ 40,581	42%(1)	\$ 17,119
Leak Detection:			
Interstitial monitor	2,610	100	2,610
Continuous piping monitoring system	439	100	439
Labor & materials (includes vapor recovery, spill containment basins & automatic shutoff valves)	<u>88,923</u>	<u>100</u>	<u>88,923</u>
Total	\$132,553	82%	\$109,091

(1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$40,581 and the bare steel system is \$23,462, the resulting portion of the eligible tank and piping cost allocable to pollution control is 42%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 82%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$132,553 with 82% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3575.

Mary Lou Perry:ew
(503) 229-5731
October 4, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Atlantic Richfield Company
2000 Alameda de las Pulgas
San Mateo, CA 94402

The applicant owns and operates a service station at 18030 E. Burnside, Portland OR, facility no. 3952.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of four double wall fiberglass tanks and piping, interstitial monitoring, spill containment basins, monitoring wells, Stage I and II vapor recovery equipment and piping and automatic shut off valves.

Claimed facility cost	\$ 143,128
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed on June 11, 1991 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation on June 11, 1991.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of four bare steel underground storage tanks, which have been removed, with no corrosion protection and no spill and overflow prevention or leak detection equipment.

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

- 1) For corrosion protection - Double wall fiberglass tanks & piping.
- 2) For spill and overflow prevention - Spill containment basins and automatic shutoff valves.
- 3) For leak detection - Interstitial monitors & monitoring wells.

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

The applicant did not indicate if any soil assessment or tank tightness testing was accomplished before undertaking the project.

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

The Department concludes that all of the costs claimed by the applicant (\$143,128) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant indicated that no alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Corrosion Protection: Double wall fiberglass tanks & piping	\$ 49,551	51%(1)	\$ 25,372
Leak Detection: Interstitial monitor	2,613	100	2,613
Labor & materials (includes vapor recovery, spill containment basins & automatic shutoff valves)	<u>90,964</u>	<u>100</u>	<u>90,964</u>
Total	\$143,128	83%	\$118,949

(1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$49,551 and the bare steel system is \$24,179, the resulting portion of the eligible tank and piping cost allocable to pollution control is 51%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil or water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 83%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$143,128 with 83% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3576.

Mary Lou Perry:ew
(503) 229-5731
October 4, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bear Creek Operations, Inc.
2518 S. Pacific Hwy.
Medford, OR 97501

The applicant owns and operates a fruit orchard operation at North Phoenix Road at I-5, Phoenix OR, facility no. 4400.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.

Claimed facility cost \$ 3,179
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed in December, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1991.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of a bare steel underground storage tank with no corrosion protection and no spill and overfill prevention or leak detection equipment.

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

- 1) For leak detection - Vapor monitoring well system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found. (The monitoring wells have shown no evidence of contamination since they have been in operation.)

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

The Department concludes that all of the costs claimed by the applicant (\$3,179) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

- b. Eligible Cost Findings

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

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

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

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

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

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

The applicant also considered electronic inventory control and electronic monitoring wells.

The applicant determined the method chosen to be more economical than the other two methods. The method chosen is acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Leak Detection: Vapor well monitoring system	\$3,179	100%	\$3,179
Total	\$3,179	100%	\$3,179

5. Summation

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

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,179 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3585.

Mary Lou Perry:ew
(503) 229-5731
September 18, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bear Creek Operations, Inc.
2518 S. Pacific Hwy.
Medford, OR 97501

The applicant owns and operates a gift fruit packing operation at 2518 S. Pacific Hwy., Medford OR, facility no. 5005. (All regulated tanks at this facility have been permanently decommissioned according to DEQ standards.)

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of a vapor monitoring well system on four unregulated heating oil tanks.

Claimed facility cost	\$12,716
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
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3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed in December, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1991.

4. Evaluation of Application

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

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

The applicant installed:

- 1) For leak detection - Vapor monitoring well system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found. (The monitoring wells have shown no evidence of contamination since they have been in operation.)

The Department concludes that all of the costs claimed by the applicant (\$12,716) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant also considered electronic inventory control and electronic monitoring wells.

The applicant determined the method chosen to be more economical than the other two methods. The method chosen is acceptable for a leak detection system for an underground heating oil tank.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Leak Detection: Vapor well monitoring system	\$12,716	100%	\$12,716
Total	\$12,716	100%	\$12,716

5. Summation

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

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$12,716 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3586.

Mary Lou Perry:ew
(503) 229-5731
October 4, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bear Creek Operations, Inc.
2518 S. Pacific Hwy.
Medford, OR 97501

The applicant owns and operates a fruit orchard operation at 5054 S. Pacific Hwy., Phoenix OR, facility no. 4407.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.

Claimed facility cost \$ 3,179
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed in December, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1991.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of a bare steel underground storage tank with no corrosion protection and no spill and overfill prevention or leak detection equipment.

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

- 1) For leak detection - Vapor monitoring well system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found. (The monitoring wells have shown no evidence of contamination since they have been in operation.)

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

The Department concludes that all of the costs claimed by the applicant (\$3,179) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant also considered electronic inventory control and electronic monitoring wells.

The applicant determined the method chosen to be more economical than the other two methods. The method chosen is acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility Cost	Percent Allocable	Amount Allocable
Leak Detection: Vapor well monitoring system	<u>\$3,179</u>	<u>100%</u>	<u>\$3,179</u>
Total	\$3,179	100%	\$3,179

5. Summation

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

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,179 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3587.

Mary Lou Perry:ew
(503) 229-5731
September 18, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bear Creek Operations, Inc.
2518 S. Pacific Hwy.
Medford, OR 97501

The applicant owns and operates a fruit orchard operation at 135 Carpenter Hill Rd., Phoenix OR, facility no. 4402.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.

Claimed facility cost \$ 3,179
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed in December, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1991.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of a bare steel underground storage tank with no corrosion protection and no spill and overfill prevention or leak detection equipment.

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

- 1) For leak detection - Vapor monitoring well system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found. (The monitoring wells have shown no evidence of contamination since they have been in operation.)

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

The Department concludes that all of the costs claimed by the applicant (\$3,179) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant also considered electronic inventory control and electronic monitoring wells.

The applicant determined the method chosen to be more economical than the other two methods. The method chosen is acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Leak Detection: Vapor well monitoring system	<u>\$3,179</u>	<u>100%</u>	<u>\$3,179</u>
Total	\$3,179	100%	\$3,179

5. Summation

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

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,179 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3588.

Mary Lou Perry:ew
(503) 229-5731
September 18, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bear Creek Operations, Inc.
2518 S. Pacific Hwy.
Medford, OR 97501

The applicant owns and operates a fruit orchard operation at 668 Beeson Lane, Talent OR, facility no. 4403.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.

Claimed facility cost \$ 3,179
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed in December, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1991.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of a bare steel underground storage tank with no corrosion protection and no spill and overflow prevention or leak detection equipment.

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

- 1) For leak detection - Vapor monitoring well system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found. (The monitoring wells have shown no evidence of contamination since they have been in operation.)

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

The Department concludes that all of the costs claimed by the applicant (\$3,179) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant also considered electronic inventory control and electronic monitoring wells.

The applicant determined the method chosen to be more economical than the other two methods. The method chosen is acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	Eligible Facility <u>Cost</u>	Percent <u>Allocable</u>	Amount <u>Allocable</u>
Leak Detection: Vapor well monitoring system	\$3,179	100%	\$3,179
Total	\$3,179	100%	\$3,179

5. Summation

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

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,179 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3589.

Mary Lou Perry:ew
(503) 229-5731
September 18, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bear Creek Operations, Inc.
2518 S. Pacific Hwy.
Medford, OR 97501

The applicant owns and operates a fruit orchard operation at 3092 Jacksonville Hwy., Medford OR, facility no. 4398.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection for an underground storage tank in the form of a vapor monitoring well system.

Claimed facility cost (Accountant's certification was provided)	\$ 3,179
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Percent allocable to pollution control	100%
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3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed in December, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1991.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of a bare steel underground storage tank with no corrosion protection and no spill and overfill prevention or leak detection equipment.

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

- 1) For leak detection - Vapor monitoring well system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found. (The monitoring wells have shown no evidence of contamination since they have been in operation.)

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

The Department concludes that all of the costs claimed by the applicant (\$3,179) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant also considered electronic inventory control and electronic monitoring wells.

The applicant determined the method chosen to be more economical than the other two methods. The method chosen is acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Leak Detection: Vapor well monitoring system	\$3,179	100%	\$3,179
Total	\$3,179	100%	\$3,179

5. Summation

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

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,179 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3590.

Mary Lou Perry:ew
(503) 229-5731
September 18, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bear Creek Operations, Inc.
2518 S. Pacific Hwy.
Medford, OR 97501

The applicant owns and operates a fruit orchard operation at 2518 S. Pacific Hwy., Medford OR, facility no. 4411.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of leak detection for one regulated oil tank and one unregulated lime sulphur tank in the form of a vapor monitoring well system.

Claimed facility cost \$ 6,358
(Accountant's certification was provided)

Percent allocable to pollution control 100%

3. Procedural Requirements

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

The facility met all statutory deadlines in that installation of the facility was substantially completed in December, 1990 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in February, 1991.

4. Evaluation of Application

- a. The facility is eligible because 1) the principal purpose of the leak detection equipment on the oil tank is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water and 2) the sole purpose of the leak detection equipment on the lime sulphur tank is to prevent pollution of soil and water. This is accomplished by detecting releases into soil or water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of a two bare steel underground storage tanks with no corrosion protection and no spill and overfill prevention or leak detection equipment.

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

- 1) For leak detection - Vapor monitoring well system.

The applicant reported that the soil was inspected during construction of the project and no evidence of contamination was found. (The monitoring wells have shown no evidence of contamination since they have been in operation.)

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

The Department concludes that all of the costs claimed by the applicant (\$6,358) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant also considered electronic inventory control and electronic monitoring wells.

The applicant determined the method chosen to be more economical than the other two methods. The method chosen is acceptable for meeting the requirements of federal regulations.

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

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

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

The Department determined the percent allocable pursuant to Department procedures under Oregon Administrative Rules Chapter 340, Division 16. The result is displayed in the following table.

	<u>Eligible Facility Cost</u>	<u>Percent Allocable</u>	<u>Amount Allocable</u>
Leak Detection: Vapor well monitoring system	<u>\$6,358</u>	<u>100%</u>	<u>\$6,358</u>
Total	\$6,358	100%	\$6,358

5. Summation

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

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$6,358 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3591.

Mary Lou Perry:ew
(503) 229-5731
September 18, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Lee's Shell Service
16222 SE Stark
Portland, OR 97233

The applicant owns and operates a service station and repair shop in Portland, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$2972.24
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 5/30/91, and the application for certification was filed on 7/18/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.00/pound. The applicant estimated an annual coolant recovery rate of 30 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2972.24 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3599.

Jerry Coffey:JC
(503) 239-8644
October 9, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Jomae Inc. dba Star Bodyworks
1024 Summit Ave.
Medford, OR 97501

The applicant owns and operates an autobody repair and painting shop in Medford, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 10 years.

Claimed Facility Cost: \$3300.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 4/23/91, and the application for certification was filed on 7/25/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.88/pound. The applicant estimated an annual coolant recovery rate of 150 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3300.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3600.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Sandy Auto Body, Inc.
38650 Pioneer Blvd., PO Box 431
Sandy, OR 97055

The applicant owns and operates an auto body repair/paint shop in Sandy, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 12 years.

Claimed Facility Cost: \$3000.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 3/29/91, and the application for certification was filed on 7/25/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$6.00/pound. The applicant estimated an annual coolant recovery rate of 25 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3000.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3601.

Jerry Coffey:JC
(503) 239-8644
September 17, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Oregon Rootstock & Tree Co., Inc. dba TRECO
10906 Monitor-McKee Rd. NE
Woodburn, OR 97071

The applicant owns and operates a farm corporation in Woodburn, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 10 years.

Claimed Facility Cost: \$2250.97
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 5/10/91, and the application for certification was filed on 7/19/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.50/pound. The applicant estimated an annual coolant recovery rate of 90 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2250.97 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3603.

Jerry Coffey:JC
(503) 239-8644
September 17, 1991

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

1. Applicant

Alto Automotive Inc. dba Six Corners Chevron
1495 N. Sherwood Blvd./PO Box 1090
Sherwood, OR 97140

The applicant owns and operates a light auto repair shop in Sherwood, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 20 years.

Claimed Facility Cost: \$2003.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 12/5/90, and the application for certification was filed on 7/19/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.00/pound. The applicant estimated an annual coolant recovery rate of 150 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2003.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3604.

Jerry Coffey:JC
(503) 239-8644
October 8, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Crater Lake Chevron
1901 Crater Lake Hwy.
Medford, OR 97501

The applicant owns and operates a gasoline station with repair shop in Medford, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 10 years.

Claimed Facility Cost: \$3095.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 7/9/91, and the application for certification was filed on 8/1/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.00/pound. The applicant estimated an annual coolant recovery rate of 200 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3095.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3605.

Jerry Coffey:JC
(503) 239-8644
October 8, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Lavia Enterprises dba Front St. Automotive
900 S. Front St.
Central Point, OR 97502

The applicant owns and operates an automotive repair and service shop in Central Point, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 10 years.

Claimed Facility Cost: \$3444.95
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/1/91, and the application for certification was filed on 8/7/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.50/pound. The applicant estimated an annual coolant recovery rate of 250 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3444.95 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3609.

Jerry Coffey:JC
(503) 239-8644
October 9, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Sargent Automotive
2810 SW 221st
Hillsboro, OR 97123

The applicant owns and operates an automotive repair shop in Hillsboro, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 7 years.

Claimed Facility Cost: \$2699.46
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 7/25/91, and the application for certification was filed on 8/9/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.33/pound. The applicant estimated an annual coolant recovery rate of 150 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2699.46 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3610.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

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

1. Applicant

A.J.'s Auto Repair
1858 13th Street, SE
Salem, OR 97302

The applicant owns and operates an auto repair and service shop in Salem, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$3995.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/6/91, and the application for certification was filed on 8/14/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.50/pound. The applicant estimated an annual coolant recovery rate of 180 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3995.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3612.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

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

1. Applicant

Ernst Hardware Co., Inc.
20179 Main St. NE, Box 38
St. Paul, OR 97137

The applicant owns and operates a farm implement dealership in St. Paul, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$3592.09
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 11/3/90, and the application for certification was filed on 8/19/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$3.13/pound. The applicant estimated an annual coolant recovery rate of 100 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3592.09 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3614.

Jerry Coffey:JC
(503) 239-8644
September 17, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

TNT Reddaway Truck Line
6201 SE Lake Rd.
Milwaukie, OR 97222

The applicant owns and operates a service and maintenance fleet shop in Milwaukie, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$3095.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/1/91, and the application for certification was filed on 8/19/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$3.35/pound. The applicant estimated an annual coolant recovery rate of 112.5 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3095.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3615.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

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

1. Applicant

Nine T Nine Towing, Inc.
11900 SW Pacific Hwy.
Tigard, OR 97223

The applicant owns and operates an automotive repair and towing business in Tigard, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$3949.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 6/13/90, and the application for certification was filed on 8/21/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.50/pound. The applicant estimated an annual coolant recovery rate of 45 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3949.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3616.

Jerry Coffey:JC
(503) 239-8644
September 24, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Baird's Auto Repair
132 N. Front/PO BOX 5224
Central Point, OR 97502

The applicant owns and operates an auto engine repair shop in Central Point, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 4 years.

Claimed Facility Cost: \$5370.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 7/25/91, and the application for certification was filed on 8/22/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.50/pound. The applicant estimated an annual coolant recovery rate of 200 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$5370.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3620.

Jerry Coffey:JC
(503) 239-8644
September 24, 1991

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Ditchen Brothers
dba Five Oak Farms
7705 Hazelgreen Rd NE
Salem, Oregon 97305

The applicant owns and operates a grass seed farm operation in Salem, Oregon.

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

2. Description of Claimed Facility

The facility described in this application is a 200' x 80' x 20' stick on stud, metal wall, straw storage building, located at 7705 Hazelgreen Road, NE, Salem, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$85,404
(Accountant's Certification was provided.)

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

The applicant has 1000 acres under perennial grass seed cultivation. During recent years the applicant has turned from open field burning to other alternatives. Now when the applicant goes from an old stand to a new planting the straw is chopped and worked under on approximately 300 acres annually. A custom baler removes the bulk straw on the remaining 700 acres. The acreage with the bulk straw removed is propane flamed.

In the past, the baler provided removal services for the value of the straw. Presently, custom balers are requiring growers to provide storage for the straw to insure prompt straw removal, growers are taking the necessary measures, thereby, eliminating the need to open field burn and reducing their reliance on propane flaming.

4. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on December 15, 1989, and the application for final certification was found to be complete on September 18, 1991. The application was submitted within two years of substantial completion of the facility.

5. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

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

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

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing protection from inclement weather.

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

There is no annual percent return on the investment as applicant claims no gross annual income. The applicant gives the straw to the custom baler for the straw removal services.

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

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

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

There is an increase in operating costs of \$2,741 to annually maintain and operate the facility. These costs were considered in the return on investment calculation.

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

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

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

6. Summation

- a. The facility was purchased in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

7. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$85,404, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3621.

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

JB:bmTC3621
September 23, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Jim Arendell's Arco Service Ctr., Inc.
4140 SE Harrison St.
Milwaukie, OR 97222

The applicant owns and operates a gasoline service station with auto and truck repair in Milwaukie, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$2542.94
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/12/91, and the application for certification was filed on 8/26/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.50/pound. The applicant estimated an annual coolant recovery rate of 100 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2542.94 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3622.

Jerry Coffey:JC
(503) 239-8644
October 8, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Nu Way Body & Fender Works, Inc.
34 NE Grand Ave.
Portland, OR 97232

The applicant owns and operates an autobody and paint shop in Portland, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$2755.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 6/12/91, and the application for certification was filed on 8/27/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.67/pound. The applicant estimated an annual coolant recovery rate of 40 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2755.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3623.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Marshall Darris Jr. dba Darris Tire & Automotive Service
1112 Court Street
Medford, OR 97501

The applicant owns and operates a tire and automobile repair shop in Medford, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$1900.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/9/91, and the application for certification was filed on 8/26/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.67/pound. The applicant estimated an annual coolant recovery rate of 240 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1900.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3624.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

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

1. Applicant

Decker's Radiator
2828 NE Glisan
Portland, OR 97232

The applicant owns and operates a general auto, radiator and air conditioner repair shop in Portland, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$2500.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 7/2/91, and the application for certification was filed on 8/26/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.34/pound. The applicant estimated an annual coolant recovery rate of 30 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2500.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3625.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Dustin's Mechanical Repair & Fabricating
2101 W. 10th
Eugene, OR 97402

The applicant owns and operates a truck and auto repair shop in Eugene, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 7 years.

Claimed Facility Cost: \$2900.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/1/91, and the application for certification was filed on 8/28/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.55/pound. The applicant estimated an annual coolant recovery rate of 100 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2900.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3626.

Jerry Coffey:JC
(503) 239-8644
September 17, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Brad's Body & Fender Service, Inc.
1810 West 8th
Eugene, OR 97402

The applicant owns and operates an autobody painting and repair shop in Eugene, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$2000.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 7/23/91, and the application for certification was filed on 8/29/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.00/pound. The applicant estimated an annual coolant recovery rate of 40 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2000.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3627.

Jerry Coffey:JC
(503) 239-8644
September 24, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Cascade Tractor Co.
495 N. Hwy 99W
McMinnville, OR 97128

The applicant owns and operates a farm implement and tractor dealership in McMinnville, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$1500.66
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 9/28/90, and the application for certification was filed on 8/30/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.34/pound. The applicant estimated an annual coolant recovery rate of 240 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1500.66 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3628.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

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

1. Applicant

Sharp Autobody & Paintworks, Inc.
4031 SE 26th
Portland, OR 97202

The applicant owns and operates an autobody repair and paint shop in Portland, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$2200.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/9/91, and the application for certification was filed on 9/4/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$2.00/pound. The applicant estimated an annual coolant recovery rate of 120 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2200.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3629.

Jerry Coffey:JC
(503) 239-8644
September 17, 1991

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

1. Applicant

Scholls Ferry Chevron
6600 SW Scholls Ferry Rd.
Portland, OR 97223

The applicant owns and operates a service station, automotive repair shop in Portland, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$3225.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 1/24/91, and the application for certification was filed on 9/4/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.50/pound. The applicant estimated an annual coolant recovery rate of 90 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3225.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3630.

Jerry Coffey:JC
(503) 239-8644
September 24, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Williams' Bakery
PO Box 1375
Eugene, OR 97440

The applicant owns and operates a wholesale bakery with fleet maintenance shop in Eugene, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 7 years.

Claimed Facility Cost: \$2285.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/5/91, and the application for certification was filed on 9/11/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.33/pound. The applicant estimated an annual coolant recovery rate of 18 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2285.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3631.

Jerry Coffey:JC
(503) 239-8644
September 17, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Les & Terry's Chevron Service, Inc.
3131 S. Sixth
Klamath Falls, OR 97603

The applicant owns and operates a service station garage in Klamath Falls, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 7 years.

Claimed Facility Cost: \$2979.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 7/19/90, and the application for certification was filed on 9/11/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$3.33/pound. The applicant estimated an annual coolant recovery rate of 450 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2979.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3632.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

DuFresne's Auto Service, Inc.
905 NW Murray
Portland, OR 97229

The applicant owns and operates a service station with auto repair in Portland, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$3000.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/9/91, and the application for certification was filed on 9/9/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$3.83/pound. The applicant estimated an annual coolant recovery rate of 60 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3000.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3633.

Jerry Coffey:JC
(503) 239-8644
September 24, 1991

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

1. Applicant

C & W Auto Body, Inc.
1775 Main
Springfield, OR 97477

The applicant owns and operates an autobody repair and finish shop in Springfield, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$2050.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/5/91, and the application for certification was filed on 9/9/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$6.50/pound. The applicant estimated an annual coolant recovery rate of 12 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2050.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3634.

Jerry Coffey:JC
(503) 239-8644
September 24, 1991

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

1. Applicant

Cleveland Auto Repair, Inc.
820 NE Cleveland
Gresham, OR 97030

The applicant owns and operates an auto repair shop in Gresham, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$4782.50
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 2/25/91, and the application for certification was filed on 9/12/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.33/pound. The applicant estimated an annual coolant recovery rate of 90 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$4782.50 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3635.

Jerry Coffey:JC
(503) 239-8644
September 17, 1991

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

J.S.G., Inc.
Steve & Virginia Glaser
32200 Quail Run
Tangent, Oregon 97389

The applicant owns and operates a grass seed farm operation in Tangent, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Facility

The equipment described in this application is a John Deere model #555 disk, located at 32200 Quail Run, Tangent, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$27,525
(Accountant's Certification was provided.)

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

The applicant has 2,800 acres under perennial grass seed production. Prior to investigating alternative field treatments, the applicant registered and open field burned as many acres as the weather and smoke management program permitted.

The applicant now bales off most of his fields and either propane flames or vacuums them in lieu of open field burning.

The applicant rotates approximately 400 acres annually from old stands to new fall plantings. On these acres, a disk is required to finely cut the straw and incorporate it into the soil. In the past, straw on rotation fields were open field burned.

4. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on November 15, 1989, and the application for final certification was found to be complete on September 24, 1991. The application was submitted within two years of substantial purchase of the equipment.

5. Evaluation of Application

- a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

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

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

The equipment does not recover or convert waste products into a salable or usable commodity. The disk is used to cut the straw and incorporate it into the soil.

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

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

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

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

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

There is an increase in operating costs of \$412.50 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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

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

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

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the principal purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$27,525, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3636.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 378-6792
JB:bmTC3636
September 24, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Cone's Automotive
515 Rieter Drive
Ontario, OR 97914

The applicant owns and operates an automotive repair shop in Ontario, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$2242.50
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 7/30/91, and the application for certification was filed on 9/16/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$2.10/pound. The applicant estimated an annual coolant recovery rate of 70 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2242.50 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3637.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

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

1. Applicant

Tool Box
1661 NE 6th St.
Grants Pass, OR 97526

The applicant owns and operates an automotive repair shop in Grants Pass, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$2795.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 5/15/91, and the application for certification was filed on 9/16/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$3.85/pound. The applicant estimated an annual coolant recovery rate of 60 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2795.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3638.

Jerry Coffey:JC
(503) 239-8644
October 9, 1991

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

1. Applicant

Rexius Forest By-Products, Inc.
1275 Bailey Hill Rd./PO Box 2276
Eugene, OR 97402

The applicant owns and operates a forest by-products business in Eugene, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$3499.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/21/91, and the application for certification was filed on 9/19/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.00/pound. The applicant estimated an annual coolant recovery rate of 50 to 100 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3499.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3639.

Jerry Coffey:JC
(503) 239-8644
October 8, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Koble's Automotive Service
1320 NE Cedar St.
Roseburg, OR 97470

The applicant owns and operates a general automotive repair service in Roseburg, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$3800.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/23/91, and the application for certification was filed on 9/20/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.50/pound. The applicant estimated an annual coolant recovery rate of 20 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3800.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3640.

Jerry Coffey:JC
(503) 239-8644
September 25, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Mike O'Hara Service
5020 NE Cully Blvd.
Portland, OR 97218

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

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 5 years.

Claimed Facility Cost: \$2995.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/28/91, and the application for certification was filed on 9/24/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$3.93/pound. The applicant estimated an annual coolant recovery rate of 40 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2995.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3641.

Jerry Coffey:JC
(503) 239-8644
October 8, 1991

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

1. Applicant

Chuck Barber, Inc. dba Chuck's Body & Fender
2620 West 5th Ave.
Eugene, OR 97402

The applicant owns and operates an automobile body and painting service in Eugene, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 10 years.

Claimed Facility Cost: \$2200.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 4/28/91, and the application for certification was filed on 9/30/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.34/pound. The applicant estimated an annual coolant recovery rate of 10 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2200.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3642.

Jerry Coffey:JC
(503) 239-8644
October 8, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Northwest Truck & Equipment Repair, Inc.
3124 Alyndale Drive
Eugene, OR 97404

The applicant owns and operates a truck repair shop in Eugene, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$3500.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 8/2/91, and the application for certification was filed on 10/7/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.00/pound. The applicant estimated an annual coolant recovery rate of 200 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3500.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3645.

Jerry Coffey:JC
(503) 239-8644
October 9, 1991

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Metro Tire & Auto Repair
10040 SW Capital Hwy.
Portland, OR 97219

The applicant owns and operates an automotive repair shop in Portland, Oregon.

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

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be 3 years.

Claimed Facility Cost: \$3295.00
(Costs have been documented)

3. Procedural Requirements

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

The facility has met all statutory deadlines in that the facility was determined substantially completed on 1/22/91, and the application for certification was filed on 10/7/91, within two years of substantial completion.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

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

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

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

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

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$4.00/pound. The applicant estimated an annual coolant recovery rate of 30 pounds.

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

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

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

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

The applicant has identified no alternatives.

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

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3295.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3646.

Jerry Coffey:JC
(503) 239-8644
October 9, 1991

REQUEST FOR EQC ACTION

Meeting Date: November 8-9, 1991

Agenda Item: E

Division: Air Quality

Section: Program Operations

SUBJECT:

Final Adoption of Revised Air Contaminant Discharge Permit Fees, OAR 340-20-155, Table 1, and 340-20-165.

PURPOSE:

Adoption of a permanent fee table with an overall increase in fees, addition of special activity fees, and improved specification of permit categories is requested. The increased fee revenue will fund a portion of the existing air quality programs for the 1991-1993 biennium.

ACTION REQUESTED:

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

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules
 - Rulemaking Statements
 - Fiscal and Economic Impact Statement
 - Public Notice

Attachment A & B
Attachment C
Attachment D
Attachment

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order

Attachment



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



Meeting Date: November 8-9, 1991
Agenda Item: E
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- Approve Department Recommendation
- Variance Request Attachment
- Exception to Rule Attachment
- Informational Report Attachment
- Other: (specify) Attachment

DESCRIPTION OF REQUESTED ACTION:

The Department's 1991-1993 air quality budget includes industrial permit fees totaling \$2.5 million. At the current fee rates, \$800,000 would be collected in the biennium. The proposed action increases the Air Contaminant Discharge Permit fees paid by all permitted industrial sources. The increased fees, effective upon adoption, and the previously approved emergency fee increase should generate \$2.5 million.

Air Contaminant Discharge Permit fees include a \$75 filing fee, an annual compliance determination fee, and an application processing fee. The latter two fees are established by industry code, based on the Department's workload for compliance assurance and permitting.

The proposed rule maintains the existing filing fee, increases the application processing fees by a mean of 283% with a minimum of \$400, and increases the compliance determination fees by a mean of 198% with a minimum of \$500. It also maintains the addition of specific charges for activities that increase the workload involved in permitting beyond the norm, adjusts categories where the workload has become disproportionate to the fees, clarifies permitting categories, and extends the fuel burning categories to the PM₁₀ nonattainment areas. The changes are shown on Table 1 of OAR 340-20-155 (Attachment A).

In addition, a rule has been added to allow a minimum annual compliance determination fee of \$250 for plants that are temporarily closed due to reasons other than scheduled maintenance or seasonal closure. This addition is shown in OAR 340-20-165(13) and (14) (Attachment B).

AUTHORITY/NEED FOR ACTION:

- Required by Statute: _____ Attachment
- Enactment Date: _____
- Statutory Authority: ORS 468.065 Attachment
- Pursuant to Rule: _____ Attachment
- Pursuant to Federal Law/Rule: _____ Attachment
- Other: _____ Attachment

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X Time Constraints: (explain)

An emergency rule was adopted on July 24, 1991 retroactive to July 1, 1991, to increase fees for the six month period the rule is in effect. Adoption of the final rule must take place prior to December 31, 1991, for continuity.

DEVELOPMENTAL BACKGROUND:

<u> </u> Advisory Committee Report/Recommendation	Attachment <u> </u>
<u>X</u> Hearing Officer's Report/Comments	Attachment <u> E </u>
<u> </u> Response to Testimony/Comments	Attachment <u> </u>
<u> </u> Prior EQC Agenda Items: (list)	

"Emergency Adoption of Revised Air Contaminant Discharge Permit Fees, OAR 340-20-155 and Authorization of Hearing For Permanent Rule Revision." July 24, 1991.

<u> </u> Other Related Reports/Rules/Statutes:	Attachment <u> </u>
<u>X</u> Supplemental Background Information	Attachment <u> </u>

Public hearings were held on August 27, 1991 in Medford, August 28, 1991 in Bend, and August 29, 1991 in Portland. of the 17 people who attended the three hearings, no one testified. There were, however, five letters received before and after the hearings that contained comments. The Hearing Officer's Report and attachments comprise Attachment E.

Some changes were made after the hearings in the wording of some categories descriptions for clarification.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

An increase in permit fees will be paid directly by all permitted sources, and all sources that apply for permits, both large and small. The dollar amount of the fee increase will be greater for larger, more complex, sources than it will for smaller sources. No fees adopted for the emergency rule have been changed for the permanent rule adoption (except for correction of a \$3 error in one fee category).

A few categories will be added or significantly changed. Category 21b will be added to include all major pulp, paper and paperboard mills other than kraft, sulfite & neutral sulfite mills. Categories 23 through 28 will be divided into high cost for sources that emit 100 or more tons per year of

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any pollutant, and lost cost for sources with less than 100 tons per year emissions. Category 32, asphalt production by distillation, will be made a part of Category 31, which will also include general refining. Category 55, electric power generation has been expanded to include natural gas. Category 56 will be expanded from gas production and/or manufacturing to include fuel burning equipment for gas production and/or distribution.

The Grants Pass, Klamath Falls and La Grande urban growth areas have been added to Categories 58, 59 and 60 for fuel burning equipment. The levels of emissions in Category 70, surface coating, manufacturing, have changed and are reflected in the changes to the descriptions of the subcategories. Category 75, soil remediation plants, will be added with subcategories for stationary and portable plants.

In addition to the above, six other fees will be added to Table 1. Those additional fees are: late fees, and fees for Best Available Control Technology (BACT)/Lowest Achievable Emission Rate (LAER) determination, ambient monitoring network review, modeling review, alternative emission control review, and non-technical permit modifications.

Industrial representatives, including Associated Oregon Industries, expressed support for the overall fee increases in the 1991 Legislature. The Department's budget was approved on June 29, 1991, which did not provide time for detailed discussion with industry on the specifics of the overall increase in fees. When the Department and industry met in mid-July, industrial representatives asked the Department to consider reducing or eliminating the annual compliance determination fees for sources that are not operating. Currently, if a source wishes to keep its air permit, it must pay its annual compliance determination fees in full.

Industry representatives also requested comment on the relationship of these fees to the new Clean Air Act. The passage of House Bill 2175, which is Oregon's initial answer to the Clean Air Act, grants the Department authority to assess an emissions fee of \$13 per ton of pollutant emitted from sources that fall under Title V of the Clean Air Act. There are approximately 150 of these sources. This fee is effective beginning July 1, 1992.

For the years 1992 and 1993, these Title V sources will pay not only the \$13 per ton, but they will also have to pay the appropriate Table 1 fees. Upon EPA approval of DEQ's Title V

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program, Table 1 fees will be dropped for the Title V sources and replaced with a single fee of \$25 per ton of emissions.

PROGRAM CONSIDERATIONS:

The increased permit revenue, along with the federal base grant and general fund revenues, will be used to maintain the industrial source control programs by funding existing positions in Air Quality's Program Operations, Technical Services and Planning and Development Sections, the Regional Operations Division, and the Laboratory.

This permanent rule change is being made as an amendment to the State Implementation Plan (SIP). Newly named source categories (described above) will be required to have permits under the SIP.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

In order to fund the program:

1. Adopt a permanent rule raising air permit fees, add needed Table 1 categories, add surcharges for extraordinary permit review activities, and add a minimum compliance determination fee for sources that are temporarily shut down. This is the recommended alternative. Fees for specific industries have been adjusted to reflect workload and industry representatives requested the Department consider reduced fees for industries that are temporarily not operating.
2. Use a different adjustment to the fee table, such as a flat across-the-board increase in the existing schedule of application processing fees and compliance determination fees.

This alternative is the simplest but not the most equitable. It would not incorporate adjustments for permit activities or source categories which are greater or lesser work for the Department and would not provide administrative efficiencies possible under Alternative 1.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends approval of Alternative 1; adopting the permanent rule allowing increases to the categories on Table 1, the addition of needed categories to Table 1, the addition of surcharges for extraordinary permit review.

Meeting Date: November 8-9, 1991
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activities, and the addition of a minimum compliance determination fee for sources that are temporarily shut down.

The recommendation provides adequate revenue to fund the existing industrial source control programs for the 1991-1993 biennium.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The revised fee table is expected to be consistent with the strategic plan, agency policy and legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

There are no issues for the Commission to resolve.

INTENDED FOLLOWUP ACTIONS:

1. File the adopted rule with the Secretary of State.
2. Send permit applications to sources now required to have a permit because of the added categories.

Approved:

Section: John Ruscigno

Division: Permitting

Director: Full House

Report Prepared By: Terri Sylvester

Phone: 229-5181

Date Prepared: October 7, 1991

TS:a
RPT\AH20012
October 21, 1991

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

(340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

A. Late Payment	B. BACT/LAER Determination - \$12,500 each	D. Modeling Review	E. Alternative Emission Control Review - \$1,500
a) 8-30 days \$200		a) Screening methodology \$ 500	
b) > 30 days \$400	C. Ambient Monitoring Network Review - \$900	b) Refined methodology \$1,000	F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] With new Application	[Fees-to-be-Submitted] With Renewal Application	[Fees-to-be-Submitted] With Application to Modify Permit
1. Seed cleaning located in special control areas, commercial operations only (not elsewhere included)	0723	75	100 1400	190 610	365	365	175
2. Reserved							
3. Flour and other grain mill products in special control areas	2041						
a) 10,000 or more [t/yr] tons/yr		75	325 1300	375 1200	775	775	400
b) Less than 10,000 [t/yr] tons/yr		75	250 1000	160 515	485	485	325
4. Cereal preparations in special control areas	2043	75	325 1300	270 865	670	670	400
5. Blended and prepared flour in special control areas	2045						
a) 10,000 or more [t/yr] tons/yr		75	325 1300	270 865	670	670	400
b) Less than 10,000 [t/yr] tons/yr		75	250 1000	135 500	460	460	325
6. Prepared feeds for animals and fowl in special control areas	2048						
a) 10,000 or more [t/yr] tons/yr		75	325 1300	375 1200	775	775	400
b) Less than 10,000 [t/yr] tons/yr		75	200 800	295 945	570	570	275
7. Beet sugar manufacturing	2063	75	425 1700	1860 5955	2360	2360	500
8. Rendering plants	2077						
a) 10,000 or more [t/yr] tons/yr input		75	250 1600	460 1920	785	785	325
b) Less than 10,000 [t/yr] tons/yr input		75	250 1200	270 1040	595	595	325
9. Coffee roasting, $E=1/30$ [t/yr] tons/yr or more roasted product	2095 2095	75 75	200 800	245 785	520	520	275

Attachment A

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

NOTE: Fees in A-F are in addition to any other applicable fees

(340-20-155)

A. Late Payment
a) 8-30 days \$200
b) > 30 days \$400

B. BACT/LAER Determination - \$12,500 each

D. Modeling Review

a) Screening methodology \$ 500
b) Refined methodology \$1,000

E. Alternative Emission Control Review - \$1,500

C. Ambient Monitoring Network Review - \$900

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] [With new Application]	[Fees-to-be-Submitted] [With Renewal] [Application]	[Fees-to-be-Submitted] [With Application-to] [Modify Permit]
10. Sawmills and/or planing mills a) 25,000 or more bd.ft./ shift finished product b) Reserved	2421, 2426 [2426]	75	[200] 800	[375] 1200	[650]	[650]	[275]
11. Reserved							
12. Reserved							
13. Mill work (including structural wood members), 25,000 or more bd.ft./shift input	[2431] 2431, 2439	[75] 75	[150] 600	[295] 945	[520]	[520]	[225]
14. Plywood manufacturing and/or veneer drying a) 25,000 or more sq.ft./hr, 3/8" basis finished product [basis-finished-product] b) 10,000 or more but less than 25,000 sq.ft./hr, 3/8" basis finished product c) Less than 10,000 sq.ft./hr, 3/8" basis finished product	[2435] 2435, [2436]	75 [75]	2500 [625]	2420 [755]	[1455]	[1455]	[700]
		75	[450] 1800	[510] 1635	[1035]	[1035]	[525]
		75	[150] 600	[270] 865	[495]	[495]	[225]
15. Reserved							
16. Wood preserving (excluding waterborne)	[2491] 2491	[75] 75	[150] 1000	[270] 960	[495]	[495]	[225]
17. Particleboard manufacturing (including strandboard, flakeboard and waferboard) a) 10,000 or more sq.ft./hr, 3/4" basis finished product b) Less than 10,000 sq.ft./hr, 3/4" basis finished product	[2492] 2493	[75] 75 [75] 75	[625] 2500 [300] 1200	[890] 2850 [425] 1360	[1590]	[1590]	[700] [375]

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

NOTE: Fees in A-F are in addition to any other applicable fees

(340-20-155)

- A. Late Payment
a) 8-30 days \$200
b) > 30 days \$400
- B. BACT/LAER Determination - \$12,500 each
- C. Ambient Monitoring Network Review - \$900
- D. Modeling Review
a) Screening methodology \$ 500
b) Refined methodology \$1,000
- E. Alternative Emission Control Review - \$1,500
- F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] With-new Application	[Fees-to-be-Submitted] With-Renewal Application	[Fees-to-be-Submitted] With Application-to-Modify-Permit
18. Hardboard manufacturing (EF) including fiberboard a) 10,000 or more sq.ft./hr, 1/8" basis finished product b) Less than 10,000 sq.ft./hr, 1/8" basis finished product	[2499] <u>2493</u>	75	[625] <u>2500</u>	[730] <u>2340</u>	[1430]	[1430]	[700]
19. Battery separator mfg.	2499	75	[160] <u>1000</u>	[540] <u>2080</u>	[715]	[715]	[175]
20. Furniture and fixtures a) 25,000 or more bd.ft./shift input b) Reserved	2511	[75]	[150]	[295]	[520]	[520]	[225]
21. Pulp mills, paper mills, and paperboard mills a) [(Kraft, sulfite, & neutral sulfite only)] b) Other - 100 tons or more of emissions	[2611] <u>2611, 2621, 2631</u> [2631]	[75]	[1250]	[3255]	[4560]	[4560]	[1325]
22. Building paper and building-board mills	[2661] <u>2621, 2493</u>	75	[200] <u>800</u>	[245] <u>785</u>	[520]	[520]	[275]
23. Alkalies and chlorine mfg. a. High cost b. Low cost	2812	[75] <u>75</u> <u>75</u>	[350] <u>2450</u> <u>1400</u>	[645] <u>2750</u> <u>2065</u>	[1070]	[1070]	[425]
24. Calcium carbide manufacturing a. High cost b. Low cost	2819	[75] <u>75</u> <u>75</u>	[375] <u>2625</u> <u>1500</u>	[645] <u>2750</u> <u>2065</u>	[1095]	[1095]	[450]
25. Nitric acid manufacturing a. High cost b. Low cost	2819	[75] <u>75</u> <u>75</u>	[250] <u>1750</u> <u>1000</u>	[325] <u>1385</u> <u>1040</u>	[650]	[650]	[325]
26. Ammonia manufacturing a. High cost b. Low cost	2819	[75] <u>75</u> <u>75</u>	[250] <u>1750</u> <u>1000</u>	[375] <u>1600</u> <u>1200</u>	[700]	[700]	[325]

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

NOTE: Fees in A-F are in addition to any other applicable fees

(340-20-155)

- A. Late Payment
 - a) 8-30 days \$200
 - b) > 30 days \$400
- B. BACT/LAER Determination - \$12,500 each
- C. Ambient Monitoring Network Review - \$900
- D. Modeling Review
 - a) Screening methodology \$ 500
 - b) Refined methodology \$1,000
- E. Alternative Emission Control Review - \$1,500
- F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] With new Application	[Fees-to-be-Submitted] With Renewal Application	[Fees-to-be-Submitted] With Application-to-Modify Permit
27. Industrial inorganic and organic chemicals manufacturing (not elsewhere included)	2819, 2869	75	325	660	860	860	600
a. High cost		75	225	1960			
b. Low cost		75	1300	1475			
28. Synthetic resin manufacturing	2821	75	250	375	700	700	325
a. High cost		75	1750	1600			
b. Low cost		75	1000	1200			
29. Charcoal manufacturing	2861	75	350 1400	780 2500	1205	1205	425
30. Pesticide manufacturing	2879	75	625 2500	3235 10355	3935	3935	700
31. Petroleum refining	2911	75	1250	3235	4560	4560	1325
a) Refining, general		75	5000	10355			
b) Asphalt production by distillation		75	1000	1200			
32. [Asphalt production by] [distillation] Reserved	2951	75	250	375	700	700	325
33. Asphalt blowing plants	2951 2952	75	250 1000	485 1555	810	810	325
34. Asphaltic concrete paving plants	2951						
a) Stationary		75	250 500	295 590	620	620	325
b) Portable		75	250 500	375 750	700	700	325
35. Asphalt felts [and] or coating	2952	75	250 500	565 900	890	890	325
36. Redefining of lubricating oils and greases, and reprocessing of oils and solvents for fuel	2992	75	225 900	350 1120	650	650	300
37. Glass container manufacturing	3221	75	250 1000	460 1475	785	785	325
38. Cement manufacturing	3241	75	800 3200	2370 7585	3245	3245	875
39. Concrete manufacturing, including redimix and CTB	3273 3271 3271, 3272, 3273	75	100 200	160 320	335	335	175

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

NOTE: Fees in A-F are in addition to any other applicable fees

(340-20-155)

- A. Late Payment
a) 8-30 days \$200
b) > 30 days \$400
- B. BACT/LAER Determination - \$12,500 each
C. Ambient Monitoring Network Review - \$900
- D. Modeling Review
a) Screening methodology \$ 500
b) Refined methodology \$1,000
- E. Alternative Emission Control Review - \$1,500
F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] [With-new-Application]	[Fees-to-be-Submitted] [With-Renewal] [Application]	[Fees-to-be-Submitted] [With-Application-to] [Modify-Permit]
40. Lime manufacturing	3274	75	E375 1500	E245 1785	E695	E695	E450
41. Gypsum products	3275	75	E200 800	E270 865	E545	E545	E275
42. Rock crusher	1442, 1446, 3295						
a) Stationary		75	E225 450	E295 590	E595	E595	E300
b) Portable		75	E225 450	E375 750	E675	E675	E300
43. Steel works, rolling and finishing mills, electro-metallurgical products	E3312 E3313 3312, 3313	E75	E625 2500	E645 2065	E1345	E1345	E700
44. Incinerators	4953						
a) 250 or greater <u>more</u> tons/day capacity <u>or any off-site infectious waste incinerator</u>		75	E3000 12000	E1615 5170	E4690	E4690	E3075
b) 50 <u>or more but less than</u> Eto 250 tons/day capacity		75	E375 3000	E245 1570	E695	E695	E450
c) 2 <u>or more but less than</u> Eto 50 tons/day capacity		75	E125 500	E190 610	E390	E390	E200
d) Crematoriums and pathological waste incinerators, not-else-where-classified <u>less than 2 tons/day capacity</u>		75	E125 500	E190 610	E390	E390	E200
e) PCB and/or off-site hazardous waste incinerator		75	E3000 12000	E1615 5170	E4690	E4690	E3075
45. Gray iron and steel foundries, Malleable iron foundries, Steel investment foundries, Steel Foundries (not elsewhere classified)	E3321 E3322 E3324 3321, 3322, 3324, 3325						
a) 3,500 or more lt/yr <u>tons/yr</u> production		75	E625 2500	E565 1810	E1265	E1265	E700
b) Less than 3,500 lt/yr <u>tons/yr</u> production		75	E150 600	E295 945	E520	E520	E225
46. Primary aluminum production	3334	75	E1250 5000	E3235 10355	E4560	E4560	E1325
47. Primary smelting of zirconium or hafnium	3339	75	E1250 5000	E3235 10355	E4560	E4560	E1325

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

NOTE: Fees in A-F are in addition to any other applicable fees

(340-20-155)

- A. Late Payment
 - a) 8-30 days \$200
 - b) > 30 days \$400
- B. BACT/LAER Determination - \$12,500 each
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- D. Modeling Review
 - a) Screening methodology \$ 500
 - b) Refined methodology \$1,000
- E. Alternative Emission Control Review - \$1,500
- F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] [With-new-Application]	[Fees-to-be-Submitted] [With-Renewal] [Application]	[Fees-to-be-Submitted] [With-Application-to] [Modify-Permit]
48. Primary smelting and refining of ferrous and nonferrous metals (not elsewhere classified)	3331, 3339						
a) 2,000 or more [t/yr]tons/yr production		75	[625]2500	[1400]4480	[2100]	[2100]	[700]
b) Less than 2,000 [t/yr]tons/yr production		75	[125]500	[540]1730	[740]	[740]	[200]
49. Secondary smelting and refining of nonferrous metals, 100 or more [t/yr]tons/yr metal charged	[3341] 3341	75	[300]1200	[375]1200	[750]	[750]	[375]
50. Nonferrous metals foundries, 100 or more [t/yr]tons/yr metal charged	[3360] 3363, 3364, 3365, 3366, 3369	75	[150]600	[325]1040	[550]	[550]	[225]
51. Reserved							
52. Galvanizing and pipe coating [---] (excluding all other activities)	3479	75	[125]500	[245]785	[445]	[445]	[200]
53. Battery manufacturing	3691	75	[150]600	[325]1040	[550]	[550]	[225]
54. Grain elevators [---], intermediate storage only, located in special control areas (not elsewhere classified)	4221						
a) 20,000 or more [t/yr]tons/yr grain processed		[75] 75	[225] 900	[510] 1635	[810]	[810]	[300]
b) Less than 20,000 [t/yr]tons/yr grain processed		[75] 75	[125] 500	[245] 785	[445]	[445]	[200]
55. Electric power generation	4911*						
a) Wood or Coal Fired, [---Greater] 25 MW or [greater-MW]more		[75] 75	[5000] 20000	[3235] 10355	[8310]	[8310]	[5075]
b) Reserved							
c) Oil or Natural Gas Fired, [---] 25 MW or [greater-MW]more		[75] 75	[450] 1800	[780] 2500	[1305]	[1305]	[525]
56. Fuel burning equipment for Gas production and/or [mfg.]distribution, 4922, 4925 10 million or more Btu/hr heat input		[75] 75	[475] 1900	[375] 1200	[925]	[925]	[550]
a) Natural gas transmission		75	1900	1200			
b) Natural gas production and/or mfg.		75	1900	1200			

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

(340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

- | | | | |
|--|---|---|---|
| <p>A. Late Payment
a) 8-30 days \$200
b) > 30 days \$400</p> | <p>B. BACT/LAER Determination - \$12,500 each</p> <p>C. Ambient Monitoring Network Review - \$900</p> | <p>D. Modeling Review
a) Screening methodology \$ 500
b) Refined methodology \$1,000</p> | <p>E. Alternative Emission Control Review - \$1,500</p> <p>F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50</p> |
|--|---|---|---|

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] [with new Application]	[Fees-to-be-Submitted] [with Renewal] [Application]	[Fees-to-be-Submitted] [with Application to] [Modify Permit]
57. Grain elevators [---] terminal elevators primarily engaged in buying and/or marketing grain [---] in special control areas	5153						
a) 20,000 or more [t/yr] tons/yr grain processed		[75]	[625]	[645]	[1345]	[1345]	[700]
b) Less than 20,000 [t/yr] tons/yr grain processed		[75]	[250]	[2065]			
		[75]	[175]	[245]	[495]	[495]	[250]
		[75]	[700]	[785]			
58. Fuel Burning equipment within the boundaries of the Portland [---] [Eugene-Springfield] and Medford-Ashland Air Quality Maintenance Areas, [and the] Salem Area Transportation Study Boundary, and Grants Pass Klamath Falls, and LaGrande Urban Growth Areas** ***	4961	[4961]** --(Fees will be based on the total aggregate heat input of all fuel burning equipment at the site)					
a) Residual or distillate oil fired, 250 million or more [Btu/hr] Btu/hr heat input		[75]	[400]	[490]	[965]	[965]	[475]
b) Residual or distillate oil fired, 10 or more but less than 250 million Btu/hr heat input		[75]	[1600]	[1570]			
		[75]	[250]	[270]	[595]	[595]	[325]
c) Reserved		[75]	[1000]	[865]			
59. Fuel Burning equipment within [the] the boundaries of the Portland [---] [Eugene-Springfield] and Medford-Ashland Air Quality Maintenance Areas, [and the] Salem Area Transportation Study Boundary, and Grants Pass Klamath Falls, and LaGrande Urban Growth Areas** ***	4961	[4961]** --(Fees will be based on the total aggregate heat input of all fuel burning equipment at the site)					
a) Wood or coal fired, 35 million or more Btu/hr heat input		[75]	[400]	[490]	[965]	[965]	[475]
b) Wood or coal fired, less than 35 million Btu/hr heat input		[75]	[1600]	[1570]			
		[75]	[1000]	[270]	[445]	[445]	[175]
		[75]	[400]	[865]			

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

NOTE: Fees in A-F are in addition to any other applicable fees

(340-20-155)

- | | | | |
|------------------------|---|---------------------------------|---|
| A. Late Payment | B. BACT/LAER Determination - \$12,500 each | D. Modeling Review | E. Alternative Emission Control Review - \$1,500 |
| a) 8-30 days \$200 | | a) Screening methodology \$ 500 | |
| b) > 30 days \$400 | C. Ambient Monitoring Network Review - \$900 | b) Refined methodology \$1,000 | F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50 |

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] [With-new-Application]	[Fees-to-be-Submitted] [With-Renewal] [Application]	[Fees-to-be-Submitted] [With-Application-to] [Modify-Permit]
60. Fuel Burning equipment outside the boundaries of the Portland [Eugene-Springfield] and Medford-Ashland Air Quality Maintenance Areas, [and-the] Salem Area Transportation Study Boundary, and Grants Pass Klamath Falls, and LaGrande Urban Growth Areas** ***	4961** -- (Fees will be based on the total aggregate heat input of all fuel burning equipment at the site) 4961 (Fees will be based on the total aggregate heat input of all fuel burning equipment at the site)						
All oil fired 30 million or more Btu/hr [heat input E], and all wood and coal fired 10 million or more Btu/hr [heat input E]		75	250	270	595	595	325
		<u>75</u>	<u>1000</u>	<u>865</u>			
61. New-s Sources installed in or after 1971 not listed herein which would emit 10 or more tons/yr [per-year] of any air contaminants including but not limited to particulates, SO _x , or Volatile Organic Compounds (VOC), if the source were to operate uncontrolled.	<u>any</u>						
a) Low-cost <u>High cost</u>		75	9000	15016400	*****	*****	*****
b) Medium cost		75	2500	35011120	*****	*****	*****
c) High-cost <u>Low cost</u>		75	600	20001480	*****	*****	*****
62. New-s Sources installed in or after 1971 not listed herein which would emit significant malodorous emissions, as determined by Departmental for-Regional-Authority review of sources which are known to have similar air contaminant emissions.	<u>any</u>						
a) Low-cost <u>High cost</u>		75	9000	15016400	*****	*****	*****
b) Medium cost		75	2500	35011120	*****	*****	*****
c) High-cost <u>Low cost</u>		75	600	20001480	*****	*****	*****
63. Existing-s sources not listed herein for which an air quality problem is identified by the Department for Regional-Authority .	<u>any</u>						
a) Low-cost <u>High cost</u>		75	9000	15016400	*****	*****	*****
b) Medium cost		75	2500	35011120	*****	*****	*****
c) High-cost <u>Low cost</u>		75	600	20001480	*****	*****	*****

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

NOTE: Fees in A-F are in addition to any other applicable fees

(340-20-155)

- A. Late Payment
a) 8-30 days \$200
b) > 30 days \$400
- B. BACT/LAER Determination - \$12,500 each
- C. Ambient Monitoring Network Review - \$900
- D. Modeling Review
a) Screening methodology \$ 500
b) Refined methodology \$1,000
- E. Alternative Emission Control Review - \$1,500
- F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] [With-new Application]	[Fees-to-be-Submitted] [With-Renewal] [Application]	[Fees-to-be-Submitted] [With Application-to] [Modify-Permit]
64. Bulk Gasoline Plants regulated by OAR 340-22-120****	[5100-*****] 5171	[75] 75	[55] 400	[160] 515	[290] 290	[290] 290	[130] 130
65. Bulk Gasoline Terminals****	5171 [*****]	75	[1000] 4000	[540] 1730	[1615] 1615	[1615] 1615	[1075] 1075
66. Liquid Storage Tanks, 39,000 gallons or more capacity, regulated by OAR 340-22-160 (B) not elsewhere included)****	[4200-*****] 5169, 5171	[75] 75	[50/tank] 200/tank	[110/tank] 355/tank			
67. Can or drum Coating**** a) 50,000 or more units/mo. b) Less than 50,000 units/mo.	3411, 3412 [*****]	75 75	[1500] 6000 [100] 400	[970] 3105 [215] 690	[2545] 2545 [390] 390	[2545] 2545 [390] 390	[1575] 1575 [175] 175
68. Paper or other substrate Coating**** [264] [267] [or] 3861 [*****]		75	[1500] 6000	[970] 3105	[2545] 2545	[2545] 2545	[1575] 1575
69. Coating Flat Wood regulated by OAR 340-22-200****	[2400-*****] 2435	[75] 75	[500] 2000	[325] 1040	[900] 900	[900] 900	[575] 575
70. Surface Coating, Manufacturing**** [a] -10 or more but less than 40 tons VOC/yr [b] -40 or more but less than 100 tons VOC/yr [c] -100 or greater tons VOC/yr a) 100 or more tons VOC/yr b) 10 or more but less than 100 tons VOC/yr c) less than 10 tons VOC/yr (at sources' request)	[2500,-3300,-3400,-3500,-3600,-3700,-3800,-3900-*****] any	[75] 75 [75] 75 [75] 75 75 75 75	[25] 25 [100] 100 [500] 500 2000 600 200	[90] 90 [215] 215 [430] 430 1380 690 290	[190] 190 [390] 390 [1005] 1005	[190] 190 [390] 390 [1005] 1005	[100] 100 [175] 175 [575] 575
71. Flexographic or Rotogravure printing, [over] 60 or more tons VOC/yr per plant****	[2751,-2754-*****] 2754, 2759	[75] 75	[50/press] 2250	[160/press] 2000			
72. Reserved							
73. Sources subject to NESHAPS rules (except demolition and renovation)	any	75	[100] 400	[150] 500	[325] 325	[325] 325	[175] 175
74. Sources [of] requiring toxic air pollutant[s] review (not elsewhere classified)	any	75	[250] 1000	[300] 960	[625] 625	[625] 625	[325] 325

TABLE 1
AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

(340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

A. Late Payment	B. BACT/LAER Determination - \$12,500 each	D. Modeling Review	E. Alternative Emission Control Review - \$1,500
a) 8-30 days \$200		a) Screening methodology \$ 500	
b) > 30 days \$400	C. Ambient Monitoring Network Review - \$900	b) Refined methodology \$1,000	F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	[Fees-to-be-Submitted] [With new Application]	[Fees-to-be-Submitted] [With Renewal] [Application]	[Fees-to-be-Submitted] [With Application to] [Modify Permit]
<u>75. Soil Remediation Plants</u>	<u>1799</u>						
<u>a) Stationary</u>		<u>75</u>	<u>1000</u>	<u>945</u>			
<u>b) Portable</u>		<u>75</u>	<u>1000</u>	<u>1200</u>			

* Excluding hydro-electric and nuclear generating projects.

** Including co-generation facilities of less than 25 megawatts.

*** [Maps of these areas are attached.] Legal descriptions and maps of these areas are on file in the Department.

**** Sources required to obtain a permit under items 61, 62, and 63 will be subject to the following fee schedule to be applied by the Department based upon the anticipated cost of processing.

***** Permit for sources in categories 64 through 71 are required only if the source is located in the Portland AQMA, Medford-Ashland AQMA or Salem SATS.

Estimated Permit Cost	Application Processing Fee
Low cost	\$-100.00--\$-250.00
Medium cost	\$-250.00--\$1500.00
High cost	\$1500.00--\$3000.00

[As nearly as possible, applicable fees shall be consistent with sources of similar complexity as listed in Table 1.]

***** Permit for sources in categories 64 through 71 are required only if the source is located in the Portland AQMA, Medford-Ashland AQMA or Salem SATS.]

RPT\AH14007
(7/91)

Rules for Air Contaminant Discharge Permits**Fees**

340-20-165 (1) All persons required to obtain a permit shall be subject to a three part fee consisting of a uniform non-refundable filing fee of \$75, an application processing fee, and an annual compliance determination fee which are determined by applying Table 1. The amount equal to the filing fee, application processing fee, and the annual compliance determination fee shall be submitted as a required part of any application for a new permit. The amount equal to the filing fee and the application processing fee shall be submitted with any application for modification of a permit. The amount equal to the filing fee, application processing fee, and the annual compliance determination fee shall be submitted with any application for a renewed permit.

(2) The fee schedule contained in the listing of air contaminant sources in Table 1 shall be applied to determine the permit fees, on a Standard Industrial Classification (SIC) plant site basis.

(3) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts or additional information, or any other reason pursuant to applicable statutes and do not require refiling or review of an application or plans and specifications shall not require submission of the filing fee or the application processing fee.

(4) Applications for multiple-source permits received pursuant to OAR 340-20-160 shall be subject to a single \$75 filing fee. The application processing fee and annual compliance determination fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in Table 1.

(5) The annual compliance determination fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the annual compliance determination fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.

(6) If a permit is issued for a period less than one (1) year, the applicable annual compliance determination fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable annual compliance determination fee shall be prorated by multiplying the annual compliance determination fee by the number of months covered by the permit and dividing by twelve (12).

(7) In no case shall a permit be issued for more than ten (10) years.

(8) Upon accepting an application for filing, the filing fee shall be non-refundable.

(9) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or proposes to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the application

processing fee. The permit application and the request for such fee reduction shall be accompanied by:

(a) A copy of the permit issued for the previous location; and

(b) Certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.

(10) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.

(11) All fees shall be made payable to the permit issuing agency.

(12) Pursuant to ORS 468.535, a regional authority may adopt fees in different amounts than set forth in Table 1 provided such fees are adopted by rule and after hearing and in accordance with ORS 468.065(2).

~~(13) [In addition to any fees required above in OAR 340-20-155 and 340-20-165, all persons required to obtain a permit shall be subject to a supplemental annual compliance determination fee payable upon billing by the Department but not later than June 30, 1991. The supplement shall be equivalent to 88% of the applicable annual compliance determination fee as shown on Table 1, except for Minimal Sources, for which the supplement shall be 20% of the applicable Table 1 annual compliance determination fee. Fees shall be calculated in five dollar increments.]~~

Sources which are temporarily not conducting permitted activities, for reasons other than regular maintenance or seasonal limitations, may apply for use of a modified annual compliance determination fee in lieu of an annual compliance determination fee determined by applying Table 1. A request for use of the modified annual compliance determination fee must be submitted to the Department in writing along with the modified annual compliance determination fee on or before the due date of the annual compliance determination fee. The modified annual compliance determination fee shall be \$250.

(14) Sources which have received Department approval for payment of a modified annual compliance determination fee must obtain authorization from the Department prior to resuming permitted activities. Sources shall submit written notification to the Department at least thirty (30) days before startup specifying the earliest anticipated startup date, and accompanied by:

(a) Payment of the full annual compliance determination fee determined from Table 1 if greater than six (6) months would remain in the billing cycle for the source, or

(b) Payment of 50% of the annual compliance determination fee determined from Table 1 if six (6) months or less would remain in the billing cycle.

**RULE MAKING STATEMENTS FOR
PROPOSED AMENDMENTS TO THE AIR CONTAMINANT
DISCHARGE PERMIT PROGRAM**

STATEMENT OF NEED FOR RULE MAKING

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

(1) Legal Authority

This proposal would amend Oregon Administrative Rule (OAR) 340, Division 20, Section 155 Table 1, and 340, Division 20, Section 165(13) and add (14). It is proposed under the authority of Oregon Revised Statutes (ORS) Chapter 468.065(2) which directs the Environmental Quality Commission to establish pollution permit fees "based upon the anticipated cost of filing and investigating the application, of issuing or denying the requested permit, and of an inspection program to determine compliance or noncompliance with the permit".

(2) Need For These Rules

Permit fee increases are needed to maintain existing air pollution control programs.

(3) Principal Documents Relied Upon

Oregon Administrative Rules (OAR) Chapter 340, Division 20, Section 155 Table 1.

Oregon Revised Statutes (ORS) 468.065.

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

LAND USE COMPATIBILITY STATEMENT

See next page.

DEQ LAND USE EVALUATION STATEMENT FOR RULEMAKING
AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE
(OAR 340-20-155) AND (OAR 340-20-165)

(1) Explain the purpose of the proposed rules.

The proposed rules increase the existing Air Contaminant Discharge Permit fees for industrial sources by an average of 213%, and deletes the provision for a one time only Air Contaminant Discharge Permit fee surcharge.

(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:

Issuance of Air Contaminant Discharge Permits

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

If no, explain:

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

Not applicable.

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

Not applicable.

Division

Intergovernmental Coord.

Date

AUTHOR: Terri Sylvester
FILE: LANDFORM
September 16, 1991

FISCAL AND ECONOMIC IMPACT STATEMENT FOR
PROPOSED AMENDMENTS TO THE AIR CONTAMINANT
DISCHARGE PERMIT PROGRAM

FISCAL AND ECONOMIC IMPACT STATEMENT

The rules proposed for permanent rule adoption would increase fees for Air Contaminant Discharge Permits. Application Processing Fees would be raised by an average of 283%. Annual Compliance Determination Fees would rise by an average of 198%. The greatest percentage increases would affect rendering, wood preserving, surface coating, bulk gasoline and chemical manufacturing plants, and operators of infectious waste incinerators. The rock products industry would be affected by the smallest percentage increase. Increases in other categories would be close to the average increases. They would also allow sources that are temporarily closed for economic reasons to pay a \$250 annual compliance determination fee in lieu of the regular fee until they reopen.

The entire cost of the fee increases would be a direct impact on current and future holders of Air Contaminant Discharge Permits, which are held by both large and small businesses. Many of the permits held by small businesses are Minimal Source Permits, which are less affected by the proposed fee increases because they only pay fees once every five years.

Only those local and state governmental agencies that have permits would be affected. The State Highway Division and various County Road Departments own and operate permitted rock crushing and asphalt paving plants which would be impacted by the smallest percentage increase. Agencies that operate permitted fuel burning equipment would be impacted by the amount of the general increase. Agencies that operate fuel burning equipment in the PM₁₀ non-attainment areas that are being added to the permit table could be subject to permitting for the first time.

There would be no direct economic impact to the general public. The only known indirect cost to the general public would be pass-through of costs to customers.

The economic impact to the Department of Environmental Quality will be an increase in revenues. Revenues are projected to increase from approximately \$800,000 to \$2.5 million for the 1991-1993 biennium. There would be no increased expenses because the new fees would be implemented through the existing billing system.

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMORANDUM

DATE: October 2, 1991

TO: Environmental Quality Commission

FROM: Terri Sylvester, Air Quality Division

SUBJECT: Hearing Officer's Report: Proposed Increase in Air Contaminant Discharge Permit Fees

Hearings were held in Medford on August 27, 1991, Bend on August 28, 1991, and Portland on August 29, 1991. Six people attended in Medford, three in Bend and eight in Portland. No one testified at any of the three hearings. However, four letters were received during the comment period, and one was received several days later. A summary of these comments is given below.

Mark S. Liefke, Operations Manager, Lone Star Northwest stated that the large amount of fee increase is excessive to impose in one year. He would prefer that a "certain portion" of the needed revenue be obtained from businesses and the remaining amount "be sought elsewhere". He would also like to see the increase in fees phased in over as much as a five-year period.

Response: In the case of the industrial permit program in the Air Quality Division, the Legislature followed the Governor's lead and specified that the Department collect \$2.5 million in fee revenue between July 1, 1991 and June 30, 1993.

Andrea Ellingson, Technical Director, Dee Forest Products, Inc. commented that the company strongly opposes the fee increase because it is fighting for survival.

Response: The Department feels the increased fees reflect funding necessary to operate the permit program as mandated by the Environmental Protection Agency (EPA). Authority to impose these fees derives from a state statute which requires that the fees be based on the Department's workload for permitting and compliance assurance. The fee structure is designed to meet that requirement.

Tom Weir, General Manager, Walling Sand & Gravel Company feels that the fees are unfair. He also feels that using fees to build a larger DEQ is not needed.

Memo to: Environmental Quality Commission
October 2, 1991
Page 2

Response: The additional fees will not be used to expand any program within the Department. It will fund the air quality industrial permit program at its current staffing level.

Dennis Hays, Executive Secretary, Oregon Feed, Seed, Grain and Suppliers Association feels that the fee increases are extremely out of line. These fees are just one of many increases experienced by businesses due to Measure 5. "Just because the DEQ is in existence doesn't mean it has to maintain the same high level of programs, especially to industries that do not pollute or discharge any large amounts into the air."

Response: The Air Quality Division is mandated by the EPA to operate an air quality program that meets its standards. If the Department fails to do that, EPA may revoke the Department's authorization to conduct the program, and administer the program themselves. Industry representatives, in general, prefer for the state to keep its authority for the program.

Quincy Sugarman, Environmental Advocate, OSPIRG (received after the record was closed) stated that OSPIRG supports the fee increase.

TS

M

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
PUBLIC HEARING ATTENDANCE LIST

SUBJECT: Air Permit fees
LOCATION: Medford
DATE & TIME: ~~7/16/91~~ 8/27/91

(PLEASE INDICATE IN FAR RIGHT COLUMN IF YOU WOULD LIKE TO HAVE
A COPY OF THE HEARING OFFICER'S REPORT MAILED TO YOU)

NAME	AFFILIATION	MAILING ADDRESS	H.O. REPORT ? <i>hearing officers</i>
1. <u>Thomas Gilsdorf</u>	<u>DYNOL POLYMERS</u>	<u>1405 ANTELOPE RD</u> ^{W.C.}	<u>YES</u>
2. <u>MIKE ANDERSON</u>	<u>ROYAL OAK</u>	<u>P.O. BOX 2367 WHITE CITY</u>	
<u>Jim Wright</u>	<u>LTM, Inc</u>	<u>P.O. Box 1145 Medford</u>	
3. <u>MICHAEL KERKER</u>	<u>Jessamine Grangers Corp</u>	<u>P.O. Box 229 GRANTS PASS</u>	
4. <u>Terry Rogers</u>	<u>Spalding & Son</u>	<u>Box 435 Grants Pass</u>	
5. <u>Bob Asseli</u>	<u>So Ore Tallice</u>	<u>P.O. Box 246 E.P. Ore</u>	
6.			
7.			
8.			
9.			
10.			

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
PUBLIC HEARING ATTENDANCE LIST

SUBJECT: Air Permit Fees

LOCATION: Bond

DATE & TIME: Aug 28, 1991

(PLEASE INDICATE IN FAR RIGHT COLUMN IF YOU WOULD LIKE TO HAVE
A COPY OF THE HEARING OFFICER'S REPORT MAILED TO YOU)

<u>NAME</u>	<u>AFFILIATION</u>	<u>MAILING ADDRESS</u>	<u>H.O. REPORT ?</u>
<u>LaSorne Black</u>	<u>Cons. Pric. Inc.</u>	<u>Po Box 428 Pineville</u>	<u>yes</u>
<u>Jim Lovell</u>	<u>"</u>	<u>"</u>	
<u>John WARRON</u>	<u>Salvage Smelters</u>	<u>22687 SE Howlett</u>	<u>97022</u>

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
PUBLIC HEARING ATTENDANCE LIST

SUBJECT: Air Permit Fees

LOCATION: Portland

DATE & TIME: 8/29/91 1:00 pm

(PLEASE INDICATE IN FAR RIGHT COLUMN IF YOU WOULD LIKE TO HAVE
A COPY OF THE HEARING OFFICER'S REPORT MAILED TO YOU)

NAME	AFFILIATION	MAILING ADDRESS	H.O. REPORT ?
1. LEE OLUNSTAD	DARIGOLD FEED CO	PO Box 42308, ^{Portland}	
2. WALLY MCBRIDE	SIMPSON TIMBER CO.	POB. 17307 PORTLAND	97217
3. DENNIS HAYS	ORE. FEED ASSOC.	1725 N.W. 24th	97210
4. Wesley C. Wilhelm	Wilhelm Funeral Home	6637 SE ⁹⁷²¹⁶ Milwaukee	
5. Theresa Parrone	Tektronix	MS40-000 PO Box 500 Beav	97077 ^{yes}
6. JOHN ARAND	INTEL #AL4-19	5200 N.E. ELAM YOUNG PKWY, HILLSBORO, OR	97124 ^{YE}
7. Jon Lund	Willamette Ind.	P.O. Box 907 Albany	97321
8. Jerry O. Richartz	Oregon Steel Mills	14400 N Rivergate Blvd Portland	97203
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0.			



LONE STAR NORTHWEST

110 S.E. CARUTHERS
PORTLAND, OREGON 97214
(503) 231-8488
FAX (503) 231-9664

August 2, 1991

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
AUG 08 1991

Department of Environmental Quality
State of Oregon
811 Southwest 6th Avenue
Portland, Oregon 97204

AIR QUALITY DIVISION

Re: Amendment to Oregon Administrative Rule Chapter 340,
Division 320, Section 155 - Permit Fee Increases

To Whom It May Concern:

This letter is regarding the proposed increase for air contaminant discharge permit fees in the amount of 213 percent which includes general increases in application processing and plan determining fees of 300 and 200 percent respectively. This seems like an outlandish amount of increase to incur in a one year period. I realize that Measure Five has had impact on some areas, but to turn around and impose the increase on businesses all at once is unfair. I would propose that if more funds are needed to maintain the department, that a certain portion of the needed funds be appropriated from the businesses and the remaining portion be sought elsewhere. I would also suggest that the amount of increase be phased in over a period of time, such as a five year period, instead of having such a major increase in one year.

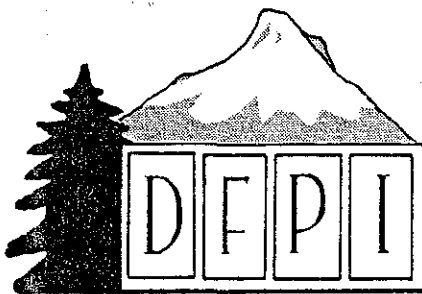
Our Company, for one, has difficulty in budgeting and dealing with a 200 to 300 percent increase on any item in one year.

It is also noted that fees for some industrial categories including rock crushers and cement plants would be changed by different amounts to better reflect the department's work load for the categories. I would be interested in knowing exactly what percentage these fees would be increasing. Since it is not mentioned, I would hope that they would be down instead in the upward trend.

Sincerely,

Mark S. Liefke
Operations Manager

cc: Ed Owens



Dee Forest Products, Inc.
4780 Dee Highway
Hood River, OR 97031
(503) 354-1711

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
AUG 16 1991

Fax (503) 354-2770

AIR QUALITY DIVISION

August 14, 1991

Terri Sylvester
Air Quality Division
Dept. of Environmental Quality
811 S.W. 6th Avenue
Portland, OR 97204

SUBJECT: PROPOSED PERMIT FEE INCREASE FOR AIR CONTAMINANT DISCHARGE

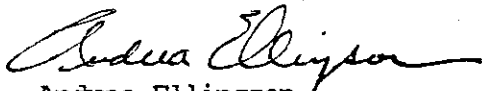
Dear Ms. Sylvester:

In response to the proposed increase in permit fee for Air Contaminant Discharge, Dee Forest Products strongly opposes the approximate 213% increase.

In the past year we have paid approximately \$9500 in DEQ permit fees. Increasing the permit fees by 200-300 % for greater quality compliance and now the proposed increase for air contaminant discharge is not an acceptable answer. Dee Forest Products is a small firm employing approximately 80 people. You are well aware of the bleak outlook in the northwest for the forest products industries. We are fighting for survival.

Please accept this letter as formal response to the proposed permit increase as our small staff is unable to attend the public hearings scheduled.

Regards,


Andrea Ellingson
Technical Director

AE/sf

WALLING SAND & GRAVEL COMPANY

READYMIXED CONCRETE • CRUSHED ROCK • SAND AND GRAVEL

Post Office Box 12009
SALEM, OREGON 97309

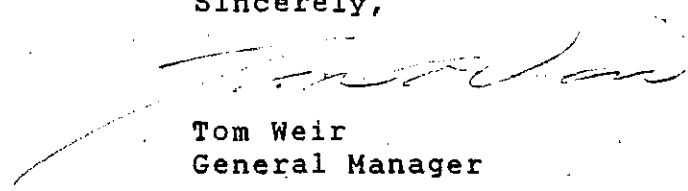
DEPARTMENT OF ENVIRONMENTAL QUALITY
Attn: Business Office
811 S.W. Sixth
Portland, OR 97204

Dear Sirs,

We received your invoice of \$590.00 for an air contaminant discharge permit compliance determination fee. We are not in agreement with this kind of unfair charging of fees.

We have paid for a permit and have been checked in the past for our compliance to the DEQ regulations. Where does this stop? There are approximately 400 plus or minus permits listed, each at \$590.00, that equals \$250,000. Where does all this money go? I have a lot of questions as to why. I do agree we need to help our environment and keep it clean but to just build a larger and larger department, we do not need it.

Sincerely,



Tom Weir
General Manager

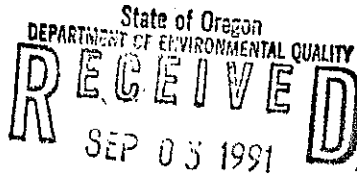
cc: Governor Roberts



OREGON FEED, SEED, GRAIN and SUPPLIERS ASSOCIATION

1725 N.W. 24TH AVENUE • PORTLAND, OREGON 97210 • PHONE (503) 226-2758

Dennis Hays, Executive Secretary



August 30, 1991

Terri Sylvester
Air-Quality Division
811 S.W. 6th Avenue
Portland, Oregon 97204

AIR QUALITY DIVISION

Dear Ms. Sylvester:

Regarding the new Air Contaminant Discharge Permit fees, our organization feels these increases are extremely out of line at this time.

All of Oregon industry is being forced to pay higher permit fees for all permits because of the Measure 5 problem. Your department's fee is just one of many increases experienced by businesses, etc.

In light of the fact that the expense of operating this program should not be going up because you have not changed the amount of time, etc., spent on servicing the people we represent, we feel the increase is way out of line.

We cannot understand how one inspection in as little as five years justifies an increase in permit fees of over 200 percent.

Nothing has changed on our industries to warrant an increase such as that. We are not putting more discharge into the air, etc. Therefore, why should we have to pay higher fees?

We feel you should review these fees and reduce them to a more reasonable increase.

Just because your department did not get their funding does not mean you have to maintain all the programs you have going.

When the voters approved Measure 5 they were thinking of reducing government expenses, not increasing fees for all licenses, etc. Why not consider what the voters said, and reduce some of your operating expenses? Just because the DEQ is in existence doesn't mean it has to maintain the same high level of programs, especially to industries that do not pollute or discharge any large amounts into the air.

We hope your department will consider these comments and take an action in reducing these fees.

Sincerely,

Dennis Hays
Executive Secretary

OFFICERS:

President: ROB VARUSKA • Vice President: DENNIS McDERMOTT • Secretary-Treasurer: JIM BROWN

Board of Directors: Harry Abkarian, Brett Dennis, John Evans, Larry Ferguson, Bruce Knudson, Marvin Kropf, Jerry Manderville, Bob Nistler, Hersh Pendell, Tillman Stone, Al Zimmer.

OSPIRG

The Oregon State Public Interest Research Group

1536 SE 11th

Portland, Oregon 97214

(503) 231-4181, FAX: (503) 231-4007

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
SEP 09 1991

Comments on
Proposed Air Contaminant Discharge Permit Fee
from

Quincy Sugarman, Environmental Advocate
Oregon State Public Interest Research Group
September 5, 1991

AIR QUALITY DIVISION

Thank you for the opportunity to comment on the proposed air contaminant discharge permit fee increase. My name is Quincy Sugarman, and I am an environmental advocate for the Oregon State Public Interest Research Group. OSPIRG is a statewide consumer and environmental research and advocacy organization with 35,000 members. I am supporting the proposed permit fee increases.

The proposed increases to permits for industrial point sources of air pollution should be implemented for several reasons:

1. These fee adjustments are part of Oregon's implementation of the 1990 amendments to the federal Clean Air Act.
2. The proposed permit fees are necessary for the Department's air quality base budget activities. These fee increases need to be implemented for the current biennium to maintain current budgeted activities and positions. These activities and this funding mechanism were approved by the Oregon Legislature. The fee increases were supported by industrial representatives in front of the Ways and Means committee.
3. The proposed permit fee increases take into account variability in the work load for the department created by processing different types of permits. The proposed fees increase more for the larger, more complex industrial point sources. The increases are less for those sources that are smaller, simpler and easier to permit or inspect. This type of fine tuning is important so that fees reflect the burden each type of polluter puts on the department.

Thank you for the chance to support these proposed fee increases. I would be happy to answer any further questions.

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: F
Division: Air Quality
Section: Vehicle Inspection

SUBJECT:

Proposed Rule Adoption: Amend Vehicle Inspection Program Certificate Fee Structure.

PURPOSE:

To increase Vehicle Inspection certificate fee cost to the general public from \$7 to \$10 and to adjust the fleet self inspection certificate cost from \$3 to \$5.

ACTION REQUESTED:

Authorize Rulemaking Hearing
 Adopt Rules

Proposed Rules
Rulemaking Statements
Fiscal and Economic Impact Statement
Public Notice

Attachment A
Attachment B
Attachment C
Attachment D

DESCRIPTION OF REQUESTED ACTION:

This report requests adoption of rules to increase the vehicle inspection fee for vehicle tests performed by the state from the current \$7 per certificate to \$10. Self inspection certificate cost would also increase from \$3 to \$5.



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



Meeting Date:
Agenda Item:
Page 2

Oregon law requires that fees be assessed to cover the operational cost of the state operated vehicle inspection program. Current fees are inadequate to meet overall operating costs. Additionally, the Department must consider future budgeting to replace existing 16 year old manually operated exhaust gas analyzers. Analyzer upgrading will be necessary to meet future testing requirements, and the federal Environmental Protection Agency has proposed requiring computerized testing equipment for all state inspection programs.

AUTHORITY/NEED FOR ACTION:

- | | |
|---|---------------------|
| <input type="checkbox"/> Required by Statute: _____ | Attachment _____ |
| Enactment Date: _____ | |
| <input checked="" type="checkbox"/> Statutory Authority: <u>ORS 468.405</u> | Attachment <u>E</u> |
| <input type="checkbox"/> Pursuant to Rule: _____ | Attachment _____ |
| <input type="checkbox"/> Pursuant to Federal Law/Rule: _____ | Attachment _____ |
| <input type="checkbox"/> Other: _____ | Attachment _____ |
| <input checked="" type="checkbox"/> Time Constraints: (explain) | |

ORS 468.405 gives the Commission the authority to establish regulations setting the Vehicle Inspection Program's certificate fee up to a \$10 limit.

The Vehicle Inspection Program has been operating during the last quarter at a loss of about \$1 for each certificate issued. Fee income is currently supplemented by drawing down the DEQ Motor Vehicle Pollution Account. It was intended that this account be set aside for funding capital costs of the program. This operational drain on the Motor Vehicle Pollution Account should be halted as soon as possible.

DEVELOPMENTAL BACKGROUND:

- | | |
|--|---------------------|
| <input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations | Attachment <u>F</u> |
| <input checked="" type="checkbox"/> Prior EQC Agenda Items: (list) | |
| 7/24/91 EQC Hearing Authorization | |
| | Attachment <u>G</u> |

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The Department's proposal would affect citizens within the Metropolitan Service District of the Portland area and within the Air Quality Maintenance Area of the Medford area. Within these areas, a vehicle owner has the responsibility to insure

Meeting Date:
Agenda Item:
Page 3

the vehicle passes the Inspection/Maintenance (I/M) test prior to each biennial vehicle registration.

There are approximately 700,000 vehicles registered in the Portland and Medford areas. Citizens in these areas will be charged an additional \$3 per vehicle registration. The increase in fee is expected to prompt some public reaction.

The response received by the Department at the public hearings did indicate dissatisfaction with certain aspects of the current Vehicle Inspection Program. Several witnesses suggested that the program could be operated with less inconvenience to the vehicle owner and more cost efficiency by private shops, similar to the California program. However, the inspection cost at California shops range between \$30 and \$50 compared to the proposed increase to \$10 for Oregon. In California the price per test is set by the marketplace. Prices in other states with decentralized (private shop testing) programs range widely but are generally higher than centralized programs. This is because of the relative efficiency of large volume centralized testing and the burdensome monitoring involved with running a decentralized program.

Other witnesses suggested they could not back the state I/M program fee increase unless vehicles were tested statewide. Testing of vehicles in heavily populated areas only is generally considered the most efficient approach to reducing carbon monoxide and ozone pollution levels. Sparsely populated areas generally do not reach elevated ambient pollution levels. During the workday it is estimated that about 15 percent of the vehicles operating in the Portland area are registered outside the I/M boundaries and not tested. The impact of this vehicle incursion is expected to drop significantly within the next couple years when Clark County, Washington begins I/M testing of vehicles.

The increase in cost of self testing fleet certificates from \$3 to \$5 per certificate will impact the inspection program's 53 self inspecting fleets. The \$2 fee increase will be added to a total of approximately 10,000 fleet vehicles. It is not expected that this fee increase will present any major hardships for the fleets.

The Department received one comment from a self inspecting fleet at the public hearings. Mac Pennington of the Lake Oswego School District agreed that a fee increase may be necessary, but petitioned to change the frequency of the fleet testing from annual to biennial. Vehicles from the general public are tested biennially. Since annual testing

Meeting Date:
Agenda Item:
Page 4

of fleets is a state statute, such a change would require legislative action.

PROGRAM CONSIDERATIONS:

The Vehicle Inspection Program has been operating during the last quarter at a loss of about \$1 for each certificate issued. This loss is draining the Motor Vehicle Pollution Account funds. During the 1989-91 biennium the funds in this account dropped from \$883,233 at the beginning of the biennium to the current level of \$460,000.

In 1975 when the Vehicle Inspection Program began operations, the certificate fee was \$5. Adjusting this figure for Portland area cost of living increases to 1990, the equivalent current cost would be approximately \$11.90. This means that even with the increase to \$10, the certificate fee increase still would not match cost of living increases.

The 1991-93 inspection program budget includes cost increases for employee salary and facility rents. The 1991-93 budget also includes acquisition of the land at the inspection program's Beaverton test center and purchase of prototype equipment designed to develop equipment specifications for replacement vehicle exhaust gas analyzers. Purchase of computerized analyzers to replace the inspection program's 16 year old equipment is a minimum requirement of EPA's draft "Guidance on Inspection/Maintenance." This EPA document was written in response to the federal 1990 Clean Air Act Amendments. Programs will be required to conform to EPA I/M guidelines within the next three years based upon recent EPA guidance.

No change in the inspection procedure is intended to accompany the fee increase. There will be no change in the number or location of test facilities or in the number of vehicle inspection personnel, as a result of the fee increase.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

The 1991 Legislature has approved a Vehicle Inspection Program budget that incorporates a \$10 certification fee. The budget covers inflation increases, funding to purchase land upon which the Beaverton inspection center is located, capital expenditures for prototype testing equipment and reserves for catastrophic equipment failure. If the Commission wishes to select a certificate fee of less than \$10, program cuts will have to be made.

Meeting Date:
Agenda Item:
Page 5

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the full increase in certificate fee to \$10. A lesser fee would not meet the requirements for a fully balanced budget and still allow the program to provide current levels of service to the public.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rules appear to be consistent with the goals of the strategic plan and with agency and legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

Does the Commission concur with the Department that a fee increase to \$10 is justified? Such fee increase will maintain the inspection program's operations at current levels of service.

INTENDED FOLLOWUP ACTIONS:

1. Update cost figures on vehicle certificates and on Motor Vehicles Division registration information mail outs.
2. Update cost figures in Vehicle Inspection Program accounting programs.

Approved:

Section: *Don P. Husebold*

Division: *Vehicle Inspection*

Director: *Jerry Coffey*

Report Prepared By: Jerry Coffey
Phone: 239-8644
Date Prepared: October 2, 1991

JC:jc
VIP\1991\2
(10/2/91)

Attachment A

PROPOSED ADDITION TO OREGON ADMINISTRATIVE RULES. CHAPTER 340
MOTOR VEHICLE EMISSION CONTROL INSPECTION TEST
CRITERIA, METHODS, AND STANDARDS

MOTOR VEHICLE INSPECTION PROGRAM FEE SCHEDULE

340-24-307 The following is the fee schedule of Certificates of Compliance, and licenses issued by the Department of Environmental Quality, Vehicle Inspection Program:

- (1) Certificates of Compliance [7] \$10
Issued by Department
- (2) Certificate of Compliance [3] \$5
Issued by Licensed Motor Vehicle Fleet Operation
- (3) Motor Vehicle Fleet Operation:
 - (a) Initial \$5
 - (b) Annual renewals \$1
- (4) Fleet Operation Vehicle Emissions Inspectors:
 - (a) Initial \$5
 - (b) Annual renewal \$1
- (5) Exhaust Gas Analyzer System:
 - (a) Initial \$5
 - (b) Annual renewal \$1

RULEMAKING STATEMENTS FOR PROPOSED AMENDMENTS TO RULES
TO AMEND INSPECTION PROGRAM FEE STRUCTURE

STATEMENT OF NEED FOR RULEMAKING

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

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340, Division 24. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

Oregon law requires that certificate fees be assessed to cover the operational cost of the state operated vehicle inspection program. The current fee of \$7 is inadequate to meet routine operating costs. In the quarter ending June 30, 1991, the inspection program lost an estimated \$1 per vehicle certificate issued. In HB 5536 the Oregon Legislature established a vehicle inspection program budget limitation for the 1991-93 biennium based on a certificate fee of \$10 per vehicle. The Department estimates that such a fee increase is required to maintain current inspection program service levels without depleting reserves.

(3) Principal Documents Relied Upon

HB 5536 1991-93 DEQ Budget

This document may be inspected at the Department of Environmental Quality, Vehicle Inspection Program, 1301 SE Morrison, Portland, Oregon, during normal business hours.

LAND USE CONSISTENCY STATEMENT

The proposed rule changes appear to not affect land use as defined in the Department's coordination program with the Department of Land Conservation and Development.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion as indicated for other testimony on these rules.

It is requested that local, state and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the DLCD to mediate any appropriate conflicts brought to our attention by local, state or federal authorities.

JC:jc

FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED AMENDMENTS TO RULES
FOR VEHICLE INSPECTION PROGRAM CERTIFICATE FEE COLLECTION

PROPOSAL SUMMARY

The proposed rules would:

- o Increase vehicle certification fee for the general public from the current \$7 per certificate to \$10 per certificate effective January 1, 1992.
- o Increase vehicle certification fee for self inspecting fleets from the current \$3 per certificate to \$5 per certificate effective January 1, 1992.

COSTS TO PORTLAND AND MEDFORD AREA RESIDENTS

The proposal would affect citizens within the Metropolitan Service District of the Portland area and within the Air Quality Maintenance Area of the Medford area. Within these areas, a vehicle owner has the responsibility to insure the vehicle passes the I/M test prior to each biennial vehicle registration.

There are approximately 700,000 vehicles registered in the Portland and Medford areas. Citizens in these areas will be charged an additional \$3 per vehicle registration.

The increase in cost of self testing fleet certificates from \$3 to \$5 per certificate will impact the inspection program's 53 self inspecting fleets. Of the total of 53 fleets, 19 are private fleets and 34 are government fleets. The \$2 fee increase will be added to a total of approximately 10,000 fleet vehicles. This continues to provide the fleets with a significant savings over the proposed cost of the \$10 general certificate.

FISCAL IMPACT ON THE DEPARTMENT OF ENVIRONMENTAL QUALITY

The Vehicle Inspection Program is currently operating at a loss of about \$1 for each certificate issued. This loss is draining the Motor Vehicle Pollution Account which was established by the Legislature to channel funding for the inspection program. During the 1989-91 biennium the funds in this account dropped from \$883,233 at the beginning of the biennium to the current level of \$460,000.

The proposed certificate fee increases are necessary to meet the program's 1991-93 budget which has been approved by the 1991 Oregon Legislature under HB 5536. The 1991-93 budget includes cost increase for employee salary and facility rents. It also

includes acquisition of the land at the inspection program's Beaverton Test Center and purchase of prototype equipment designed to develop equipment specifications for replacement vehicle exhaust gas analyzers. Finally, it includes funds to cover emergency equipment acquisition in case of catastrophic failure of existing equipment.

Without the full proposed increase in certificate fee, the Department would be forced to reduce the level of service offered by the inspection program.

JC:jc
(7/10/91)

A CHANCE TO COMMENT ON...

Attachment D

INCREASE IN VEHICLE INSPECTION PROGRAM CERTIFICATE FEES NOTICE OF PUBLIC HEARING

Hearing Date: September 17, 1991
Comments Due: September 20, 1991

- WHO IS AFFECTED:** Motor vehicle owners in the Portland Metropolitan Service District and the Medford Air Quality Maintenance Area.
- WHAT IS PROPOSED:** The Department of Environmental Quality is proposing to amend OAR 340, Division 24.
- WHAT ARE THE HIGHLIGHTS:**
- 1) Proposed rule change would increase Vehicle Inspection Program's vehicle certification fee from the current \$7 per certificate to \$10 per certificate effective January 1, 1992.
 - 2) Proposed rule change would increase certification fee for self inspecting fleets from the current \$3 per certificate to \$5 per certificate effective January 1, 1992.
 - 3) The Vehicle Inspection Program is supported solely by certificate fees. The last fee increase was made in 1981. The current fee of \$7 per certificate is inadequate to meet overall operating costs.



811 S.W. 6th Avenue
Portland, OR 97204

11/1/88

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

**HOW TO
COMMENT**

Public hearings will be held before a hearings officer at:

1:30 p.m.	7:00 p.m.
September 17, 1991	September 17, 1991
Dept. of Envir. Qual.	Dept. of Envir. Qual.
Conference Room 3A	Vehicle Insp. Prog.
811 SW Sixth Avenue	3030 Biddle Road
Portland, Or 97204	Medford, OR 97504

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than September 20, 1991 at 5 pm. They should be sent to Jerry Coffey at Vehicle Inspection Program, Department of Environmental Quality, 1301 SE Morrison, Portland, OR 97214.

Copies of the proposed rule package may be obtained from: Vehicle Inspection Program, Department of Environmental Quality, 1301 SE Morrison, Portland, OR 97214 or the regional office nearest you. For further information contact Jerry Coffey at (503) 239-8644.

(3) The license issued pursuant to ORS 468.390 of any person whose bond is canceled by legal notice shall be canceled immediately by the Department. If the license is not renewed or is voluntarily or involuntarily canceled, the sureties of the bond shall be relieved from liability accruing subsequent to such cancellation by the department.

468.405 Fees; collection; use.

(1) The department shall:

(a) Establish and collect fees for application, examination and licensing of persons, equipment, apparatus or methods in accordance with ORS 468.390.

(A) The fee for licensing shall not exceed \$5.

(B) The fee for renewal of licenses shall not exceed \$1.

(b) Establish fees for the issuance of certificates of compliance. The department may classify motor vehicles and establish a different fee for each such class. The fee for the issuance of certificates shall be established by the Commission in an amount based upon the costs of administering this program established in the current biennial budget. The fee for a certificate shall not exceed \$10.

(2) The department shall collect the fees established pursuant to paragraph (b) of subsection (1) of this section at the time of the issuance of certificates of compliance as required by paragraph (c) of subsection (2) or ORS 468.390.

(3) On or before the 15th day of each month, the commission shall pay into the State Treasury all moneys received as fees pursuant to subsections (1) and (2) of this section during the preceding calendar month. The State Treasurer shall credit such money to the Department of Environmental Quality Motor Vehicle Pollution Account, which is hereby created. The moneys in the Department of Environmental Quality Motor Vehicle Pollution Account are continuously appropriated to the department to be used by the department solely or in conjunction with other state agencies and local units of government for:

(a) Any expenses incurred by the department and, if approved by the Governor, any expenses incurred by the Motor Vehicles Division of the Department of Transportation in the certification, examination, inspection or licensing of persons, equipment, apparatus or methods in accordance with the provisions or ORS 468.390 and 815.310.

(b) Such other expenses as are necessary to study traffic patterns and to inspect, regulate and control the emission of pollutants from motor vehicles in this state.

468.410 Authority to limit motor vehicle operation and traffic.

The commission and regional air pollution control authorities organized pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter by

STATE OF OREGON

Attachment F

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 2, 1991

TO: Environmental Quality Commission

FROM: Ted Wacker, Hearing Officer for Medford Hearing
Jerry Coffey, Hearing Officer for Portland Hearing

SUBJECT: Public Hearings on September 17, 1991, in Medford and
Portland:

Proposal to increase Vehicle Inspection Program
certificate fee to the general public from \$7 to \$10 and
to self inspecting fleets from \$3 to \$5.

Schedule and Procedures

The Medford public hearing was held at the Department of Environmental Quality, Vehicle Inspection Program test facility at 3030 Biddle Road, Medford, Oregon. The Portland public hearing was held at the Executive Building at 811 S.W. Sixth Avenue in Portland, Oregon. Both hearings were held September 17, 1991. Public notice was published in the Oregonian and the Medford Mail Tribune 23 days prior to the hearing. Public notice of both hearings was published by the Secretary of State 45 days prior to the hearing. Ted Wacker was the hearing officer in Medford and Jerry Coffey the hearing officer in Portland.

A total of six people provided testimony during the public hearing process. Verbal testimony was given by five persons. Written testimony was submitted by three participants some of whom had also presented verbal testimony. Copies of all of the written materials are attached.

Summary of the Testimony at the Medford Hearing

Alan DeBoer, representing the Medford area new car dealers, asked that repair facilities be allowed to test vehicles and issue certificates. He stated the program could be more efficiently run by private garages and maintain the \$7 fee. Benefits would include a greater convenience to the public, less gasoline used for travel to testing facilities, and, therefore, lower emissions in the Rogue Valley.

Jim Sikes questioned the need for a 43 percent increase in certificate fees for private vehicles and a 66 percent increase in fleet certificate fees. He suggested a private garage approach to testing as a way of decreasing emissions caused by traveling to a

Memo to: Environmental Quality Commission
October 2, 1991
Page 2

central testing location. The private garage would reduce costs through competition and increased efficiency.

Joe Harrison, Jr. asked why the inspection/maintenance program discriminates against Medford and Portland. He suggested the use of mobile testing vans traveling throughout the state. He wants to test vehicles statewide or do away with the program. He also supported the concept of private enterprise to do the job "cheaper, faster and quicker."

Summary of Testimony of the Portland Hearing

Harold Coe of Speed's Automotive, Inc. disagreed with the proposed fee increase and suggested instead that the testing be done by private shops as is done in California. He felt the long lines at the DEQ vehicle testing centers were not palatable to the public and in some cases, because of pollution build-up in the car while waiting, caused vehicles to fail the test. He also noted that with only six testing centers in Portland, his customers had to drive as much as 4 miles to be tested, emitting pollution the whole way.

Mr. Coe suggested that if the DEQ is to continue testing vehicles, the test centers should be moved next to Motor Vehicles Division offices to facilitate the registration process.

Si Stanich was opposed to the fee increase. He stated that the Vehicle Inspection Program was ineffective because DEQ does not test Oregon vehicles from outside Portland and vehicles from Washington state that enter the Portland air shed.

Mac Pennington of the Lake Oswego School District said that he had no problem with a fee increase. He expected the fee increase a couple years ago. However, he felt it was unfair to require self inspecting fleets to test every year while private vehicles have only a biennial test.

JC:jc

Speed's Automotive, Inc.

120 S. E. CLAY STREET

238-6211

PORTLAND, OREGON 97214

September 5, 1991

Jerry Coffey
Vehicle Inspection Program
1301 S.W. Morrison St.
Portland, OR 97214

Dear Mr. Coffey,

It's a fact that our air pollutants have come down in the past 15 years, even though our population has increased. The D.E.Q. testing before licensing has been a part of this decrease, but I believe only a small part.

The Federal Emission Control Standards put on the auto manufacturers and the oil companies has been the main help in reduction of pollution.

The high cost of the state D.E.Q. stations is caused by the high labor and labor overhead costs of the employees. One of two things should happen in our testing procedures:

1. Testing should be turned over to certified private testing stations, or repair shops (such as California has).
2. The D.E.Q. should be part of the D.M.V. and located at the D.M.V. offices.

I do not agree with raising the D.E.Q. rate to \$10. There has been no reason published why an increase is needed. Are we trying to make D.E.Q. testing an income source for the state?

Please note my vote to leave the \$7 rate as is.

Sincerely,



Harold Coe
President

SI STANICH
5437 N.E. JESSUP
PORTLAND, OR. 97218

2 SEPT '91

JERRY CORNER
% DEQ. VEHICLE INSPECTION
1301 S.W. MORRISON 97214

RE: INCREASE IN VEHICLE INSPECTION FEES,

DEAR SIR,

I WILL BE OUT OF THE CITY PART OF THE WEEK OF THE 17TH BUT I WISH TO MAKE A COUPLE OF COMMENTS.

1. I AM IN ACCORD W/ PROTECTING OUR AIR SHED, BUT WHY DOES THIS FALL ON THE PEOPLE OF MULTNOMAH COUNTY? WHAT ABOUT CARS FROM OTHER COUNTIES & OTHER STATES (WASHINGTON) & PRIVATE CAR COMMISSIONS ARE THE WORST OFFENDERS OF OUR AIR SHED, BUT WHY DOES I (ONE) SMALL AREA PAY FOR IT - AN EXERCISE IN FUTILITY.
2. BASED ON THIS STATEMENT #1 - I AM DEFINITELY OPPOSED TO THIS WHOLE PROGRAM TO SUPPORT AN AGENCY THAT DOESN'T DO MUCH! THANKS SO



TOWN & COUNTRY CHEVROLET OLDSMOBILE, INC.

2045 HIGHWAY 99 NORTH
P.O. BOX 249
ASHLAND, OREGON 97520
503/482-2411

September 27, 1991

Department of Environmental Quality
Air Quality
Steve Greenwood
811 SW 6th Ave
Portland, OR 97204

Dear Mr. Greenwood,

Recently I had a chance to testify at your Medford meeting concerning the proposed I & M rate increase. I would like to put my views in writing.

All of the new car dealers in the Southern Oregon I & M area are prepared to do I & M tests for the fee of \$7.00, including the current procedure of a no charge policy if the vehicle fails. It is the belief of these dealers that this will benefit both customers and the state for the following reasons.

POLLUTION-More stations would reduce pollution by reducing travel to the North Medford area and thus help the levels Medford has. A side benefit is also the fuel savings to local residents.

TRAFFIC-The Department of Transportation has labeled the North Medford interchange as a traffic problem, yet the I & M station forces more traffic into that intersection by requiring every resident to travel through it at least once every 2 years.

CONVENIENCE-Having several locations would be more convenient for Medford residents and eliminate the travel distance for residents from outside the city of Medford. Providing south valley test stations would also be an advantage in fuel saved. Residents would further benefit by obtaining repair information, if needed, and allow them a choice of options at the time of testing.

COST-The amount saved would be significant. Not only the proposed increase amount would be saved but also the current expenses being used to support the Medford station. According to your people, the average cost of a test is \$11.70. It seems that private industry which already has a use for this equipment can lower the cost. This will allow DEQ to divert the money currently being used to subsidize the Medford station to better benefit the people of Oregon.

TRUST- Recently on a radio talk show the question was raised, "can we trust the dealers?". At my Ashland dealership I have the Allen Scope with the sealed tape drive. I think it addresses the trust factor, should anyone believe that a dealer would alter the results for their benefit on a \$7.00 test. Ethics, and things that are good for our community, are rated high among car dealers and business people, just as they are for the DEQ employees of this state. Yes, we do care.

In conclusion, I ask that you allow independent business people to perform the I & M inspections. I believe that present law allows DEQ to enforce the I & M by the best means possible. This gives two options. The first one is the I & M station and the second is private enterprise. The rule making by DEQ can permit independent stations to operate for the benefit of all residents.

Please consider this request. Negative cash flow items need to be stopped. If private industry can operate at a savings to the public, it should be allowed to. Let's stop waste and if we can, return extra money back to the state. Schools and other agencies are needing money desperately. If this decision is made based on the facts, southern Oregon is the perfect place to begin.

Sincerely Yours,



Alan DeBoer
President

cc: Sen. L. Hannon
Rep. J. Barnes
Rep. E. Johnson
Rep. J. Watt
Southern Oregon Dealers



ENVIRONMENTAL
QUALITY
COMMISSION

REQUEST FOR EQC ACTION

Meeting Date: July 24, 1991
Agenda Item: D-2
Division: Air Quality
Section: Vehicle Inspection

SUBJECT:

Vehicle Inspection Rules - Request for Authorization to Hold a Public Hearing to Amend Inspection Program Fee Structure.

PURPOSE:

To increase Vehicle Inspection fee from \$7 to \$10 per certificate of compliance and to adjust the fleet self inspection certificate cost from \$3 to \$5.

ACTION REQUESTED:

- Authorize Rulemaking Hearing
- Adopt Rules

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

DESCRIPTION OF REQUESTED ACTION:

Authorization is requested to hold a public hearing on a proposed increase in Vehicle Inspection fees. The proposal would increase the fee from the current \$7 per certificate to \$10 per certificate for tests performed by the state. It would also increase the fleet self inspection certificate cost from \$3 to \$5. Both fee increases would become effective on January 1, 1992.

Oregon law requires that fees be assessed to cover the operational cost of the state operated vehicle inspection program. Current fees are inadequate to meet overall operating costs. Additionally, the Department must consider future budgeting to replace existing 16 year old manually operated exhaust gas analyzers. Analyzer upgrading will be necessary to meet future testing requirements, and the federal Environmental Protection Agency has proposed



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



Meeting Date:
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requiring computerized testing equipment for all state inspection programs.

AUTHORITY/NEED FOR ACTION:

- Required by Statute: _____ Attachment _____
 Enactment Date: _____
 Statutory Authority: ORS 468.405 Attachment E
 Pursuant to Rule: _____ Attachment _____
 Pursuant to Federal Law/Rule: _____ Attachment _____

 Other: _____ Attachment _____

 Time Constraints: (explain)

ORS 468.405 gives the Commission the authority to establish regulations setting the motor vehicle inspection program's certification fee up to a \$10 limit.

The Vehicle I/M Program is currently operating at a loss of about \$1 for each certificate issued. Fee income is currently supplemented by drawing down the DEQ Motor Vehicle Pollution Account. It was intended that this account be set aside for funding capital costs of the program. This operational drain on the Motor Vehicle Pollution Account should be halted as soon as possible.

DEVELOPMENTAL BACKGROUND:

- Advisory Committee Report/Recommendation Attachment _____
 Hearing Officer's Report/Recommendations Attachment _____
 Response to Testimony/Comments Attachment _____
 Prior EQC Agenda Items: (list) Attachment _____

 Other Related Reports/Rules/Statutes: Attachment _____

 Supplemental Background Information Attachment _____

The Department operates the Vehicle Inspection Program in the Portland and Medford areas. The program has been operating in the Portland area since 1975. The program began in Medford in 1986. The program is supported only by the certificate fees received and does not receive monies from or contribute to the State General Fund.

The Oregon Legislature, under ORS 468.405, established a provision that "the fee for issuance of certificates shall be established by the Commission in an amount based upon the costs of administering this program." In 1975 the Commission set the fee at \$5 per certificate. In 1981 when

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cost of operation began to exceed operational costs, the Department requested of the Oregon Legislature and was granted statutory authority under ORS 468.405 to increase the fee to a maximum of \$10. On June 5, 1981 the Commission granted a fee increase to \$7 per certificate.

Currently, operational costs are again exceeding fee income. The average cost per vehicle of administering the program during the 1989-91 biennium exceeded the \$7 certificate fee. For the quarter ending June 30, 1991, the cost was approximately \$8 per certificate, meaning the program has a current operational loss of about \$1 per certificate.

The Department included in the budget request to the 1991 Legislature for the Vehicle Inspection Program a budget based upon a \$10 certificate fee. In HB 5536 the Legislature established Vehicle Inspection Program budget limitation for the 1991-93 biennium based on the \$10 fee.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The Department's current proposal would affect citizens within the Metropolitan Service District of the Portland area and within the Air Quality Maintenance Area of the Medford area. Within these areas, a vehicle owner has the responsibility to insure the vehicle passes the I/M test prior to each biennial vehicle registration.

There are approximately 700,000 vehicles registered in the Portland and Medford areas. Citizens in these areas will be charged an additional \$3 per vehicle registration. The increase in fee is expected to prompt some public reaction. Nobody likes a fee increase.

The increase in cost of self testing fleet certificates from \$3 to \$5 per certificate will impact the inspection program's 53 self inspecting fleets. The \$2 fee increase will be added to a total of approximately 10,000 fleet vehicles. It is not expected that this fee increase will present any major hardships for the fleets.

No change in the inspection procedure is intended to accompany the fee increase. There will be no change in the number or location of test facilities, or in the number of vehicle inspection personnel, as a result of the fee increase.

The bulk of the fee increase is intended to simply offset inspection program total operational cost increases. It also will provide for the acquisition of the land on which the

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Beaverton test center is located and to allow for testing of prototype equipment and emergency equipment replacement.

PROGRAM CONSIDERATIONS:

The Vehicle Inspection Program is currently operating at a loss of about \$1 for each certificate issued. This loss is draining the Motor Vehicle Pollution Account funds. During the 1989-91 biennium the funds in this account dropped from \$883,233 at the beginning of the biennium to the current level of \$460,000.

In 1975 when the Vehicle Inspection Program began operations, the certificate fee was \$5. Adjusting this figure for Portland area cost of living increases to 1990, the equivalent current cost would be approximately \$11.90. This means that even with the increase to \$10, the certificate fee increase still would not match cost of living increases.

The 1991-93 inspection program budget includes cost increases for employee salary and facility rents. The 1991-93 budget also includes acquisition of the land at the Inspection Program's Beaverton Test Center and purchase of prototype equipment designed to develop equipment specifications for replacement vehicle exhaust gas analyzers. Purchase of computerized analyzers to replace the Inspection Program's 16 year old equipment is a minimum requirement of EPA's draft "Guidance on Inspection/Maintenance." This EPA document was written in response to the federal 1990 Clean Air Act Amendments. Programs will be required to conform to EPA I/M guidelines within the next three years based upon recent EPA guidance.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

The 1991 Legislature has approved a Vehicle Inspection Program budget that incorporates a \$10 certification fee. The budget covers inflation increases, funding to purchase land upon which the Beaverton inspection center is located, capital expenditures for prototype testing equipment, and reserves for catastrophic equipment failure. If the Commission wishes to select a certificate fee of less than \$10, program cuts will have to be made.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the full increase in certificate fee to \$10. A lesser fee would not meet the requirements for

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a fully balanced budget and still allow the program to provide current levels of service to the public.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rules appear to be consistent with the goals of the strategic plan and with agency and legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

Does the Commission concur with the Department that a fee increase to \$10 is justified? Such fee increase will maintain the inspection program's operations at current levels of service.

INTENDED FOLLOWUP ACTIONS:

- a. Public hearing in both Medford and Portland scheduled for September 20, 1991.
- b. Summarize and evaluate comments.
- c. Prepare a report for presentation to the Commission at the October 25, 1991 meeting.

Approved:

Section:

Division:

Director:

Ron Hauschold
Jim Greenwood
Jul Hansen

Report Prepared By: Jerry Coffey
Phone: 239-8644
Date Prepared: July 9, 1991

JC:jc
VIP\1991\1
(7/9/91)

REQUEST FOR EQC ACTION


Meeting Date: November 7, 1991
Agenda Item: G
Division: HSW
Section: SW Permit/Compl.

SUBJECT:

Waste Tire Program: Proposed Adoption of Rule Amendments to Implement Changes in Waste Tire Statute from 1991 Legislative Session

PURPOSE:

- Removes several categories of persons hauling waste tires from the waste tire carrier permit requirement.
- Requires persons generating waste tires and hauling more than four at a time to keep records of their disposal.
- Allows the Department of Environmental Quality (DEQ, Department) to assist with cleanup of waste tire piles under "negotiated settlements," and amends criteria for financial assistance for tire pile cleanups.
- Changes procedures for a respondent to request a hearing concerning a Department tire pile abatement action.
- Changes priorities in reimbursement program for use of waste tires, giving a preference to in-state users, and incorporates legislatively required sunset date.
- Amends policy on use of Waste Tire Recycling Account to give priority to waste tire cleanups over reimbursements.
- Requires waste tire storage permits for piles of waste tire chips exceeding 200 cubic yards.
- Implements ban on landfill disposal of tires.
- Makes other changes as required by statute, and housekeeping changes in the waste tire storage and carrier permit programs, and in the reimbursement and tire pile cleanup programs.


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

Meeting Date: November 7, 1991
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ACTION REQUESTED:

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

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

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

- Approve Department Recommendation
 - Variance Request Attachment ___
 - Exception to Rule Attachment ___
 - Informational Report Attachment ___
 - Other: (specify) Attachment ___

DESCRIPTION OF REQUESTED ACTION:

The Environmental Quality Commission (EQC, Commission) is requested to adopt proposed rule revisions as summarized above, pertaining to waste tire storage, hauling, cleanup and reimbursement to persons using waste tires.

The Department proposal includes minor changes from the proposed rules submitted for public comment. The most significant of these are discussed in this report.

AUTHORITY/NEED FOR ACTION:

- Required by Statute: 1991 HB2246; 1991 SB66 Attachment E,F
 - Enactment Date: 10/91; 7/1/91
- Statutory Authority: ORS 459.785 Attachment ___
- Pursuant to Rule: _____ Attachment ___
- Pursuant to Federal Law/Rule: _____ Attachment ___

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Other: Attachment
 Time Constraints:

DEVELOPMENTAL BACKGROUND:

<input checked="" type="checkbox"/> Advisory Committee Report/Recommendation	Attachment <input type="checkbox"/>
<input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment <u>G</u>
<input checked="" type="checkbox"/> Response to Testimony/Comments	Attachment <u>H</u>
<input checked="" type="checkbox"/> Prior EQC Agenda Items:	Attachment <input type="checkbox"/>
Agenda Item G, 7/8/88 EQC Meeting - Waste Tire Program Permitting Requirements	
Agenda Item N, 11/4/88 EQC Meeting - Reimbursement for Use and Cleanup of Waste Tires	
Agenda Item K, 4/14/89 EQC Meeting - Amendments to Permitting Requirements for Waste Tire Storage Sites and Waste Tire Carriers	
Agenda Item J, 1/19/90 EQC Meeting - Amendments Regulating Waste Tire Beneficial Use, and Adding Criteria for Financial Assistance	
Agenda Item F, 11/2/90 EQC Meeting - Waste Tire Financial Assistance	
Agenda Item C, 7/24/91 EQC Meeting - Request for hearing authorization for present rulemaking	
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment <input type="checkbox"/>
<input checked="" type="checkbox"/> Supplemental Background Information Land Use Evaluation Statement	Attachment <u>I</u>

Note: This staff report discusses only those changes which the Department made from the draft rule, mainly in response to public comment. For a complete discussion of the issues, please refer to Agenda Item C, 7/24/91 EQC Meeting, Request for Hearing Authorization.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

1. Record-keeping requirement. A comment was received from the public that three years seems excessive to retain records

of disposal of waste tires. The Department agrees, and has reduced the record-keeping to two years, which it feels is not an unreasonable length of time for businesses to keep records of waste tire disposal. In addition, the Department now proposes to exempt from the record-keeping requirement those persons who generate waste tires and transport fewer than five at one time. This will remove most private individuals from having to retain any records of tire disposal. They are still required to properly dispose of the waste tires.

2. Reimbursement.

a. Eligibility. A comment was received concerning eligibility for DEQ's \$.01 per pound reimbursement for use of granulate made from waste tires. There are presently no processors in Oregon that make rubber granules suitable for use in such projects as rubber asphalt paving. The person making the comment suggested that it would be more cost-effective to allow Oregon waste tires to be traded for rubber granules made out-of-state from non-Oregon tires, rather than requiring the granules be made from Oregon tires. The Department does not recommend accepting this suggestion; the statute requires the reimbursement to be for use of waste tires generated in Oregon (ORS 459.770(1)).

b. Deadline. The same person commented that projects in the paving industry may be delayed for reasons beyond the control of the contractors. This comment was in relation to the wording in the draft rule that waste tires must "be used before July 1, 1992" to be eligible for the reimbursement. This date is early in the 1992 summer paving season. The commentator noted that a paving project which had received DEQ approval for the reimbursement might be delayed beyond the June 30 date. 1991 House Bill 2246 terminating the reimbursement reads as follows:

All reimbursements shall cease not later than July 1, 1992, although the commission may provide reimbursements to users of waste tires or chips or similar materials after July 1, 1992, for those purchases made in the calendar quarter immediately preceding July 1, 1992.

The Department has changed the proposed wording to correspond more closely to that in the statute. The proposed rule now specifies that waste tires must "be purchased no later than the calendar quarter immediately preceding July 1, 1992" to be eligible for the reimbursement. This would cover the situation described by the comment, if the user

"purchased" the rubber from waste tires in the quarter before July 1, 1992, even though the project might not be completed by that date.

3. Regulation of waste tire chips. Public comment was received on regulation of waste tires or tire chips to be used as materials in fulfilling an existing contract with a government agency (such as for a highway embankment project using tire chips). The comment suggested that storage of such tires or chips be exempt from regulation as a waste tire storage site. This might facilitate such projects by easing regulation of these materials. The Department partially agrees with this suggestion, and proposes a rule change that would exempt storage of tire chips (but not whole tires) on land owned by a unit of government when that government has an existing contract to use the tire material. The Department believes that the exemption should be restricted to land owned by a unit of government rather than also allowing it on private land. It is not equitable to exempt some private landowners from waste tire storage regulation when others who may wish to operate the same sort of business, but do not have existing government contracts, must obtain permits.

The Waste Tire Advisory Committee (WTAC) considered the draft proposed rule changes at its June 11, 1991 meeting and supported the Department's recommendations. The Department incorporated the WTAC's suggestions into the proposed rule, except for its recommendation dealing with landfilling whole tires. The WTAC had recommended allowing DEQ to make an "emergency" declaration allowing waste tires to be landfilled whole for a limited time, if processors temporarily were not accepting such tires for recycling. Under the new landfill ban (SB 66) such landfilling would not be allowed. At its October 15, 1991 meeting the Solid Waste Advisory Committee considered and had no objections to the Department's proposal concerning the landfill ban on tires.

PROGRAM CONSIDERATIONS:

1. Ban on Landfilling Tires. 1991 Senate Bill 66 bans the disposal of "tires" at a solid waste disposal site. The draft rule proposed to allow the Department to exempt from this ban any tires so heavily contaminated that they cannot be processed for recycling. However in the meantime the Attorney General's Office advised the Department that a contaminated waste tire is still a "tire," and remains subject to the landfill ban. Therefore we have removed that

Meeting Date: November 7, 1991
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exemption from the currently proposed rule. The proposed rule would allow tires chipped to DEQ standards to continue to be landfilled.

SB 66 did not define "tire." The Department proposes to use the definition of "tire" from the waste tire statute (ORS 459.705(11)):

"Tire" means a continuous solid or pneumatic rubber covering encircling the wheel of a vehicle in which a person or property is or may be transported in or drawn by upon a highway.

There has been some confusion about what vehicles may transport persons or property "upon a highway." To remedy this, the Department proposes to adopt a clarification from a rule passed by the Department of Revenue (DOR), which also bases its collection of the \$1 tire fee upon the above statutory definition of "tire." DOR's rule specifies that vehicles not driven on highways are the following: "bulldozers, mobile cranes, road graders, loaders, rotary snow plows, road rollers and road sanders." (OAR 150-459.504(6)) These vehicles have mostly very large tires, which are difficult or impossible to recycle. If they are subject to the landfill ban, illegal disposal problems will occur. Adopting the DOR clarification will allow such tires to be landfilled whole, thus avoiding the illegal disposal problem.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Request adoption of the draft rules as proposed in Attachment A, including record-keeping requirements for persons generating and disposing of five or more waste tires, changes in criteria establishing the amount of money DEQ will contribute to waste tire cleanups, regulation of waste tire chip piles and a landfill ban on waste tires except those exempt in the DOR's clarification of tires on vehicles not driven on highways.
2. Modify draft rule to have landfill ban apply to all whole tires.

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DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission adopt Alternative 1.

The draft rule received the support of the Waste Tire Advisory Committee (except as noted on p. 5 above). In areas where new legislation allows discretion in implementation, such as regulation of tire chips and new record-keeping requirements for persons disposing of waste tires, the Department made changes from the draft rule based on public testimony. Illegal disposal of tires from large vehicles not generally driven on highways will be lessened by exempting such tires from the landfill ban.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Most of the proposed changes are to make the rule conform to changes made by the 1991 Legislature in HB 2246 and SB 66. Other changes have been made to streamline the Department's administrative procedures.

ISSUES FOR COMMISSION TO RESOLVE:

1. Is it appropriate to require waste tire storage permits for waste tire chip piles, basing regulation of the piles on size, and to include tire chips under the Department's waste tire abatement and cleanup authority?
2. Is it appropriate to exclude tires from vehicles not driven on highways from the ban on landfilling "tires"?

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INTENDED FOLLOWUP ACTIONS:


File adopted rules with the Secretary of State's Office.

Notify interested persons summarizing the adopted rule.

Modify program procedures and fact sheets to correspond to the rule changes.


Approved:

Section:



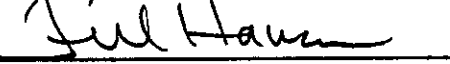
MOR SWPC

Division:



Stephanie Hallock

Director:



Jul Hawn

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Phone: 229-5808

Date Prepared: October 21, 1991

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10/21/91

ATTACHMENT A

Proposed Amendments to OAR 340-64

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
ADMINISTRATIVE RULES
DIVISION 64 - SOLID WASTE MANAGEMENT: WASTE TIRES
10/21/91

Proposed additions to rule are underlined.
Proposed deletions are in brackets [].

Definitions

340-64-010 As used in these rules unless otherwise specified:

(1) "Abatement" -- the processing or removing to an approved storage site of waste tires which are creating a danger or nuisance, following a legal nuisance abatement procedure.

(2) "Beneficial use" -- storage of waste tires in a way that creates an on-site economic benefit, other than from processing or recycling, to the owner of the tires, such as in using the tires for raised-bed planters.

(3) "Buffings" -- a product of mechanically scarifying a tire surface, removing all trace of the surface tread, to prepare the casing to be retreaded.

(4) "Commission" -- the Environmental Quality Commission.

(5) "Common carrier" -- any person who transports persons or property for hire or who publicly purports to be willing to transport persons or property for hire by motor vehicle; or any person who leases, rents, or otherwise provides a motor vehicle to the public and who in connection therewith in the regular course of business provides, procures, or arranges for, directly, indirectly, or by course of dealing, a driver or operator therefor.

(6) "Danger" or "nuisance" -- includes but is not limited to the unpermitted storage of waste tires or waste tire materials, or the storage of waste tires or waste tire materials in a manner that does not comply with a condition of a permittee's waste tire storage permit.

(7) [(6)] "Department" -- the Department of Environmental Quality.

(8) [(7)] "Director" -- the Director of the Department of Environmental Quality.

(9) [(8)] "Dispose" -- to deposit, dump, spill or place any waste tire on any land or into any water as defined by ORS 468.700.

(10) [(9)] "DMV" -- Oregon Department of Motor Vehicles.

(11) [(10)] "End user":

(a) For energy recovery: the person who utilizes the heat content or other forms of energy from the incineration or pyrolysis of waste tires, chips or similar materials.

(b) For other eligible uses of waste tires: the last person who uses the tires, chips, or similar materials to make a product with economic value. If the waste tire is processed by more than one person in becoming a product, the "end user" is the last person to use the tire as a tire, as tire chips, or as similar materials. A person who produces tire chips or

similar materials and gives or sells them to another person to use is not an end user.

(c) For paving projects: either the paving contractor laying the paving, or the person for whom the paving is done, depending on the agreement between the paving contractor and the person for whom the paving is done.

(12) [(11)] "Energy recovery" -- recovery in which all or a part of the waste tire is processed to utilize the heat content, or other forms of energy, of or from the waste tire.

(13) [(12)] "Financial assurance" -- a performance bond, letter of credit, cash deposit, insurance policy or other instrument acceptable to the Department.

(14) [(13)] "Land disposal site" -- a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.

(15) "Negotiated settlement" -- a stipulation, agreed settlement or consent order allowing removal of waste tires.

(16) [(14)] "Nonocean waters" -- fresh waters, tidal and nontidal bays and estuaries as defined in ORS 541.605.

[(15)] "Oversize waste tire" -- a waste tire exceeding a 24.5-inch rim diameter, or which is excluded from Federal excise tax (except a passenger tire).]

(17) [(16)] "Passenger tire" -- a tire with less than an 18-inch rim diameter.

(18) [(17)] "Passenger tire equivalent" -- a measure of mixed passenger and truck tires, where five passenger tires are considered to equal one truck tire.

(19) [(18)] "Person" -- the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

(20) [(19)] "Private carrier" -- any person who receives or generates waste tires and who operates a motor vehicle over the public highways of this state for the purpose of transporting persons or property when the transportation is incidental to a primary business enterprise, other than transportation, in which such person is engaged. Notwithstanding OAR 340-64-010(26)(f), "private carrier" does not include a person whose primary tire business is selling, collecting, sorting or transporting used or waste tires.

(21) [(20)] "PUC" -- the Public Utility Commission of Oregon.

(22) [(21)] "Recycle" or "recycling" -- any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity.

(23) "Retreadable casing" -- a waste tire suitable for retreading.

[(22)] "Retreader" -- a person engaged in the business of recapping tire casings to produce recapped tires for sale to the public.]

(24) [(23)] "Rick" -- to horizontally stack tires securely by overlapping so that the center of a tire fits over the edge of the tire below it.

(25) [(24)] "Store" or "storage" -- [the placing of waste tires in a manner that does not constitute disposal of the waste tires.] to accumulate waste tires above ground, or to own or control property on which there are waste tires above ground. "Storage" includes the beneficial use of waste tires as fences and other uses with similar potential for causing environmental risks. "Storage" does not include [such beneficial uses as]

the use of waste tires as a ballast to maintain covers on agricultural materials or at a construction site or a beneficial use such as planters except when the Department determines such uses create environmental risks.

(26) [(25)] "Tire" -- a continuous solid or pneumatic rubber covering encircling the wheel of a vehicle in which a person or property is transported, or by which they may be drawn, on a highway. "Tire" does not include tires from vehicles not driven on highways, including bulldozers, mobile cranes, road graders, loaders, rotary snow plows, road rollers and road sanders. Except for the purposes of waste tire removal under OAR 340-64-150 through -170, and for the purposes of disposal under OAR 340-64-052, "tire" [This] does not include tires [on] from the following:

(a) A device moved only by human power.

(b) A device used only upon fixed rails or tracks.

(c) A motorcycle.

(d) An all-terrain vehicle, including but not limited to, three-wheel and four-wheel ATVs, dune buggies and other similar vehicles. All-terrain vehicles do not include jeeps, pick-ups and other four-wheel drive vehicles that may be registered, licensed and driven on public roads in Oregon.

(e) A device used only for farming, except a farm truck.

(f) A retreadable casing while under the control of a tire retreader or while being delivered to a tire retreader.

(27) [(26)] "Tire carrier" -- a person who picks up or transports waste tires for the purpose of storage, removal to a processor or disposal.

[This] "Tire carrier" does not include the following:

(a) Solid waste collectors operating under a license or franchise from a local government unit [and who transport fewer than 10 tires at a time].

(b) Persons who transport fewer than five tires [with their own solid waste] for disposal.

(c) Private individuals or private carriers who transport the person's own waste tires to a processor or for proper disposal.

(d) The United States, the State of Oregon, any county, city, town or municipality in this state, or any agency of the United States, the State of Oregon or a county, city, town or municipality of this state.

(28) [(27)] "Tire processor" -- a person engaged in the processing of waste tires.

(29) [(28)] "Tire retailer" -- a person actively engaged in the business of selling new replacement tires at retail, whose local business license or permit (if required) specifically allows such sale. To be "actively" engaged in selling new tires, the person must demonstrate to the Department's satisfaction that new replacement tires have been sold in the preceding calendar quarter.

(30) "Tire retreader" -- a person actively engaged in the business of retreading waste tires by scarifying the surface to remove the old surface tread and attaching a new tread to make a usable tire for sale to the public.

(31) [(29)] "Tire-derived products" -- tire chips or other [usable] materials produced from the physical processing of a waste tire.

(32) [(30)] "Truck tire" -- a tire with a rim diameter of between 18 and 24.5 inches.

(33) [(31)] "Waste tire" -- a tire that is no longer suitable for its original intended purpose because of wear, damage or defect, and is fit only for:

- (a) Remanufacture into something else, including a retreaded [recapped] tire; or
 - (b) Some other use which differs substantially from its original use.
- (34) [(32)] "Waste tires generated in Oregon" -- Oregon is the place at which the tire first becomes a waste tire. A tire casing imported into Oregon for potential retreading, [recapping,] but which proves unusable for that purpose, is not a waste tire generated in Oregon. Examples of waste tires generated in Oregon include but are not limited to:
- (a) Tires accepted by an Oregon tire retailer in exchange for new replacement tires.
 - (b) Tires removed from a junked auto at an auto wrecking yard in Oregon.
- (35) "Wrecking business" -- a business operating according to a certificate issued under ORS 822.110.

Waste Tire Storage Permit Required

340-64-015 (1) [After July 1, 1988, a] A person who stores more than 100 waste tires or over 200 cubic yards of tire-derived products in this state is required to have a waste tire storage permit from the Department. The following are exempt from the permit requirement:

- (a) A tire retailer who stores not more than 1,500 waste tires for each retail business location.
 - (b) A tire retreader who stores not more than 3,000 waste tires [outside] for each individual retread operation so long as the waste tires are of the type the retreader is actively retreading.
 - (c) A wrecking business who stores not more than 1,500 waste tires for each retail business location.
 - (d) Storage of tire-derived products packaged in closed plastic bags.
- (2) The exception allowed to a tire retailer under section (1) of this rule shall not apply unless the tire retailer submits the return required under ORS 459.519 and the return indicates the sale of new tires during the reporting period, so long as such returns are required to be submitted.
- (3) Piles of tire-derived products are not subject to regulation as a waste tire storage site if the site actively consumes the following minimum tons of tire-derived products annually:
- (a) For cement kilns: 1,500 tons.
 - (b) For pulp and paper mills: 1,500 tons.
- (4) Manufacturers must obtain a waste tire storage permit if they are storing the following levels of tire-derived products:
- (a) For manufacturers actively consuming crumb rubber: 400 tons, or over 50 percent of the manufacturer's annual use of such materials.
 - (b) For manufacturers actively consuming other waste tire shreds or pieces: 100 tons or over 50 percent of the manufacturer's annual use of such materials.
- (5) The Department may exempt a site owned by a federal, state or local government unit from the requirement to obtain a waste tire storage permit for tire-derived products if the following conditions are met:
- (a) The government unit wants to store tire-derived products for use

in fulfilling an existing contract, and requests an exemption from the Department for the waste tire storage permit requirement:

(b) The quantity of tire-derived products to be stored does not exceed the estimated quantity specified in the contract plus 10 percent to allow for changes or discrepancies:

(c) The length of time the tire-derived products are to be stored does not exceed six months; and

(c) The Department determines that such storage will not create an environmental risk.

[(2) Piles of tire derived products are not subject to regulation as waste tire storage sites if they have an economic value.]

[(3) If tire derived products have been stored for over six months, the Department shall assume they have no economic value, and the site operator must either:]

[(a) Apply for a waste tire storage site permit and comply with storage standards and other requirements of OAR 340-64-005 through 340-64-045; or]

[(b) Demonstrate to the Department's satisfaction that the tire derived products do have an economic value by presenting receipts, orders, or other documentation acceptable to the Department for the tire derived products.]

(6) [(4)] After July 1, 1988, a permitted solid waste disposal site which stores more than 100 waste tires, is required to have a permit modification addressing the storage of tires from the Department.

(7) [(5)] The Department may issue a waste tire storage permit in two stages to persons required to have such a permit by July 1, 1988. The two stages are a "first-stage" or limited duration permit, and a "second-stage" or regular permit.

(8) [(6)] Owners or operators of existing sites not exempt from the waste tire storage site permit requirement shall apply to the Department by June 1, 1988 for a "first-stage" permit to store waste tires. A person who wants to establish a new waste tire storage site shall apply to the Department at least 90 days before the planned date of facility construction. A person applying for a waste tire storage permit on or after September 1, 1988 shall apply for a "second-stage" or regular permit.

(9) [(7)] A person who is using or wants to use over 100 waste tires for a beneficial use must request the Department to determine whether that use constitutes "storage" pursuant to OAR 340-64-010(25) [(24)], and is thus subject to the waste tire storage site permit requirement. The Department may recommend remedial actions which, if implemented, will eliminate any environmental risk which would otherwise be caused by a beneficial use of waste tires.

(10) [(8)] Use of waste tires which is regulated under ORS 468.750 or ORS 541.605 through 541.695 and for which a permit has been acquired is not subject to additional regulation under OAR 340-64.

(11) [(9)] Failure to conduct storage of waste tires according to the conditions, limitations, or terms of a permit or these rules, or failure to obtain a permit, is a violation of these rules and shall be subject to civil penalties as provided in OAR Chapter 340, Division 12 or to any other enforcement action provided by law. Each day that a violation occurs is a separate violation and may be the subject of separate penalties.

(12) [(10)] After July 1, 1988 no person shall advertise or represent himself/herself as being in the business of accepting waste tires for storage without first obtaining a waste tire storage permit from the Department.

(13) [(11)] Failure to apply for or to obtain a waste tire storage permit, or failure to meet the conditions of such permit constitutes a nuisance.

"Second-Stage" or Regular Permit

340-64-020 (1) An application for a "second-stage" or regular waste tire storage permit shall:

(a) Include such information as shall be required by the Department, including but not limited to:

(A) A description of the need for the waste tire storage site.

(B) The zoning designation of the site, and a written statement of compatibility of the proposed waste tire storage site with the acknowledged local comprehensive plan and zoning requirements from the local government unit(s) having jurisdiction.

(C) A description of the land uses within a one-quarter mile radius of the facility, identifying any buildings and surface waters.

(D) A management program for operation of the site, which includes but is not limited to:

(i) Anticipated maximum number of passenger and/or truck tires and/or tire-derived products to be stored at the site for any given one year period.

(ii) Present and proposed method of disposal, and timetable.

(iii) How the facility will meet the technical tire storage standards in OAR 340-64-035 for both tires and tire-derived products currently stored on the site, and tires and tire-derived products to be accepted.

(iv) How the applicant proposes to control mosquitoes and rodents, considering the likelihood of the site becoming a public nuisance or health hazard, proximity to residential areas, etc.

(E) A proposed contingency plan to minimize damage from fire or other accidental or intentional emergencies at the site. It shall include but not be limited to procedures to be followed by facility personnel, including measures to be taken to minimize the occurrence or spread of fires and explosions.

(F) The following maps:

(i) A site location map showing section, township, range and site boundaries.

(ii) A site layout drawing, showing size and location of all pertinent man-made and natural features of the site (including roads, fire lanes, ditches, berms, waste tire storage areas, structures, wetlands, floodways and surface waters).

(iii) A topographic map using a scale of no less than one inch equals 200 feet, with 40 foot intervals on 7.5 minute series.

(b) Submit proof that the applicant holds financial assurance acceptable to the Department in an amount determined by the Department to be necessary for [waste tire] removal or processing of waste tires and tire-derived products, fire suppression or other measures to protect the environment and the health, safety and welfare, pursuant to OAR 340-64-025 and 340-64-035.

(c) Submit an application fee of \$250 (or for applications for a waste tire storage permit to operate a site where tires will be stored as a

beneficial use, an application fee of \$100), and an annual compliance fee as listed in OAR 340-64-025. Fifty dollars (\$50) of the application fee shall be nonrefundable. The rest of the application fee may be refunded in whole or in part when submitted with an application if either of the following conditions exists:

(A) The Department determines that no permit will be required;

(B) The applicant withdraws the application before the Department has granted or denied the application.

(d) Demonstrate that the applicant has long-term control of the site.

(2) A "second-stage" permit may be issued for up to five years.

"Second-stage" storage permits and combined tire carrier/storage permits shall expire on January 1.

(3) The Department may waive any of the requirements in subsections (1)(a)(C) (land use descriptions), (1)(a)(D) (management program), (1)(a)(E) (contingency plan), (1)(a)(F) (maps), [or] (1)(b) (financial assurance) or (1)(d) (long-term control) of this rule for a waste tire storage site in existence on or before January 1, 1988, if it is determined by the Department that the site is not likely to create a public nuisance, health hazard, air or water pollution or other environmental problem, or if it is scheduled to be cleaned up within six months of issuance of the permit. This waiver shall be considered for storage sites which are no longer receiving additional tires, and are under a closure schedule approved by the Department. The site must still meet operational standards in OAR 340-64-035.

(4) A permittee who wants to renew his/her "second-stage" storage permit or combined tire carrier/storage permit shall apply to the Department for permit renewal at least 90 days before the permit expiration date. The renewal shall include such information as required by the Department. It shall include a permit renewal fee of \$125, or \$50 in the case of a permittee storing tires as a beneficial use, and a written statement of compatibility of the beneficial use with the acknowledged local comprehensive plan and zoning requirements from the local government unit(s) having jurisdiction.

(5) A permittee may request from the Department a permit modification to modify its operations as allowed in an unexpired permit. A permit modification initiated by the permittee shall include a permit modification fee of \$25.

(6) The fee to reinstate a waste tire storage permit or combined tire carrier/storage permit which has been revoked by the Department is \$150. There is no fee to reinstate a waste tire storage permit or combined tire carrier/storage permit which has been suspended by the Department.

Financial Assurance

340-64-022 (1) The Department shall determine for each applicant the amount of financial assurance required under ORS 459.720(c) and OAR 340-64-020 (1)(b). The Department shall base the amount on the estimated cost of cleanup for the maximum number of waste passenger tire equivalents and/or tire-derived products allowed by the permit to be stored at the storage site or the estimated cost of fire suppression. The amount of financial assurance required for permittees storing waste tires as a beneficial use

could be as low as \$0 if the use meets applicable operational and storage standards in OAR 340-64-035, and the Department determines that there will be no need to remove the tires. If the tire-derived products have a positive economic value and are actively being used or sold by the permittee, the Department may reduce or eliminate financial assurance for the tire-derived products.

(2) The Department will accept as financial assurance only those instruments listed in and complying with requirements in OAR 340-61-034(3)(c)(A) through (G) or OAR 340-71-600(5)(a) through (c).

(3) The financial assurance shall be filed with the Department.

(4) The Department shall make any claim on the financial assurance within one year of any notice of proposed cancellation of the financial assurance.

Permittee Obligations

340-64-025 (1) Each person who is required by ORS 459.715 and 459.725, and OAR 340-64-015 and 340-64-055, to obtain a permit shall:

(a) Comply with the provisions of ORS 459.705 to 459.790, these rules and any other pertinent Department requirements.

(b) Inform the Department in writing within 30 days of company changes that affect the permit, such as business name change, change from individual to partnership and change in ownership.

(c) Allow to the Department, after reasonable notice, necessary access to the site and to its records, including those required by other public agencies, in order for the monitoring, inspection and surveillance program developed by the Department to operate.

(2) Each person who is required by ORS 459.715 and OAR 340-64-015 to obtain a permit shall submit to the Department by February 1 of each year an annual compliance fee for the coming calendar year in the amount of \$250, except that the holder of a waste tire storage permit allowing operation of the site as a beneficial use, shall submit an annual compliance fee in the amount of \$50, effective February 1, 1989. The permittee shall submit evidence of required financial assurance when the annual compliance fee is submitted. For the first year's operation, the full annual compliance fee shall apply if the waste tire storage site permit is issued on or before October 1. Any new waste tire storage site issued a permit after October 1 shall not owe an annual compliance fee until February 1 of the following year.

(3) Each waste tire storage site permittee whose site accepts waste tires after the effective date of these rules shall also do the following as a condition to holding the permit:

(a) Maintain records on approximate numbers of waste tires received and shipped, and tire carriers transporting the tires so as to be able to fulfill the reporting requirements in subsection (3)(c) of this rule. The permittee shall issue written receipts upon receiving loads of waste tires. Quantities may be measured by aggregate loads or cubic yards, if the permittee documents the approximate number of tires included in each. These records shall be maintained for a period of three years, and shall be available for inspection by the Department after reasonable notice.

(b) Maintain a record of the name (and the carrier permit number, if applicable) of the tire carriers not exempted by OAR 340-64-055(3) [(4)] who deliver waste tires to the site and ship waste tires from the site, together with the quantity of waste tires shipped with those carriers.

(c) Submit a report containing the following information annually by February 1 of 1990 and each year thereafter:

(A) Number of waste tires received at the site during the year covered by the report;

(B) Number of waste tires shipped from the site during the year covered by the report;

(C) A list (and tire carrier permit number, if applicable) of the tire carriers not exempted by OAR 340-64-055(3) [(4)] delivering waste tires to the site and shipping waste tires from the site.

(D) The number of waste tires and amount of tire-derived products located at the site at the time of the report.

(d) Notify the Department within one month of the vehicle license plate number and name, if possible, of any unpermitted tire carrier (who is not exempt under OAR 340-64-055(3) [(4)]) who delivers waste tires to the site after January 1, 1989.

(e) If required by the Department, prepare for approval by the Department and then implement:

(A) A plan to remove some or all of the waste tires or tire-derived products stored at the site. The plan shall follow standards for site closure pursuant to OAR 340-64-045. The plan may be phased in, with Department approval.

(B) A plan to process some or all of the waste tires stored at the site. The plan shall comply with ORS 459.705 through 459.790 and OAR 340-64-035.

(f) Maintain the financial assurance required under OAR 340-64-020(1)(b) and 340-64-022.

(g) Maintain any other plans and exhibits pertaining to the site and its operation as determined by the Department to be reasonably necessary to protect the public health, welfare or safety or the environment.

[(4) The Department may waive any of the requirements of subsections (3)(a) through (3)(c) (D) of this rule for a waste tire storage site in existence on or before January 1, 1988. This waiver shall be considered for storage sites which are no longer receiving additional tires and are under a closure schedule approved by the Department.]

Department Review of Applications for Waste Tire Storage Sites

340-64-030 (1) Applications for waste tire storage permits shall be processed in accordance with the Procedures for Issuance, Denial, Modification and Revocation of Permits as set forth in OAR Chapter 340, Division 14, except as otherwise provided in OAR Chapter 340, Division 64.

(2) Applications for permits shall be complete only if they:

(a) Are submitted on forms provided by the Department, accompanied by all required exhibits, and the forms are completed in full and are signed by the applicant and the property owner or person in control of the premises;

(b) Include plans and specifications as required by OAR 340-64-018, and 340-64-020.

(c) Include the appropriate application fee pursuant to OAR 340-64-020(1)(c).

(3) An application may be accepted as complete for processing if all required materials have been received with the exception of the financial assurance required under OAR 340-64-020(1)(b) and 340-64-022, and the written statement of compatibility of the proposed site with the acknowledged local comprehensive plan and zoning requirements from the local government unit(s) having jurisdiction. However, the Department shall not issue a "second-stage" waste tire storage permit unless required financial assurance and land use compatibility have been received.

(4) Following the submittal of a complete waste tire storage permit application, the director shall cause notice to be given in the county where the proposed site is located in a manner reasonably calculated to notify interested and affected persons of the permit application.

(5) The notice shall contain information regarding the location of the site and the type and amount of waste tires or tire-derived products intended for storage at the site. In addition, the notice shall give any person substantially affected by the proposed site an opportunity to comment on the permit application.

(6) The Department may conduct a public hearing in the county where a proposed waste tire storage site is located.

(7) Upon receipt of a completed application, the Department may deny the permit if:

(a) The application contains false information.

(b) The application was wrongfully accepted by the Department.

(c) The proposed waste tire storage site would not comply with these rules or other applicable rules of the Department.

(d) There is no clearly demonstrated need for the proposed new, modified or expanded waste tire storage site.

(e) The proposed waste tire storage site would in the Department's opinion cause environmental, safety or health hazards.

(8) Based on the Department's review of the waste tire storage site application, and any public comments received by the Department, the director shall issue or deny the permit. The director's decision shall be subject to appeal to the Commission and judicial review under ORS 183.310 to 183.550.

Standards for Waste Tire Storage Sites

340-64-035 (1) All permitted waste tire storage sites must comply with the technical and operational standards in this rule.

(2) The holder of a "first-stage" waste tire storage permit shall comply with the technical and operational standards in this part if the site receives any waste tires after the effective date of these rules.

(3) A waste tire storage site shall not be constructed or operated in a wetland, waterway, floodway, 25-year floodplain, or any area where it may be subjected to submersion in water.

(4) Operation. A waste tire storage site shall be operated in compliance with the following standards:

(a) An outdoor waste tire pile shall have no greater than the following maximum dimensions:

- (A) Width: 50 feet.
- (B) Area: 15,000 square feet.
- (C) Height: 6 feet.

(b) A 50-foot fire lane shall be placed around the perimeter of each waste tire pile. Access to the fire lane for emergency vehicles must be unobstructed at all times.

(c) Waste tire piles shall be located at least 60 feet from buildings.

(d) Waste tires to be stored for one month or longer shall be ricked, unless the Department waives this requirement.

(e) The permittee shall operate and maintain the site in a manner which controls mosquitoes and rodents if the site is likely to become a public nuisance or health hazard and is close to residential areas.

(f) A sign shall be posted at the entrance of the storage site stating operating hours, cost of disposal and site rules if the site receives tires from persons other than the operator of the site.

(g) No operations involving the use of open flames or blow torches shall be conducted within 25 feet of a waste tire pile.

(h) An approach and access road to the waste tire storage site shall be maintained passable for any vehicle at all times. Access to the site shall be controlled through the use of fences, gates, or other means of controlling access.

(i) If required by the Department, the site shall be screened from public view.

(j) An attendant shall be present at all times the waste tire storage site is open for business, if the site receives tires from persons other than the operator of the site.

(k) The site shall be bermed or given other adequate protection if necessary to keep any liquid runoff from potential tire fires from entering waterways.

(L) If pyrolytic oil is released at the waste tire storage site, the permittee shall remove contaminated soil in accordance with applicable rules governing the removal, transportation and disposal of the material.

(m) In the case of tire fences, the following are also required:

(A) For vector control:

(i) Drilling a two-inch hole into each quadrant of the downside of each tire used in the fence; or

(ii) Filling each individual waste tire with dirt; or

(iii) Another treatment approved in advance by the Department.

(B) A 20-foot fire lane shall be maintained on land under control of the permittee along the entire length of the tire fence. Access to the fire lane for emergency vehicles must be unobstructed and clear of vegetation at all times.

(C) Weeds shall not be allowed to grow on or over the tire fence.

(D) A tire fence shall not be constructed wider than one tire width.

(n) In the case of waste tires stored for seasonal agricultural uses: during the annual period(s) during which the waste tires are not being used for the beneficial use, they shall be stored to meet the standards in this rule.

(5) Operational standards for storage of tire-derived products: the following standards must be met:

(a) The product pile shall have no greater than the following maximum dimensions:

(A) Width: 40 yards.

(B) Volume: 6400 cubic yards.

(C) Height: 4 yards.

(b) A maximum of four piles of product are allowed on a site.

(c) Compliance with waste tire storage standards under sections (3).

(4)(b), (c), and (e) through (L).

(6) [(5)] The Department may impose additional storage requirements for an individual site which are reasonably necessary to protect the public health or the environment.

(7) [(6)] Waste tires stored indoors shall be stored under conditions that meet those in The Standard for Storage of Rubber Tires, NFPA 231D-1986 edition, adopted by the National Fire Protection Association, San Diego, California.

(8) [(7)] The Department may approve exceptions to the preceding technical and operational standards for a company processing waste tires and/or storing tire-derived products if:

(a) The average time of storage for a waste tire and/or tire-derived products on that site is one month or less; and

(b) The Department and the local fire authority are satisfied that the permittee has sufficient fire suppression equipment and/or materials on site to extinguish any potential tire and tire chip fire within an acceptable length of time.

[(8) Tire-derived products subject to regulation under OAR 340-64-015 (3) shall be subject to standards in this rule except that piles of such products may be up to 12 feet high if approved by local fire officials.]

(9) [A permittee may petition t] The director may [to] grant a variance to the technical and operational standards in this rule or the requirements of subsections (3)(a) through (3)(c)(D) of OAR 340-64-025 for a waste tire storage site in existence on or before January 1, 1988, or for a waste tire storage site using tires for a beneficial use. [The director may by specific written variance waive] This may include certain requirements of these technical and operational standards when circumstances of the waste tire storage site location, operating procedures, and fire control protection indicate that the purpose and intent of these rules can be achieved without strict adherence to all of the requirements, or when the site is not receiving additional tires and is under a closure schedule approved by the Department.

Disposal of Tires at Solid Waste Disposal Sites: Ban; Chipping Standards
[for Solid Waste Disposal Sites]

340-64-052 (1) After July 1, [1989,] 1991, no person shall dispose of tires and no operator of [a person may not dispose of tires in] a land disposal site permitted by the Department shall knowingly accept tires for disposal unless:

(a) The [waste] tires are processed in accordance with the standards in section (2) of this rule; [or] and

[(b) The waste tires were located for disposal at that site before July 1, 1989; or]

[(c) The Commission finds that the reuse or recycling of waste tires is not economically feasible pursuant to OAR 340-64-053; or]

[(d) The waste tires are received from a person exempt from the requirement to obtain a waste tire carrier permit under OAR 340-64-055 (4) (a) and (b); and]

(b) [(e)] Such disposal is not prohibited by the land disposal site's solid waste permit.

(2) To be landfilled under subsection (1)(a) of this rule, waste tires must be processed to meet the following criteria:

(a) The volume of 100 unprepared randomly selected whole tires in one continuous test period must be reduced by at least 65 percent of the original volume. No single void space greater than 125 cubic inches may remain in the randomly placed processed tires; or

(b) The tires shall be reduced to an average chip size of no greater than 64 square inches in any randomly selected sample of 10 tires or more. No more than 40 percent of the chips may exceed 64 square inches.

(3) The test to comply with (2)(a) shall be as follows:

(a) Unprocessed whole tire volume shall be calculated by randomly placing the 100 unprepared randomly selected whole tires in a rectangular container and multiplying the depth of unprocessed tires by the bottom area of the container;

(b) Processed tire volume shall be determined by randomly placing the processed tire test quantity in a rectangular container and leveling the surface. It shall be calculated by multiplying the depth of processed tires by the bottom area of the container.

[Economic Feasibility of Reuse or Recycling Waste Tires]

[340-64-053 (1) Reuse or recycling of oversize waste tires and solid rubber tires is not economically feasible, and they are thus exempt from the chipping requirement under OAR 340-64-052 (2).]

[(2) The standard for "economic feasibility" of tire reuse or recycling shall be based on the following:]

[(a) The Department shall conduct a survey at least once every biennium of the charges for accepting waste passenger and truck tires at each permitted land disposal site in the state.]

[(b) The Department shall use the survey results to determine the mean and modal charges for passenger and truck tire disposal in the state.]

[(c) Either the mean or the modal charge, whichever is greater, shall be used as the base for the standard.]

[(d) The standard for passenger tires shall be the base plus ten percent.]

[(e) The standard for truck tires shall be the base plus 25 percent.]

[(3) Reuse or recycling of a waste tire shall be deemed economically

feasible if the cost to reuse or recycle the tire is not more than the standard.]

[(4) If the charge for waste tire disposal at the local land disposal site is more than the standard:]

[(a) The local per tire disposal charge shall be the standard used to determine whether the cost of reuse or recycling is economically feasible; and]

[(b) Reuse or recycling shall be deemed economically feasible if the cost to reuse or recycle the passenger or truck tire is equal to or less than the charge for tire disposal at the local land disposal site.]

[(5) The director shall determine whether it is economically feasible to reuse or recycle waste tires in the service area of a land disposal site permittee.]

[(6) Only a land disposal site permittee may apply to the director to make that determination. Such application may be made after the effective date of this rule. Application shall be made on a form provided by the Department.]

[(7) An applicant shall submit written documentation such as bids from contractors of the cost of at least two of the best available options to reuse or recycle waste tires in quantities which could reasonably be expected to be generated in the applicant's service area. Cost shall be determined for waste tires collected at the applicant's land disposal site. The applicant may also submit documentation for costs of reuse or recycling from one or more other locations within its service area where quantities of waste tires are generated.]

[(8) Reuse or recycling options whose costs should be considered include transporting the waste tires to:]

[(a) The nearest permitted waste tire storage site accepting waste tires.]

[(b) A waste tire processing site.]

[(9) If the Department knows of a reasonable alternative for reuse or recycling of waste tires that the applicant did not consider, it may require the applicant to document costs of that option.]

[(10) The Department may require any additional information necessary to act upon the application.]

[(11) If the Department requires additional information, the application shall not be considered complete until such information is received.]

[(12) The director shall approve or deny a complete application within 90 days of its receipt.]

[(13) Application for this exemption shall not be made more often than once a year.]

[(14) The Department may review biennially whether any exemption granted under this part should continue in force.]

Waste Tire Carrier Permit Required

340-64-055 (1) After January 1, 1989, any person engaged in picking up, collecting or transporting waste tires for the purpose of storage, processing or disposal is required to obtain a waste tire carrier permit from the Department.

(2) After January 1, 1989, no person shall collect or haul waste tires or advertise or represent himself/herself as being in the business of a waste tire carrier without first obtaining a waste tire carrier permit from the Department.

[(3) After January 1, 1989, any person who gives, contracts or arranges with another person to collect or transport waste tires for storage or disposal shall only deal with a person holding a waste tire carrier permit from the Department, unless the person is exempted by subsection (4)(a) or (b) of this rule.]

(3) [(4)] The following persons are exempt from the requirement to obtain a waste tire carrier permit:

(a) Solid waste collectors operating under a license or franchise from any local government unit [and who transport fewer than 10 tires at any one time].

(b) A private individual transporting the individual's own waste tires to a processor or for proper disposal.

(c) A private carrier transporting the carrier's own waste tires to a processor or for proper disposal.

[(b)] (d) A person [Persons] transporting fewer than five tires to a processor or for proper disposal.

(e) [(c)] Persons transporting tire-derived products to a market.

(f) Persons transporting tire chips that meet the chipping standards in OAR 340-64-052.

[(d) Persons who use company-owned vehicles to transport tire casings for the purposes of retreading between company-owned or company-franchised retail tire outlets and company-owned or company-franchised retread facilities while transporting casings between those retail tire outlets and those retread facilities.]

[(e) Tire retailers or retreaders who transport used tires between their retail tire outlet or retread operation and their customers, after taking them from customers in exchange for other tires, or for repair or retreading while transporting used tires between their retail tire outlet or retread operation and their customers.]

(g) [(f)] The United States, the State of Oregon, any county, city, town or municipality in this state or any agency of the United States, the State of Oregon or a county, city, town or municipality of this state [, or any department of any of them].

[(5) Persons exempt from the waste tire carrier permit requirement under subsection (4)(d) of this rule shall nevertheless notify the Department of this practice on a form provided by the Department.]

(4) [(6)] A combined tire carrier/storage permit may be applied for by tire carriers:

(a) Who are subject to the carrier permit requirement; and

(b) Whose business includes or wants to establish a site which is subject to the waste tire storage permit requirement.

(5) [(7)] The Department shall supply a combined tire carrier/storage permit application to such persons. Persons applying for the combined tire carrier/storage permit shall comply with all other regulations concerning storage sites and tire carriers established in these rules.

(6) [(8)] Persons who transport waste tires for the purpose of storage, processing or disposal must apply to the Department for a waste tire carrier permit within 90 days of the effective date of this rule. Persons who want to begin transporting waste tires for the purpose of

storage, processing or disposal must apply to the Department for a waste tire carrier permit at least 90 days before beginning to transport the tires.

(7) [(9)] Applications shall be made on a form provided by the Department. The application shall include such information as required by the Department. It shall include but not be limited to:

(a) A description, license number and registered vehicle owner for each truck used for transporting waste tires.

(b) The PUC authority number under which each truck is registered.

(c) Where the waste tires will be stored, processed or disposed of.

(d) Any additional information required by the Department.

(8) [(10)] A corporation which has more than one separate business location may submit one waste tire carrier permit application which includes all the locations. All the information required in section (7) [(9)] of this rule shall be supplied by location for each individual location. The corporation shall be responsible for amending the corporate application whenever any of the required information changes at any of the covered locations.

(9) [(11)] An application for a tire carrier permit shall include a \$25 non-refundable application fee and an annual compliance fee as listed in OAR 340-64-063.

(10) [(12)] An application for a combined tire carrier/storage permit shall include a \$250 application fee, \$50 of which shall be nonrefundable, and an annual compliance fee as listed in OAR 340-64-063. The rest of the application fee may be refunded in whole or in part when submitted with an application if either of the following conditions exists:

(a) The Department determines that no permit will be required;

(b) The applicant withdraws the application before the Department has granted or denied the application.

(11) [(13)] The application for a waste tire carrier permit shall also include a bond in the sum of \$5,000 in favor of the State of Oregon. In lieu of the bond, the applicant may submit financial assurance acceptable to the Department. The Department will accept as financial assurance only those instruments listed in and complying with requirements in OAR 340-61-034(3)(c)(A) through (G) and OAR 340-71-600(5)(a) through (c).

(12) [(14)] The bond or other financial assurance shall be filed with the Department and shall provide that:

(a) In performing services as a waste tire carrier, the applicant shall comply with the provisions of ORS 459.705 through 459.790 and of this rule; and

(b) Any person injured by the failure of the applicant to comply with the provisions of ORS 459.705 through 459.790 or this rule shall have a right of action on the bond or other financial assurance in the name of the person. Such right of action shall be made to the principal or the surety company within two years after the injury.

(13) [(15)] Any deposit of cash, certificate of deposit, letter of credit, or negotiable securities submitted under sections (11) and (12) [(13) and (14)] of this rule shall remain in effect for not less than two years following termination of the waste tire carrier permit.

(14) [(16)] A waste tire carrier permit or combined tire carrier/storage permit shall be valid for up to three years.

(15) [(17)] Waste tire carrier permits shall expire on March 1. Waste tire carrier permittees who want to renew their permit must apply to the

Department for permit renewal by January [February] 1 of the year the permit expires. The application for renewal shall include all information required by the Department, and a permit renewal fee.

(16) [(18)] A waste tire carrier permittee may add another vehicle to its permitted waste tire carrier fleet if it does the following before using the vehicle to transport waste tires:

(a) Submits to the Department:

(A) The information required in OAR 340-64-055 (7) [(9)]; and

(B) A fee of \$25 for each vehicle added.

(b) Displays on each additional vehicle decals from the Department pursuant to OAR 340-64-063 (1)(b).

(17) [(19)] A waste tire carrier permittee may lease additional vehicles to use under its waste tire carrier permit without adding that vehicle to its fleet pursuant to section (16) [(18)] of this rule, under the following conditions:

(a) The vehicle may not transport waste tires when under lease for a period of time exceeding 30 days ("short-term leased vehicles"). If the lease is for a longer period of time, the vehicle must be added to the permittee's permanent fleet pursuant to section (16) [(18)] of this rule.

(b) The permittee must give previous written notice to the Department that it will use short-term leased vehicles.

(c) The permittee shall pay a \$25 annual compliance fee in advance to allow use of short-term leased vehicles, in addition to any other fees required by OAR 340-64-055 (9), (10) and (16), [(11), (12) and (18),] and 340-64-063 [(7) and] (9)[.] and (10).

(d) Every permittee shall keep a daily record of all vehicles leased on short term, with beginning and ending dates used, license numbers, PUC authority, PUC temporary pass or PUC plate/marker, and person from whom the vehicles were leased. The daily record must be kept current at all times, subject to verification by the Department. The daily record shall be maintained at the principal Oregon office of the permittee. The daily record shall be submitted to the Department each year as part of the permittee's annual report required by OAR 340-64-063 (8)[(5)].

(e) The permittee's bond or other financial assurance required under OAR 340-64-055 (11) [(13)] must provide that, in performing services as a waste tire carrier, the operator of a vehicle leased by the permittee shall comply with the provisions of ORS 459.705 through 459.790 and of this rule.

(f) Each vehicle being used on a short-term lease basis by a permittee must carry a properly filled out cab card provided by the Department in the power vehicle at all times when hauling waste tires. Information on the cab card shall include the starting and ending dates of the short-term lease.

(g) [(f)] The permittee is responsible for ensuring that a leased vehicle complies with OAR 340-64-055 through 340-64-063, except that the leased vehicle does not have to obtain a separate waste tire carrier permit pursuant to OAR 340-64-055 (1) while operating under lease to the permittee.

(18) [(20)] A holder of a combined tire carrier/storage permit may purchase special block passes from the Department. A person located outside of Oregon who is a holder of a waste tire carrier permit issued by the Department may also purchase special block passes from the Department if he or she also holds a valid permit allowing storage of waste tires issued by the responsible state or local agency of that state, and if such permit is deemed acceptable by the Department. The block passes will allow the permittee to use a common carrier [or private carrier] which does not have a

waste tire carrier permit. Use of a block pass will allow the unpermitted common carrier [or private carrier] to haul waste tires under the permittee's waste tire carrier permit.

(a) Special block passes shall be available in sets of at least five, for a fee of \$5 per block pass. Only a holder of a combined tire carrier/storage permit may purchase block passes. Any unused block passes shall be returned to the Department when the permittee's waste tire permit expires or is revoked.

(b) The permittee is responsible for ensuring that a common carrier [or private carrier] operating under a block pass from the permittee complies with OAR 340-64-055 through 340-64-063, except that the common carrier [or private carrier] does not have to obtain a separate waste tire carrier permit pursuant to OAR 340-64-055(1) while operating under the permittee's block pass.

(c) A block pass may be valid for a maximum of ten days and may only be used to haul waste tires between the origin(s) and destination(s) listed on the block pass.

(d) A separate block pass shall be used for each trip hauling waste tires made by the unpermitted common carrier [or private carrier] under the permittee's waste tire permit. (A "trip" begins when waste tires are picked up at an origin, and ends when they are delivered to a proper disposal site(s) pursuant to OAR 340-64-063(4).)

(e) The permittee shall fill in all information required on the block pass, including name of the common carrier [or private carrier], license number, PUC authority if applicable, PUC temporary pass or PUC plate/marker if applicable, beginning and ending dates of the trip, address(es) of where the waste tires are to be picked up and where they are to be delivered, and approximate numbers of waste tires to be transported.

(f) Each block pass shall be in triplicate. The permittee shall send the original to the Department within five days of the pass's beginning date, one copy to the common carrier [or private carrier] which shall keep it in the cab during the trip, and shall keep one copy.

(g) The permittee shall be responsible for ensuring that any common carrier [or private carrier] hauling waste tires under the permittee's waste tire permit has a properly completed block pass.

(h) While transporting waste tires, the common carrier [or private carrier] shall keep a block pass properly filled out for the current trip in the cab of the vehicle.

(i) An unpermitted common carrier [or private carrier] may operate as a waste tire carrier using a block pass no more than three times in any calendar quarter. Before a common carrier [or private carrier] may operate as a waste tire carrier more than three times a quarter, he or she must first apply for and obtain a waste tire carrier permit from the Department.

Waste Tire Carrier Permittee Obligations

340-64-063 (1) Each person required to obtain a waste tire carrier permit shall:

- (a) Comply with OAR 340-64-025(1).
- (b) Display current decals with his or her waste tire carrier

identification number issued by the Department when transporting waste tires. The decals shall be displayed on the sides of the front doors of each truck used to transport tires.

(c) Maintain the financial assurance required under ORS 459.730(2)(d).

(2) When a waste tire carrier permit expires or is revoked or suspended, the former permittee shall immediately remove all waste tire permit decals from its vehicles and remove the permit from display. The permittee shall surrender a revoked or suspended permit, and certify in writing to the Department within fourteen days of revocation or suspension that all Department decals have been removed from all vehicles.

(3) Leasing, loaning or renting of permits or decals is prohibited. No permit holder shall engage in any conduct which falsely tends to create the appearance that services are being furnished by the holder when in fact they are not.

(4) A waste tire carrier shall leave waste tires for storage or disposal [dispose of them] only in a permitted waste tire storage site, at a land disposal site permitted by the Department to store waste tires or with an operating plan allowing the storage of waste tires, or at another site approved by the Department, such as a site authorized to accept waste tires under the laws or regulations of another state.

(5) The Department may allow a permittee to use up to two covered containers to collect waste tires. A maximum of 2,000 tires may be so collected at any one time, and for no longer than 90 days in each container, beginning with the date when a waste tire is first placed in a container. The containers must be located at the permittee's main place of business.

(6) A waste tire carrier permittee shall inform the Department within two weeks of any change in license plate number or ownership (sale) of any vehicle under his or her waste tire carrier permit.

(7) Waste tire carrier permittees shall record and maintain for three years the following information regarding their activities for each month of operation:

(a) The approximate quantity of waste tires collected. Quantities may be measured by aggregate loads or cubic yards, if the carrier documents the approximate number included in each load;

(b) Where or from whom the waste tires were collected, and whether the waste tires are from the cleanup of a waste tire pile;

(c) Where the waste tires were deposited. The waste tire carrier shall keep receipts or other written materials documenting where all tires were stored or disposed of.

(8) Waste tire carrier permittees shall submit to the Department an annual report that summarizes the information collected under section (7) of this rule. The information shall be broken down by quarters. This report shall be submitted to the Department annually as a condition of holding a permit together with the annual compliance fee or permit renewal application.

(9) A holder of a waste tire carrier permit shall pay to the Department a[n] nonrefundable annual fee in the following amount:

Annual compliance fee (per company or corporation)	\$175
Plus annual fee per vehicle used for haul-	25

ing waste tires

[(10) A holder of a waste tire carrier permit who is a private carrier meeting requirements of subsection (10)(b) of this rule shall, instead of the fees under section (9) of this rule, pay to the Department an annual fee in the following amount:]

[(a) Annual compliance fee \$25]

[(b) To qualify for the fee structure under subsection (10)(a) of this rule, a private carrier must:]

[(A) Use a vehicle with a combined weight not exceeding 26,000 lbs;]

[(B) Transport only such waste tires as are generated incidentally to his business; and]

[(C) Use the vehicle to transport the waste tires to a proper disposal site.]

[(c) If a vehicle owned or operated by a private carrier is used for hire in hauling waste tires, the annual fee structure under section (9) of this rule shall apply.]

(10) [(11)] A holder of a combined tire carrier/storage permit shall pay to the Department by February 1 of each year a[n] nonrefundable annual compliance fee for the coming calendar year in the following amount:

Annual compliance fee (per company or corporation) \$250

Plus annual fee per vehicle used for hauling waste tires \$ 25

(11) [(12)] A holder of a waste tire carrier permit shall pay to the Department by February 15 of each year an annual compliance fee for the coming year (March 1 through February 28) as required by sections (9) [through] and (10) [(11)] of this rule. The permittee shall provide evidence of required financial assurance when the annual compliance fee is submitted. For the first year's operation, the full fee(s) shall apply if the carrier permit is issued on or before December 1. Any new waste tire carrier permit issued after December 1 shall not owe an annual compliance fee(s) until March 1.

(12) [(13)] The fee is \$10 for a decal to replace one that was lost or destroyed.

(13) [(14)] The fee for a waste tire carrier permit renewal is \$25.

(14) [(15)] The fee for a permit modification of an unexpired waste tire carrier permit, initiated by the permittee, is \$15. Adding a vehicle to the permittee's fleet pursuant to OAR 340-64-055(16) [(18)], dropping a vehicle from the permitted fleet, or updating a changed license plate number of a vehicle in the permitted fleet does not constitute a permit modification. However, adding a vehicle is subject to a separate fee pursuant to OAR 340-64-055(16) [(18)].

(15) The fee to reinstate a waste tire carrier permit which has been revoked by the Department is \$100. No fee is required to reinstate a waste tire carrier permit which has been suspended by the Department.

(16) A waste tire carrier permittee should check with the PUC and DMV to ensure that he or she complies with all PUC and DMV regulations.

Permit Suspension or Revocation

340-64-075 (1) The Department may suspend, revoke or refuse to renew any permit issued under OAR 340-64-005 through 340-64-070 if it finds:

(a) Failure to comply with any conditions of the permit, provisions of ORS 459.710 through 459.780, the rules of the Commission or an order of the Commission or Department; or

(b) Failure to maintain in effect at all times the required bond or other approved equivalent financial assurance in the amount specified in ORS 459.720 and ORS 459.730 or in the permit; or

(c) The permit was obtained by misrepresentation or failure to disclose fully all relevant facts; or

(d) A significant change in the quantity or character of waste tires received or in the method of waste tire storage site operation; or

(e) Failure to timely remit the annual compliance fee, or nonpayment by drawee of any instrument tendered by applicant as payment of the permit fee.

(2) Suspension or revocation of a permit shall be processed in accordance with the Procedures for Issuance, Denial, Modification and Revocation of Permits as set forth in OAR 340-14-045, except as otherwise provided in OAR Chapter 340, Division 64.

(3) Within 45 days of the date when the Department receives a notice of prospective cancellation of the financial assurance required of a permittee under OAR 340-64-055(11) or OAR 340-64-020, the Department may initiate procedures to suspend or revoke the permit unless notice of reinstatement is received.

(4) If an annual compliance fee as required under OAR 340-64-025 or OAR 340-64-063 is not received by the Department within 45 days of the due date, the Department may initiate procedures to suspend or revoke the permit.

Proper Disposition of Waste Tires and Documentation Required of Generators of Waste Tires

340-64-080 (1) After the effective date of these rules, any person who generates or handles more than 100 waste tires a year shall keep a log of the amount of waste tires he or she generated or handled.

(2) After the effective date of these rules, any person who generates waste tires shall either:

(a) Have the waste tires transported by a waste tire carrier operating under a permit issued by the Department under ORS 459.705 to 459.790; or

(b) Transport the waste tires generated by the person to a waste tire storage site operating under a permit issued by the Department or to another site authorized by the Department.

(c) Transport any waste tires which are also retreadable casings to a tire retreader for the purposes of retreading.

(3) After the effective date of these rules, any person who generates and transports five or more waste tires at a time shall maintain for two years a written record, including receipts, bills of lading or other similar documents to establish the disposition of the waste tires. This shall include:

(a) For persons having their waste tires transported by a permitted waste tire carrier: receipts signed by the waste tire carrier showing the name and permit number of the waste tire carrier, the date and number or volume of waste tires hauled. A person using a waste tire carrier must verify that the carrier has a Department-issued waste tire carrier permit; such verification may include noting possession by the waste tire carrier of a valid Department decal, a valid properly filled out cab card, or a valid properly filled out block pass; or the person may call the Department for verification.

(b) For persons hauling their own waste tires: receipts with the date, number or volume of waste tires hauled and place where the waste tires were taken. The receipts shall be signed by an official representative of the location to which the waste tires were taken for storage, processing or disposal.

(4) The written record in section (3) shall reflect the approximate amount of waste tires generated by the person or under that person's control as reflected in the log, when required, kept under section (1) of this rule.

(5) For purposes of this rule, "generation" of waste tires shall include the accumulation of waste tires on property owned or controlled by the person, the presence of which has been documented by a public official.

(6) The information maintained under sections (1), (2) and (3) of this rule shall be made available to the Department upon request of the Department.

Policy on Use of Waste Tire Recycling Account Funds

340-64-090 Waste tires have a resource value to society that is lost if they are landfilled. One goal of the Waste Tire Program is to control the transportation and storage of waste tires so that illegal dumping is eliminated, and the tires do not cause environmental hazards. The major tools for this are the permitting requirements for tire sites and tire carriers, and civil penalties for illegal tire storage/disposal.

Another program goal is to enhance the market for reuse of waste tires so that their value is recovered, and the market helps divert the stream of waste tires from being landfilled. [For this to happen, an economically attractive alternative to landfilling must be in place.] The 1987 Legislature determined that it was appropriate to offer an incentive to enhance this market in the form of [. The major tool for this is] a reimbursement to users of waste tires from the Waste Tire Recycling Account. The 1991 Legislature determined that such a reimbursement will no longer be needed to support the waste tire market after June 30, 1992. However, the Legislature directed that funds should continue to be available to assist with tire pile cleanups. [However, some existing sites will need financial help, or they will never be cleaned up. The Waste Tire Recycling Account also addresses this need, but under limited circumstances. The Department

shall recommend or determine use of available funds in the Waste Tire Recycling Account, based on the following priority order:]

[(1) Reimbursement to people who use waste tires.] Accordingly, The Department shall recommend or determine use of available funds in the Waste Tire Recycling Account based on the following priority order:

(1) [(2)] Cleanup of permitted or non-permitted waste tire storage sites, following criteria established in OAR 340-64-155. Priority shall be given to abating a danger or nuisance created by waste tires, pursuant to OAR 340-64-155.

(2) Reimbursement to persons who use waste tires in Oregon.

(3) Reimbursement to persons who use waste tires outside of Oregon.

Reimbursement for Use of Waste Tires

340-64-100 (1) Funds in the Waste Tire Recycling Account may be used to reimburse persons for the costs of using waste tires or chips or similar materials.

(2) A person may apply to the Department for partial reimbursement from the Account for using waste tires. To be eligible for the reimbursement, the tires must:

(a) Be waste tires generated in Oregon;

(b) Be tire chips or similar materials from waste tires generated in Oregon; [and]

(c) Be used for energy recovery or other appropriate uses as specified in OAR 340-64-110[.]; and

(d) Be purchased no later than the calendar quarter immediately preceding July 1, 1992.

(3) Notwithstanding any other provision of ORS 459.015, for purposes of encouraging the use of waste tires under ORS 459.705 to 459.790, the use of processed, source-separated waste tires having a positive market value as a new product to recover energy shall be considered recycling under ORS 459.015(2)(a)(C).

Application for Reimbursement

340-64-120 (1) Application for reimbursement for use of waste tires shall be made on a form provided by the Department.

(2) An applicant may apply in advance for certification ("advance certification") from the Department that his or her proposed use of waste tires shall be eligible for reimbursement.

(a) Such advance certification may be issued by the Department if the applicant proves to the Department's satisfaction that:

(A) The use being proposed is an eligible use under OAR 340-64-110;

(B) The applicant is an eligible end user under OAR 340-64-010(11).

[(10)];

(C) The applicant will be able to document that the waste tires used were generated in Oregon; and

(D) The applicant will be able to document the number of net pounds of waste tires used.

(b) The applicant must still apply to the Department for reimbursement for waste tires actually used, and document the amount of that use, pursuant to sections (3) and (4) of this rule.

(c) Advance certification issued by the Department to an applicant shall not guarantee that the applicant shall receive any reimbursement funds. The burden of proof shall be on the applicant to document that the use for which reimbursement is requested actually took place, and corresponds to the use described in the advance certification.

(3) An applicant may apply to the Department directly for the reimbursement each quarter without applying for advance certification. The application shall be on a form provided by the Department.

(4) To apply for reimbursement for the use of waste tires an applicant shall:

(a) Apply to the Department no later than thirty (30) days after the end of the quarter in which the waste tires were used.

(b) Unless the applicant holds an advance certification for the use of waste tires for which they are applying, prove to the Department's satisfaction that:

(A) The use being proposed is an eligible use under OAR 340-64-110; and

(B) The applicant is an eligible end user under OAR 340-64-010 (11) (10) and OAR 340-64-115.

(c) Provide documentation acceptable to the Department, such as bills of lading, that the tires, chips or similar materials used were from waste tires generated in Oregon.

(d) Provide documentation acceptable to the Department of the net amount of pounds of waste tires used (including embedded energy from waste tires) in the quantity of product sold, purchased or used. Examples of acceptable documentation are:

(A) For tire-derived fuel: receipts showing tons of tire-derived fuel purchased.

(B) For incineration of whole tires producing process heat, steam or electricity: records showing net tons of rubber burned.

(C) For pyrolysis plants producing electricity or process heat or steam: billings showing sales of kilowatt hours or tons of steam produced by the tire pyrolysis, calculations certified by a professional engineer showing how many net pounds of tires were required to generate that amount of energy, [and] receipts or bills of lading for the number of waste tires actually used to produce the energy[.], and gross pounds of rubber from waste tires fed into the processing machine.

(D) For pyrolysis technologies producing combustible hydrocarbons and other salable products: billings to customers showing amounts of pyrolysis-derived products sold (gallons, pounds, etc.) with calculations certified by a professional engineer showing the number of net pounds of waste tires, including embedded energy, used to produce those products[.]; and gross pounds of rubber from waste tires fed into the processing machine.

(E) For end users of tire strips, chunks, rubber chips, crumbs and the like in the manufacture of another product: billings to purchasers for the

product sold, showing net pounds of rubber used to manufacture the amount of product sold.

(F) For end users of tire chips in rubberized asphalt, or as road bed material and the like: billings or receipts showing the net pounds of rubber used.

(G) For end users of whole tires: documentation of the weight of the tires used, exclusive of any added materials such as ballast or ties.

(e) Submit a notarized affidavit warranting that the information provided in claiming the reimbursement is true and correct to the best of the applicant's knowledge.

(5) The Department may require any other information necessary to determine whether the proposed use is in accordance with Department statutes and rules.

(6) An applicant for a reimbursement for use of waste tires, and the person supplying the waste tires, tire chips or similar materials to the applicant, for which the reimbursement is requested, are subject to audit by the Department (or Secretary of State) and shall allow the Department access to all records during normal business hours for the purpose of determining compliance with this rule.

(7) In order to apply for a reimbursement, an applicant must have used an equivalent of at least 10,000 pounds of waste tires or 500 passenger tires after the effective date of this rule. Waste tires may be used in more than one quarter to reach this threshold amount.

(8) In addition to any other penalty imposed by law, any person who knowingly or intentionally provides false information to the Department in claiming a reimbursement shall be ineligible to receive any reimbursement under OAR 340-64-100 through OAR 340-64-135.

Basis of Reimbursement

340-64-130 (1) In order to be eligible for reimbursement, the use of waste tires must occur after [the effective date of this rule.] November 8, 1988 and the waste tires must be purchased no later than the calendar quarter immediately preceding July 1, 1992.

(2) Any one waste tire shall be subject to only one request for reimbursement.

(3) The amount of the reimbursement shall be based on \$.01 per pound for rubber derived from waste tires which is used by an applicant.

(4) Before June 30, 1991, t [T]he Department may authorize reimbursement funds for demonstration projects at a rate exceeding the above per pound amount if:

(a) The project does not use the waste tires [waste tires are recycled or reused, rather than processed] for energy recovery;

(b) There is no established market in Oregon for the use which is to be demonstrated;

(c) The total funds spent on any given project do not exceed \$100,000 per project;

(d) The project is located in Oregon; [and]

(e) Advance certification for the project is obtained from the Department[.]; and

(f) The project is completed before June 30, 1992.

(5) The amount of rubber used shall be based on sales of product containing the rubber; or if the applicant is an end user who consumes and does not further sell the tires, chips or similar materials, the reimbursement shall be based on net pounds of materials purchased or used.

(6) Notwithstanding (3) above, the amount of reimbursement to an end user for an eligible use of tires shall not exceed the out-of-pocket cost to the end user of using the tires.

Processing and Approval of Applications

340-64-135 (1) An applicant shall submit a complete application for a reimbursement to the Department within 30 days of the end of the quarter in which the waste tires were used. The Department shall act on an application only if it is complete.

(2) If an application is late or incomplete, the Department shall not act on the application.

(3) The applicant may submit additional information required by the Department to complete the application. However, the Department [shall] may choose not to act on such an application until the end of the following quarter.

(4) The Department shall review a complete reimbursement application form for overall eligibility. The Department shall then determine the eligible number of pounds of rubber used.

(5) When the Department has received and reviewed pursuant to section (4) of this rule all completed applications for reimbursement for a quarter, the Department shall calculate the total dollar amount of eligible reimbursements requested at \$.01 per pound of rubber used.

(6) The Department shall determine the amount of available funds in the Waste Tire Recycling Account. [In determining the amount of funds available for the reimbursement in any quarter, the Department shall first deduct the amount of prorated reimbursement from the previous quarter "made whole" under section (8) of this rule.]

(7) If the amount of eligible reimbursements requested exceeds the amount of funds available for reimbursement, the Commission shall prorate the amount of all reimbursements for eligible uses received for that quarter. The time period for reimbursement as specified by the Commission shall be a calendar quarter. The proration shall be done as follows:

(a) First, in-state users [uses which reuse or recycle the waste tires, chips or similar materials] shall receive one hundred percent of the eligible amount requested up to the amount of funds available. Available funds in the Waste Tire Recycling Account shall be reduced by that amount.

(b) Remaining available funds in the Waste Tire Recycling Account shall then be prorated among all eligible out-of-state users [applicants who have used waste tires, chips or similar materials to recover their energy value]. This proration shall be based on an equal reduction per pound of rubber used by all remaining eligible applicants.

(c) If insufficient funds are available to reimburse eligible in-state users, the Commission shall prorate the amount of available funds among the eligible in-state users and not reimburse eligible out-of-state users for waste tires used in that quarter.

(8) When the final amount of reimbursement for all applicants under section (7)(a), [and] (7)(b) and (7)(c) of this rule has been determined, the Department shall make payment in that amount to each applicant.

(9) [The Department shall keep track of the amount by which a proration under section (7)(b) of this rule has reduced an otherwise eligible amount of reimbursement for an applicant. Before making reimbursements for the following quarter, the Department shall first reserve funds from the Waste Tire Recycling Account for applicants to "make whole" any reductions in costs eligible for the reimbursement caused by prorating in the preceding quarter under section (7)(b) of this rule.] Both in-state and out-of-state users may reapply again in the next quarter for reimbursement for the waste tires, chips or similar materials used but not reimbursed during the previous quarter.

(10) Within 30 days of the filing of an application for advance certification, the Department shall request any additional information needed to complete the application. The application is not complete until such additional information requested by the Department has been received.

(11) If the Department determines that an application for advance certification is eligible, it shall within 60 days of receipt of a completed application issue an advance certification.

(12) The Department shall process applications for reimbursement which have "advance certification" before acting on other applications.

(13) To ensure that a use continues to be eligible for the reimbursement, the Department may review the eligibility of an approved advance certification form:

(a) Annually;

(b) After any revision of this rule; or

(c) After a finding of the Commission that a reimbursement is not necessary to promote the use of waste tires.

Use of Waste Tire Site Cleanup Funds

340-64-150 (1) The Department may use cleanup funds in the Waste Tire Recycling Account, subject to the priorities set in 340-64-090, to:

(a) [Partially p] Pay to remove or process waste tires from a permitted waste tire storage site, if the Commission or Director finds that such use is appropriate pursuant to ORS 459.780(2) and OAR 340-64-160.

(b) Pay to remove or process waste tires or waste tire materials from a site pursuant to a signed negotiated settlement entered into by the Department and the applicable persons, pursuant to OAR 340-64-155.

(c) [(b)] Pay for abating a danger or nuisance created by [a] waste tires or other waste tire materials, [pile,] subject to cost recovery by the attorney general pursuant to OAR 340-64-165.

(d) [(c)] Partially reimburse a local, state or federal government unit for the cost it incurred in abating a waste tire danger or nuisance. The Department may reimburse from 90 to 99 percent of the cleanup cost based on the degree of environmental risk posed by the site, as determined by OAR 340-64-155.

(e) Cleanup funds may also be used under this rule to pay for removal of tires exempt by definition from Department regulation, if such tires are co-mingled with other waste tires.

(2) The Commission authorizes the Director to make a finding of whether use of cleanup funds is appropriate to assist a permittee, pursuant to ORS 459.780(2), provided that the Director's finding is based on criteria in OAR 340-64-150, 340-64-155 and 340-64-160.

(3) Priority in use of cleanup funds shall go to sites ranking higher than other potentially eligible sites in criteria making them an environmental risk, pursuant to OAR 340-64-155.

(4) For the Department to reimburse a local, state or federal government unit for waste tire danger or nuisance abatement, the following must happen:

(a) The Department must determine that the site ranks high in priority criteria among remaining waste tire piles for use of cleanup funds, OAR 340-64-155.

(b) The local, state or federal government unit and the Department must have an agreement on how the waste tires shall be properly disposed of.

(c) The agreement may require the local, state or federal government unit to assist the Department with recovery of costs from the responsible party if the cost of the abatement is \$50,000 or more, or if the local, state or federal government unit wishes to pursue cost recovery from an abatement regardless of the cost.

(5) The Department may condition use of Waste Tire Recycling Account funds on use of a contractor who has a performance record free of significant violations of waste tire storage and carrier rules and statutes for the three years prior to a subject cleanup.

Criteria for Use of Funds to Clean Up Permitted Waste Tire Sites or Conclude Negotiated Settlements for Cleanups

340-64-155 (1) The Department shall establish an environmental ranking for waste tire piles of permittees requesting cleanup funds or of applicable parties requesting a negotiated settlement for cleanup, based on potential degree of environmental risk created by the tire pile. Sites with a higher ranking will in general be cleaned up before lower ranked sites. The following special circumstances shall serve as criteria in determining the degree of environmental risk. The criteria, listed in priority order, include but are not limited to:

(a) Susceptibility of the tire pile to fire. In this, the Department shall consider:

(A) The characteristics of the pile that might make it susceptible to fire, such as how the tires are stored (height and bulk of piles), the absence of fire lanes, lack of emergency equipment, presence of easily combustible materials, and lack of site access control;

(B) How a fire would impact the local air quality; and

(C) How close the pile is to natural resources or property owned by third persons that would be affected by a fire at the tire pile.

(b) Other characteristics of the site contributing to environmental risk, including susceptibility to mosquito infestation.

(c) Other special conditions which justify immediate cleanup of the site.

(d) A local fire district or a local government deems the site to be a danger or nuisance, or an environmental concern that warrants immediate removal of all waste tires.

(2) In determining the degree of environmental risk involved in the two criteria above, the Department shall consider:

(a) Size of the tire pile (number of waste tires).

(b) How close the tire pile is to population centers. The Department shall especially consider the population density within five miles of the pile, and location of any particularly susceptible populations such as hospitals.

(3) In the case of a waste tire storage permittee which is also a local government:

(a) The following special circumstances may also be considered by the Department in determining whether financial assistance to remove waste tires is appropriate:

(A) The tire pile was in existence before January 1, 1988.

(B) The waste tires were collected from the public, and the local government did not charge a fee to collect the tires for disposal.

(C) The pile consists of at least 1,000 waste tires.

(b) If all the above conditions are present, the Department may assist the local government with up to 80 percent of the net cost of tire removal, based on an index. The index will be determined by dividing the local government's population by the number of waste tires at the site. The percentage of cleanup cost which could be covered by financial assistance is as follows:

Table 1: Financial Assistance to Local Governments

Index	% Financial Assistance
Less than 1.0	80%
1.0 - 9.9	70%
10.0 - 99.9	60%
100.0 - 499.9	50%
Greater than 500	25%

(c) If a local government is out of compliance with its waste tire storage permit, the percentage of financial assistance from Table 1 may be reduced by 10 percentage points.

(4) For waste tire pile cleanups initiated after the effective date of this rule, in determining the amount of financial assistance to a permittee who is not a local government, or the share of the applicable parties' costs under a negotiated settlement, the Department may use the following criteria:

(a) If the waste tire pile contains fewer than 1,000 passenger tire equivalents: the Department may pay 100% of the cost.

(b) If the waste tire pile contains from 1,000 to 100,000 passenger tire equivalents: the Department may pay 90% of the cost if the permittee or applicable party is a private individual or partnership; the Department may pay 80% of the cost for a corporation.

(c) If the waste tire pile contains more than 100,000 passenger tire equivalents: the Department will perform an analysis of the financial situation of the person. The person will be subject to a "spend-down" contribution to the cost of the cleanup based on the following:

(A) For individuals and partnerships:

(i) Income spend-down: the amount of the person's average gross income for the three preceding years less \$32,000 must be contributed to the cost of the cleanup; and

(ii) Asset spend-down: the amount of the person's net assets (excluding one automobile and homestead, and, for businesses, excluding building, equipment and inventory) less \$20,000 must be contributed to the cost of the cleanup.

(iii) However, the total spend-down requirement shall not exceed half of the person's average gross annual income for the preceding three years.

(B) For corporations:

(i) Income spend-down: the average gross household income for the three preceding years of each of the corporate officers who are also corporate stockholders, less \$32,000 for each officer, must be contributed to the cost of the cleanup;

(ii) Asset spend-down: the amount of the corporation's net assets (excluding building, equipment and inventory) less \$20,000 must be contributed to the cost of the cleanup; and

(iii) The Department's contribution to the cost of a cleanup for a corporation shall not exceed 80%.

(d) If a permittee or applicable party (other than a corporation) believes that the contribution required by the criteria in subsection (4)(b) above would cause him or her financial hardship, he or she may request that the Department perform a financial analysis. After the analysis, the Department may reduce the required contribution as follows:

(A) The person's contribution may be limited to 50% of his or her average gross annual income for the preceding three years; or

(B) If the person's combined average income for the preceding three years and current net assets (excluding one automobile and homestead, and, for businesses, excluding building, equipment and inventory) are less than \$32,000, the person's cost share may be reduced to \$0.

(e) In order for the Department to complete any financial analysis under subsections (c) or (d) of this section, the person must submit state and federal tax returns for the past three years, a business statement of net worth, and similar materials. If the person is a business, the income and net worth of other business enterprises in which the principals of the person's business have a legal interest must also be submitted.

(5) The criteria in section (4) of this rule may not be applied retroactively to waste tire pile cleanups completed before the effective date of the rule.

(6) The criteria in section (4) of this rule may be applied to the cleanup of only those waste tire piles that existed before January 1, 1988, unless the Department determines that special circumstances exist which justify an exception.

(7) The director retains the discretion to depart from the criteria in subsections 4(b) and 4(c) of this rule in extraordinary circumstances.

[(4) Financial hardship on the part of the permittee shall be an additional criterion in the Department's determination of the amount of cleanup funds appropriate to be spent on a site. Financial hardship means that strict compliance with OAR 340-64-005 through 340-64-045 would result in substantial curtailment or closing of the permittee's business or operation, or the bankruptcy of the permittee. The burden of proof of such financial hardship is on the permittee. In interpreting when "financial hardship" may result, the Department may use the following as guidelines:]

[(a) In the case of a permittee who is not a corporation or a local government, the cost of cleaning up the tires:]

[(A) Would cause the permittee's annual gross household income to fall below the state median income as determined by the U.S. Department of Housing and Urban Development; and/or]

[(B) Would reduce the permittee's net assets (excluding one automobile and homestead) to below \$20,000.]

[(b) In the case of a permittee which is a corporation, the cost of complying with the tire removal schedule required by the Department:]

[(A) Would cause the annual gross household income of each of the corporate officers who are also corporate stockholders to fall below the state median income as determined by the U.S. Department of Housing and Urban Development; and/or]

[(B) Would reduce the net assets (excluding basic assets of building, equipment and inventory) of the corporation to below \$20,000; and]

[(C) Would, as certified in a statement from the corporation's accountant or attorney, cause substantial curtailment or closing of the corporation, or bankruptcy.]

[(5) The Department may assist a permittee with the cost of tire removal to the following extent:]

[(a) For a permittee whose income and/or assets are above the thresholds in section (4) of this rule: the permittee is required to contribute its own funds to the cost of tire removal up to the point where "financial hardship," as specified in section (4), would ensue. The Department may pay the remaining cost of the cleanup up to a maximum of 90 percent (for individuals) or 80 percent (for corporations) of the total cost of the cleanup.]

[(b) For a permittee whose income and assets fall below the thresholds in section (4) of this rule, the Department may pay up to the following percentage of the cost of cleanup:]

[(A) For an individual or a partnership: up to 90 percent of the cost (plus any cost of waste tire storage permit fees paid by the permittee);]

[(B) For a corporation: up to 80 percent of the cost.]

[(6) The Department may reduce to \$1,500 the permittee's required contribution to the cleanup cost in the case of a permittee whose net equity in assets exempt under section (4) of this rule is less than \$50,000, or who is over 65 years of age and whose net exempt assets are less than \$100,000.]

(8) [(7)] A permittee or applicable party may receive financial assistance or conclude a negotiated settlement with the Department for no more than one complete waste tire removal or processing job.

(9) [(8)] The Department may advance funds for up to 100 percent of the cost of the [cleanup of] removal or processing of waste tires or waste tire materials from a permitted waste tire site, if:

(a) The permittee demonstrates that it cannot pay its share of the cleanup cost, as calculated according to section (4) of this rule, at the time the cleanup is completed; and

(b) The permittee signs an agreement to repay the Department its share of the cleanup costs within a schedule agreeable to the Department, and with such guarantees as the Department deems appropriate.

Procedure for Use of Cleanup Funds for a Permitted Waste Tire Storage Site

340-64-160 (1) The Department may recommend to the Commission or the Director may find that cleanup funds should be made available to [partially] pay for cleanup of a permitted waste tire storage site, if all of the following are met:

(a) The site ranks relatively high in the criteria making it an environmental risk, pursuant to OAR 340-64-155.

(b) The permittee submits to the Department a compliance plan to remove or process the waste tires. The plan shall include:

(A) A detailed description of the permittee's proposed actions, including how the waste tires will be processed or recycled;

(B) A time schedule for the removal and or processing, including interim dates by when part of the tires will be removed or processed;

(C) An estimate of the net cost of removing or processing the waste tires using the most cost-effective alternative. This estimate must be documented;

(D) Three bids competitively obtained from responsible contractors. The plan shall also show that the permittee selected the lowest responsible contractor. The contractor shall either be [or subcontract with] a waste tire carrier permitted by the Department, or be capable of processing the waste tires on site, or otherwise demonstrate why no such permit is required for the cleanup.

(c) The plan receives approval from the Department.

(2) As an alternative to subsections (1)(b) and (c) of this rule, the Department may obtain competitive bids to have the waste tires removed or processed. In such case the permittee shall be responsible for paying its share of the costs as determined by the criteria in OAR 340-64-155 to the Department after the waste tires have been removed.

[(2) A permittee claiming financial hardship under OAR 340-64-155(4) must document such claim through submittal of the permittee's state and federal tax returns for the past three years, business statement of net worth, and similar materials. If the permittee is a business, the income and net worth of other business enterprises in which the principals of the permittee's business have a legal interest must also be submitted.]

(3) [(3)] If the Commission or the Director finds that use of cleanup funds is appropriate, the Department shall agree to pay [part of the] Department-approved costs in an amount determined by the criteria in OAR 340-64-155 incurred by the permittee to remove or process the waste tires. Final payment shall be withheld until the Department's final inspection and confirmation that the tires have been removed or processed pursuant to the compliance plan and until the Department receives written documentation satisfactory to the Department that the permittee's share of the costs have been paid.

Use of Cleanup Funds for Abatement by the Department

340-64-165 (1) The Department may use funds in the Account to contract for the abatement of:

(a) A waste tire pile or other waste tire materials for which a person has failed to apply for or obtain a waste tire storage site permit.

(b) A permitted waste tire storage site if the permittee fails to meet the conditions of such permit.

(c) A waste tire pile or other waste tire materials which an owner of real property has failed to remove as required by the Department.

(2) The Department may abate any danger or nuisance created by waste tires or other waste tire materials by removing or processing the tires or waste tire materials. The Department shall follow environmental risk criteria in OAR 340-64-155 in determining which sites shall be subject to abatement.

(3) Before taking any action to abate the danger or nuisance, the Department shall give any persons having the care, custody or control of the waste tires or waste tire materials, or owning the property upon which the tires or waste tire materials are located, notice of the Department's intentions and order the person to abate the danger or nuisance in a manner approved by the Department.

(4) The Department may bring an action or proceeding against the property owner or the person having possession, care, custody or control of the waste tires or other waste tire materials to enforce the abatement order issued under ORS 459.780.

[(4) Any order issued by the Department under this subsection shall be subject to appeal to the Commission and judicial review of a final order under the applicable provisions of ORS 183.310 to 183.550.]

(5) If a person fails to take action as required under [sub]section (3) of this [section] rule within the time specified, the Director may contract to abate the danger or nuisance.

(6) The order issued under [sub]section (3) of this [section] rule may include entering the property where the danger or nuisance is located, taking the tires and waste tire materials into public custody and providing for their processing or removal.

(7) After the abatement, the Department, upon request, may conduct a hearing according to the provisions of ORS 183.310 to 183.550 applicable to contested case hearings to determine the financial responsibility of any party involved. Any person requesting a hearing shall present his or her reasons why he or she should not be considered financially responsible for the costs of the abatement. If a hearing is not requested, the Department may proceed to recover the costs incurred in abating the waste tires or other waste tire materials. This shall include providing an invoice to the responsible party with the Department's costs incurred in the abatement.

(8) [(7)] The Department may [request the attorney general to] bring an action or proceeding to recover any reasonable and necessary expenses incurred by the Department for abatement costs, including administrative and legal expenses. The Department's certification of expenses shall be prima facie evidence that the expenses are reasonable and necessary. [The Department may consider the financial situation of the person in determining the amount of abatement costs to be recovered.] In general, the Department will consider a person or persons who were the subject of an abatement conducted by the Department under this rule to be responsible for repaying the Department for the full costs of the abatement.

Procedure for Use of Cleanup Funds By Negotiated Settlement

340-64-170 (1) Instead of entering an order, the Department may enter into a negotiated settlement with any or all of the applicable parties.

allowing the Department to enter and remove the waste tires or other waste tire materials on the property, if the following criteria are met:

(a) The site ranks high among other remaining sites in the criteria making it an environmental risk, pursuant to OAR 340-64-155.

(b) The applicable parties agree to allow the Department or its contractors to enter the property and remove the waste tires or other waste tire materials.

(c) The applicable parties agree to pay to the Department, if so required by the Department pursuant to criteria in OAR 340-64-155, either of the following:

(A) A specified sum of money representing the Department's costs in removing the waste tires or other waste tire materials from the property; or

(B) If the exact amount of the costs is unknown at the time of the agreement, a percentage of the Department's final costs incurred in removing the waste tires or other waste tire materials from the property.

(2) Upon completion of the waste tire removal, the Department shall send to the applicable parties a certified statement indicating the total cost of removal and the percentage of the total costs the parties are required to pay to the Department, if any.

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ATTACHMENT B

RULEMAKING STATEMENTS

for

Proposed New Rules and Revisions to Existing Rules
Pertaining to Storage, Transportation, Disposal
and Cleanup of Waste Tires,
and Reimbursement for Use of Waste Tires

OAR Chapter 340, Division 64

Pursuant to ORS 183.335, these statements provide information on the intended action to adopt a rule.

STATEMENT OF NEED:

Legal Authority

The 1987 Oregon Legislature passed the Waste Tire Act regulating the disposal, storage and transportation of waste tires, and establishing a fund to clean up waste tire piles and reimburse persons who use waste tires. ORS 459.785 requires the Commission to adopt rules and regulations necessary to carry out the provisions of ORS 459.705 to 459.790. ORS 459.770 requires the Commission to adopt rules to carry out the provision of that section pertaining to reimbursement for use of waste tires. The 1991 Oregon Legislature passed HB 2246 amending and adding new provisions to the Waste Tire Act. The Commission is adopting new rules and revisions to existing rules which are necessary to implement the statutory revisions and carry out the provisions of the Act.

Need for the Rule

Improper storage and disposal of waste tires represents a significant problem throughout the State. The Waste Tire Act established a comprehensive program to regulate disposal, storage and transportation of waste tires. The purpose of the reimbursement is to stimulate the market for waste tires, providing an alternative to landfill disposal. The rule revisions are needed to implement legislative revisions to the program and to make changes the Department has found necessary in administering this program.

Principal Documents Relied Upon

- a. 1991 HB 2246.
- b. Oregon Revised Statutes, Chapter 459.
- c. Oregon Administrative Rules, Chapter 340, Division 64.

ATTACHMENT C

FISCAL AND ECONOMIC IMPACT STATEMENT

I. Introduction

The rule makes several changes required by revisions to the Waste Tire Act in 1991 HB 2246. These include removing certain persons from the requirement to obtain a waste tire carrier permit; establishing a record-keeping requirement for persons generating waste tires; creating a new procedure which the Department may use to provide financial assistance to persons who must clean up waste tire piles and changing existing criteria for financial contributions of responsible parties to waste tire cleanups; changing the appeals procedure for respondents whom the Department is ordering to clean up illegal tire piles; modifying priority uses under the Department's reimbursement to persons who use waste tires for recycling and ending the reimbursement on June 30, 1992; requiring operators of certain waste tire chip piles to obtain waste tire storage permits; changing waste tire storage regulations for tire retreaders and wrecking businesses; and allowing the Department to make an emergency determination allowing temporary disposal of whole waste tires at landfills.

II. General Public

The general public will now be allowed to transport at one time unlimited numbers of their own waste tires for proper disposal. Previous legislation required anyone hauling over four waste tires at one time to obtain a waste tire carrier permit. This meant that persons needing to dispose of even small numbers of waste tires (over four) either had to obtain a permit or use a permitted waste tire carrier. The cost of obtaining a permit was \$50 plus a \$5,000 bond (costing at least \$100/year). The cost of using a permitted waste tire carrier could vary from about \$1 per passenger tire to over \$2.50. "At the gate" tipping fees for waste tires range from \$.50 (processors) to \$2.50 (transfer stations).

Members of the general public having illegal waste tire piles which they are required, by statute, to clean up, would be able to enter into a "negotiated settlement" with the Department. The rules specify the financial contribution required from the responsible party in this situation. Small tire piles (under 1,000 tires) would be cleaned up at no cost to the person. Operators of intermediate size tire piles (1,000 to 100,000 tires)

would be required to contribute 10% of the cost of the cleanup. Operators of large piles (over 100,000 tires) would be subject to a "spend-down" requirement (per criteria in existing rule), based on their income and assets. Cleanup of waste tire piles costs about \$1 per passenger-tire equivalent. Thus the owner of a 500-tire pile cleaned up would receive a \$500 financial benefit. The Department estimates that there are a few hundred tire piles with fewer than 1,000 waste tires. An operator of a 25,000-tire pile would receive a \$22,500 benefit. There are 30 - 40 intermediate size piles. The benefit received by the operator of a "large" pile would depend on the size of the pile and the financial situation of the site operator. There are only one or two "large" piles.

It is likely that funds from the Waste Tire Recycling Account will be exhausted before all potentially eligible tire piles can be cleaned up. The Department's priority is to clean larger sites first.

Members of the public who have or want to create piles of over 200 cubic yards of tire chips will be required to obtain a waste tire storage site. They would be subject to a permit application fee of \$250 and an annual compliance fee of \$250. They would also have to provide financial assurance for the tire chips, amounting to about \$20/ton. If the owner of a tire chip pile did not want to obtain a permit, he or she would be required to remove and properly dispose of the chips, again at a cost of about \$20/ton. To the Department's knowledge, there are fewer than five such sites now in existence.

Members of the public needing to dispose of waste tires will be required to keep records of their proper disposal. Since this may be done merely by saving receipts, this would not be an increased financial burden.

III. Small Business

Small businesses generating and/or needing to dispose of waste tires or tire chips would be affected in the same way as the general public. Small businesses (sole proprietorships or partnerships) with waste tire piles to be cleaned up could receive the same financial assistance with tire pile cleanup under a "negotiated settlement" as members of the general public.

A number of small businesses (about 40) who transport only their own waste tires for disposal are now subject to the waste tire carrier permit requirement. Under the proposed rule changes, they will no longer need a permit if they haul only their own waste tires. Thus they will thus no longer be subject to the \$25 (private carrier) or \$175 (regular carrier) annual carrier permit compliance fee, or the \$5,000 financial assurance requirement. However a small business which is in the business of hauling waste tires will still need a waste tire carrier permit; and may be

subject to the new permit reinstatement fee (\$100) if the permit is revoked by the Department. A small business which has a waste tire storage site permit would be subject to the new permit reinstatement fee (\$150) if the waste tire storage permit were revoked by the Department. Few such cases are anticipated, as the Department has not yet revoked any carrier or storage permits.

A small business which is also a wrecking yard would be allowed to store up to 1,500 waste tires without having to obtain a waste tire storage permit from the Department. This will allow wrecking yards more flexibility in managing waste tires; and may allow one or two which now have waste tire storage permits to operate without such a permit, thus saving permit fees and other permit-associated expenses.

IV. Large Business

The same remarks are true for large businesses. However, the amount of financial assistance a corporation may receive with the cleanup of a waste tire pile is 80%. Some large out-of-state businesses are now receiving a \$.01/lb reimbursement from the Department for using/recycling Oregon waste tires. Under the proposed rules, in-state users of rubber from waste would be reimbursed before out-of-state users if insufficient funds exist to reimburse both. This could result in a lower reimbursement than anticipated on the part of the out-of-state users.

V. Local Governments

Local governments are exempted from the requirement to obtain a waste tire carrier permit, even if they charge a fee for collecting waste tires. Any local government now possessing a waste tire carrier permit will in the future be exempt, and thus receive an economic benefit of at least \$200/year in saved permit fees. Local governments will be subject to record-keeping requirements for how they dispose of any waste tires generated, but this should cause little economic impact over current record-keeping practices.

VI. State Agencies

State agencies are specifically added as "persons" which might receive reimbursement for waste tire abatements which they carry out. The Department could reimburse them, under an Intergovernmental Agreement, for between 90% and 99% of the cost of the waste tire abatement.

fiscal

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Proposed Rules Relating to Regulating Transportation and Storage of Waste Tires; Cleanup of Tire Piles; and Reimbursement to Users of Waste Tires

Hearing Dates: 9/16/91
9/17/91
9/18/91
9/19/91
Comments Due: 9/20/91

**WHO IS
AFFECTED:**

All persons generating waste tires, including retail tire dealers. Persons hauling waste tires. Persons storing tire chips or waste tires, including wrecking yards. Persons disposing of waste tires. Tire retreaders. Units of state and the federal government with waste tires. Persons using rubber from Oregon waste tires.

**WHAT IS
PROPOSED:**

The Department proposes to revise existing administrative rules OAR 340-64-010, 340-64-015, 340-64-020, 340-64-025, 340-64-030, 340-64-035, 340-64-052, 340-64-053, 340-64-055, 340-64-063, 340-64-075, 340-64-090, 340-64-100, 340-64-120, 340-64-130, 340-64-135, 340-64-150, 340-64-155, 340-64-160, and 340-64-165; to add new rules OAR 340-64-080 and 340-64-170; and to delete rule OAR 340-64-053.

**WHAT ARE THE
HIGHLIGHTS:**

Rule revisions and additions implement changes made by the 1991 Oregon Legislature, and make other changes the Department has found necessary in administering the program. The revisions will remove certain waste tire carriers from the waste tire carrier permit requirement; will establish criteria for a responsible party's financial contribution to a Department-funded tire pile cleanup; will regulate the storage of waste tire chips; will require persons generating waste tires to either use a permitted waste tire carrier, or to self-haul for proper disposal, and to keep records of how the tires are disposed of; will establish fees to reinstate a revoked waste tire carrier or storage permit; will change procedures to request a hearing concerning a Department tire pile abatement action; will change priorities in use of the \$.01/lb reimbursement for reuse or recycling of waste tires; will implement a ban on landfill disposal of waste tires.

(over)



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

HOW TO
COMMENT:

Public hearings will be held before a hearings officer at:

10 a.m.
Monday, September 16, 1991
Department of Environmental Quality
Hearing Room 3A
811 S.W. 6th Avenue
Portland, OR

7 p.m.
Tuesday, September 17, 1991
City Council Chambers, Room 184
225 5th Street
Springfield, OR

7 p.m.
Wednesday, September 18, 1991
Klamath County Library
126 South 3rd Street
Klamath Falls, OR

7 p.m.
Thursday, September 19, 1991
Malheur County Library
388 S.W. 2nd Avenue
Ontario, OR

Written or oral comments on the proposed rule changes may be presented at the hearing. Written comments may also be sent to the Department of Environmental Quality, Waste Tire Program, Hazardous and Solid Waste Division, 811 S.W. 6th Avenue, Portland, OR 97402, and must be received no later than 5:00 p.m., Friday, September 20, 1991.

Copies of the complete proposed rule package including rulemaking statements may be obtained from the DEQ Hazardous and Solid Waste Division. For further information, contact Deanna Mueller-Crispin at 229-5808, or toll-free at 1-800-452-4011.

WHAT IS THE
NEXT STEP:

The Environmental Quality Commission may adopt rule revisions identical to the ones proposed, adopt modified rules as a result of testimony received, or may decline to adopt rules. The Commission will consider the proposed rule revisions at its October, 1991 meeting.

**B-Engrossed
House Bill 2246**

Ordered by the House June 27
Including House Amendments dated May 20 and June 27

Ordered printed by the Speaker pursuant to House Rule 12.00A (5). Pre-session filed (at the request of Budget and Management Division, Executive Department)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Requires permit to collect or transport waste tires. Specifies how waste tire generator may dispose of waste tires. Deletes time limitation related to fee on retail sale of replacement tires. Allows Department of Environmental Quality to conduct hearing after abatement of danger or nuisance caused by waste tires to determine financial responsibility of party involved.

Limits expenditures.

A BILL FOR AN ACT

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Relating to solid waste; creating new provisions; amending ORS 314.840, 459.509, 459.705, 459.715, 459.770, 459.775, 459.780, 459.785, 459.790 and 459.995; repealing ORS 459.504, 459.509, 459.514, 459.519, 459.524, 459.529, 459.534, 459.539, 459.544, 459.549, 459.554, 459.559, 459.564, 459.569, 459.574, 459.579, 459.584, 459.589, 459.594, 459.599, 459.604, 459.609, 459.614, 459.619, 459.770 and 459.997; and limiting expenditures.

Be It Enacted by the People of the State of Oregon:

SECTION 1. Sections 2 to 4 of this Act are added to and made a part of ORS 459.705 to 459.790.

SECTION 2. (1) No person shall collect or transport waste tires for the purpose of storage, processing or disposal or purport to be in the business of collecting or transporting waste tires unless the person has a waste tire carrier permit issued by the department under ORS 459.705 to 459.790.

(2) As a condition to holding a permit issued under subsection (1) of this section, each waste tire carrier shall:

(a) Comply with the provisions of ORS 459.705 to 459.790.

(b) Report periodically to the department on numbers of waste tires transported and the manner of disposition.

(c) Maintain financial assurance in the amount of \$5,000 in the name of the State of Oregon.

(d) Maintain other plans and exhibits pertaining to the tire carrier operation as determined by the department to be reasonably necessary to protect the public health, welfare or safety or the environment.

(3) Subsection (1) of this section shall not apply to:

(a) A solid waste collector operating under a license or franchise from a local government unit.

(b) A private individual transporting the individual's own waste tires to a processor or for proper disposal.

(c) A private carrier transporting the carrier's own waste tires to a processor or for proper disposal.

NOTE: Matter in bold face in an amended section is new; matter *[italic and bracketed]* is existing law to be omitted.

1 (d) The United States, the State of Oregon, any county, city, town or municipality in this state
2 or any agency of the United States, the State of Oregon or a county, city, town or municipality of
3 this state.

4 **SECTION 3.** (1) After the effective date of this 1991 Act, any person who generates waste tires
5 shall either:

6 (a) Have the waste tires transported by a waste tire carrier operating under a permit issued by
7 the department under ORS 459.705 to 459.790; or

8 (b) Transport the waste tires generated by the person to a waste tire storage site operating
9 under a permit issued by the department, to a solid waste disposal site permitted by the department
10 to accept waste tires or to another site authorized by the department.

11 (2) After the effective date of this 1991 Act, any person who generates waste tires shall maintain
12 a written record of the disposition of the waste tires including:

13 (a) Receipts indicating the disposition of the waste tires;

14 (b) The name and permit number of the waste tire carrier to whom waste tires were given for
15 disposal;

16 (c) The name and location of the disposal site where waste tires were taken, including the date
17 and number of waste tires; and

18 (d) Any other information the department may require.

19 (3) The information maintained under subsection (2) of this section shall be made available to
20 the department upon request of the department.

21 **SECTION 4.** Notwithstanding any other provision of ORS 459.015, for purposes of encouraging
22 the use of waste tires under ORS 459.705 to 459.790, the use of processed, source-separated waste
23 tires having a positive market value as a new product to recover energy shall be considered recy-
24 cling under ORS 459.015 (2)(a)(C).

25 **SECTION 5.** ORS 459.509 is amended to read:

26 459.509. (1) *[Beginning January 1, 1988, and ending June 30, 1991,]* A fee is hereby imposed upon
27 the retail sale of all new replacement tires in this state of \$1 per tire sold. The fee shall be imposed
28 on retail dealers at the time the retail dealer sells a new replacement tire to the ultimate consumer.

29 (2) The amount remitted to the Department of Revenue by the retail dealer for each quarter
30 shall be equal to 85 percent of the total fees due and payable by the retail dealer for the quarter.

31 **SECTION 6.** ORS 459.705 is amended to read:

32 459.705. As used in ORS 459.705 to 459.790:

33 (1) "Commission" means the Environmental Quality Commission.

34 (2) "Consumer" means a person who purchases a new tire to satisfy a direct need, rather than
35 for resale.

36 (3) "Danger" or "nuisance" includes but is not limited to the unpermitted storage of
37 waste tires or the storage of waste tires in a manner that does not comply with a condition
38 of a permittee's waste tire storage permit.

39 [(3)] (4) "Department" means the Department of Environmental Quality.

40 [(4)] (5) "Director" means the Director of the Department of Environmental Quality.

41 [(5)] (6) "Dispose" means to deposit, dump, spill or place any waste tire on any land or into any
42 waters of the state as defined by ORS 468.700.

43 [(6)] (7) "Person" means the United States, the state or a public or private corporation, local
44 government unit, public agency, individual, partnership, association, firm, trust, estate or any other

1 legal entity.

2 (8) "Private carrier" means a person who receives or generates waste tires and who op-
3 erates a motor vehicle over the public highways of this state for the purpose of transporting,
4 persons or property when the transportation is incidental to a primary business enterprise,
5 other than transportation, in which the person is engaged. "Private carrier" does not include
6 a person whose primary tire business is collecting, sorting or transporting used or waste
7 tires.

8 (9) "Retreadable casing" means a waste tire suitable for retreading.

9 [(7)] (10) "Store" or "storage" means *[the placing of waste tires in a manner that does not con-*
10 *stitute disposal of the waste tires]* to accumulate waste tires above ground, or to own or control
11 property on which there are waste tires above ground. "Storage" includes the beneficial use
12 of waste tires as fences and other uses with similar potential for causing environmental
13 risks. "Storage" does not include the use of waste tires as a ballast to maintain covers on
14 agricultural materials or at a construction site or a beneficial use such as a planter except
15 when the department determines the use creates an environmental risk.

16 [(8)] (11) "Tire" means a continuous solid or pneumatic rubber covering encircling the wheel
17 of a vehicle in which a person or property is or may be transported in or drawn by upon a highway.

18 [(9)] (12) "Tire carrier" means any person engaged in picking up or transporting waste tires for
19 the purpose of storage, removal to a processor or disposal. *[This]* "Tire carrier" does not include
20 a solid waste *[collectors]* collector operating under a license or franchise from any local government
21 unit, a private individual or private carrier who transports the person's own waste tires to
22 a processor or for proper disposal, a person who transports fewer than five tires for disposal,
23 or the United States, the State of Oregon, any county, city, town or municipality in this
24 state, or any agency of the United States, the State of Oregon or a county, city, town or
25 municipality of this state *[and who transport fewer than 10 tires at any one time or persons trans-*
26 *porting fewer than five tires with their own solid waste for disposal]*.

27 [(10)] (13) "Tire retailer" means any person actively engaged in the business of selling new re-
28 placement tires.

29 (14) "Tire retreader" means any person actively engaged in the business of retreading
30 waste tires by scarifying the surface to remove the old surface tread and attaching a new
31 tread to make a usable tire.

32 [(11)] (15) "Waste tire" means a tire that is no longer suitable for its original intended purpose
33 because of wear, damage or defect.

34 (16) "Wrecking business" means a business operating according to a certificate issued
35 under ORS 822.110.

36 SECTION 7. ORS 459.715 is amended to read:

37 459.715. (1) *[After July 1, 1988,]* No person shall store more than 100 waste tires anywhere in
38 this state except at a waste tire storage site operated under a permit issued under ORS 459.715 to
39 459.760.

40 (2) Subsection (1) of this section shall not apply to:

41 (a) A solid waste disposal site permitted by the department if the permit has been modified by
42 the department to authorize the storage of tires;

43 (b) A tire retailer with not more than 1,500 waste tires in storage; *[or]*

44 (c) A tire retreader with not more than 3,000 waste tires *[stored outside.]* in storage so long

1 as the waste tires are of the type the retreader is actively retreading; or

2 (d) A wrecking business with not more than 1,500 waste tires in storage.

3 (3) The exception allowed to a tire retailer under subsection (2) of this section shall not
4 apply unless the tire retailer submits the return required under ORS 459.519 and the return
5 indicates the sale of new tires during the reporting period.

6 SECTION 8. ORS 459.770 is amended to read:

7 459.770. (1) Any person who purchases waste tires generated in Oregon or tire chips or similar
8 materials from waste tires generated in Oregon and who uses the tires or chips or similar material
9 for energy recovery or other appropriate uses may apply for partial reimbursement of the cost of
10 purchasing the tires or chips or similar materials.

11 (2) Any person who uses, but does not purchase, waste tires or chips or similar materials, for
12 energy recovery or another appropriate use, may apply for a reimbursement of part of the cost of
13 such use.

14 (3) If during any quarter requests for reimbursement for waste tires or waste tire pro-
15 ducts used exceed available funds for the reporting calendar quarter, the in-state users shall
16 be reimbursed first, and any remaining funds shall be prorated among out-of-state users.
17 Out-of-state users may reapply again in the next quarter for reimbursement for the waste
18 tires or waste tire products used but not reimbursed during the previous quarter.

19 [(3)] (4) Any costs reimbursed under this section shall not exceed the amount in the Waste Tire
20 Recycling Account. If applications for reimbursement during a period specified by the commission
21 exceed the amount in the account, the commission shall prorate the amount of all reimbursements.

22 [(4)] (5) The intent of the partial reimbursement of costs under this section is to promote the
23 use of waste tires by enhancing markets for waste tires or chips or similar materials. The com-
24 mission shall limit or eliminate reimbursements if the commission finds they are not necessary to
25 promote the use of waste tires. All reimbursements shall cease not later than July 1, 1992, al-
26 though the commission may provide reimbursements to users of waste tires or chips or
27 similar materials after July 1, 1992, for those purchases made in the calendar quarter im-
28 mediately preceding July 1, 1992.

29 [(5)] (6) The commission shall adopt rules to carry out the provisions of this section. The rules
30 shall:

31 (a) Govern the types of energy recovery or other appropriate uses eligible for reimbursement
32 under this section. These uses shall include but need not be limited to:

33 (A) Recycling other than retreading; or

34 (B) Artificial fishing reefs in nonocean waters of this state.

35 (b) Establish the procedure for applying for a reimbursement.

36 (c) Establish the amount of reimbursement.

37 SECTION 9. ORS 459.775 is amended to read:

38 459.775. (1) The Waste Tire Recycling Account is established in the State Treasury, separate
39 and distinct from the General Fund. All moneys received by the Department of Revenue under ORS
40 459.504 to 459.619 (1989 Edition) shall be deposited to the credit of the account. Moneys in the ac-
41 count are appropriated continuously to the Department of Environmental Quality to be used:

42 [(1)] (a) For expenses in cleaning up waste tire piles as provided in ORS 459.780;

43 [(2)] (b) To reimburse persons for the costs of using waste tires or chips or similar materials;

44 and

1 [(3)] (c) For expenses incurred by the Department of Environmental Quality in carrying out the
2 provisions of sections ORS 459.710, 459.715 and 459.770 to 459.790.

3 (2) Any moneys remaining in the Waste Tire Recycling Account on July 1, 1992, shall be
4 used:

5 (a) To reimburse users for the costs of using waste tires or chips or similar material for
6 requests made for the calendar quarter immediately preceding July 1, 1992; and

7 (b) By the Department of Environmental Quality for other programs and activities re-
8 lated to waste tire storage, removal or disposal.

9 **SECTION 10. ORS 459.780 is amended to read:**

10 459.780. (1) The department, as a condition of a waste tire storage site permit issued under ORS
11 459.715 to 459.760, may require the permittee to remove or process the waste tires according to a
12 plan approved by the department.

13 (2) The department may use moneys from the Waste Tire Recycling Account to assist a
14 permittee in removing or processing the waste tires. Such assistance may include the payment
15 by the department of the total costs of removal or processing the waste tires and the en-
16 tering into an agreement between the department and the permittee that requires the
17 permittee to pay to the department a portion of the costs of removal or processing calculated
18 according to rules adopted by the Environmental Quality Commission. Moneys may be used
19 only after the commission finds that:

20 (a) Special circumstances make such assistance appropriate; or

21 (b) Strict compliance with the provisions of ORS 459.705 to 459.790 would result in substantial
22 curtailment or closing of the permittee's business or operation or the bankruptcy of the permittee.

23 (3) The department may [use] proceed under subsections (4) to [(7)] (8) of this section if:

24 (a) A person fails to apply for or obtain a waste tire storage site permit under ORS 459.715 to
25 459.760; [or]

26 (b) A permittee fails to meet the conditions of such permit[.]; or

27 (c) An owner of real property fails to remove waste tires as required by the department.

28 (4) The department may abate any danger or nuisance created by waste tires or other waste
29 tire materials by removing or processing the tires or other waste tire materials. Before taking
30 any action to abate the danger or nuisance, the department shall give any persons having the care,
31 custody or control of the waste tires or materials, or owning the property upon which the tires
32 or materials are located, notice of the department's intentions and order the person to abate the
33 danger or nuisance in a manner approved by the department. [Any order issued by the department
34 under this subsection shall be subject to appeal to the commission and judicial review of a final order
35 under the applicable provisions of ORS 183.310 to 183.550.] After the abatement, the department,
36 upon request, may conduct a hearing according to the provisions of ORS 183.310 to 183.550
37 applicable to contested case hearings to determine the financial responsibility of any party
38 involved. If a hearing is not requested, the department may proceed to recover the costs
39 incurred in abating the waste tires or other waste tire materials.

40 (5) If a person fails to take action as required under subsection (4) of this section within the
41 time specified the director may abate the danger or nuisance. The order issued under subsection (4)
42 of this section may include entering the property where the danger or nuisance is located, taking
43 the tires or other waste tire materials into public custody and providing for their processing or
44 removal.

1 (6) The department may [*request the Attorney General to*] bring an action [*to*] or proceeding
2 against the property owner or the person having possession, care, custody or control of the
3 waste tires or other waste tire materials to enforce the abatement order issued under sub-
4 section (4) of this section and recover any reasonable and necessary expenses incurred by the
5 department for abatement costs, including administrative and legal expenses. The department's cer-
6 tification of expenses shall be prima facie evidence that the expenses are reasonable and necessary.

7 (7) In lieu of entering an order and conducting a contested case hearing, the department
8 may enter into a stipulation, agreed settlement or consent order with any or all of the ap-
9 plicable parties, allowing the department to enter and remove the waste tires on the prop-
10 erty. The stipulation, agreed settlement or consent order also may provide that the parties
11 shall pay to the department either a specified sum of money representing the department's
12 costs in removing the waste tires from the property, or if the exact amount of the costs are
13 unknown at the time of the agreement, the parties may agree to pay to the department a
14 percentage of the department's final costs incurred in removing the waste tires from the
15 property. Upon completion of the waste tire removal, the department shall send to the ap-
16 plicable parties a certified statement indicating the total cost of removal and the percentage
17 of the total costs the parties are required to pay to the department. The costs or percentage
18 of costs to be paid by the parties shall be computed according to rules adopted by the Envi-
19 ronmental Quality Commission.

20 [(7)] (8) Nothing in ORS 459.705 to 459.790 shall affect the right of any person or local govern-
21 ment unit to abate a danger or nuisance or to recover for damages to real property or personal in-
22 jury related to the transportation, storage or disposal of waste tires. The department may reimburse
23 a person or local government unit for the cost of abatement.

24 (9) No state or local government shall be liable for costs or damages as a result of actions
25 taken under the provisions of ORS 459.705 to 459.790. This subsection shall not preclude li-
26 ability for costs or damages as a result of gross negligence or intentional misconduct by the
27 state or local government. For purposes of this subsection, reckless, willful or wanton mis-
28 conduct shall constitute gross negligence.

29 SECTION 11. ORS 459.785 is amended to read:

30 459.785. (1) In accordance with the applicable provisions of ORS 183.310 to 183.550, the com-
31 mission shall adopt rules necessary to carry out the provisions of ORS 459.705 to 459.790.

32 (2) The commission may adopt rules that limit, restrict or prohibit the storage of waste
33 tire chips not chipped and disposed of in accordance with standards adopted by the commis-
34 sion under ORS 459.710, or used for the purposes described in ORS 459.770. The rules also
35 may include requirements for obtaining a permit from the department for the storage of tire
36 chips.

37 SECTION 12. ORS 459.790 is amended to read:

38 459.790. Except for the purposes of waste tire removal under ORS 459.780 (2) and (4) to
39 (8), the provisions of ORS 459.705 to 459.785 do not apply to:

40 (1) Tires from:

41 [(1)] (a) Any device moved exclusively by human power.

42 [(2)] (b) Any device used exclusively upon stationary rails or tracks.

43 [(3)] (c) A motorcycle.

44 [(4)] (d) An all-terrain vehicle.

1 [(5)] (e) Any device used exclusively for farming purposes, except a farm truck.

2 (2) A retreadable casing while under the control of a tire retreader or while being deliv-
3 ered to a retreader.

4 SECTION 13. ORS 459.995 is amended to read:

5 459.995. (1) In addition to any other penalty provided by law:

6 (a) Any person who violates ORS 459.205, 459.270 or the provisions of ORS 459.180, 459.188,
7 459.190, 459.195, [459.710 or 459.715 or the provisions of ORS] 459.386 to 459.400 or 459.705 to
8 459.790, or any rule or order of the Environmental Quality Commission pertaining to the disposal,
9 collection, storage or reuse or recycling of solid wastes, as defined by ORS 459.005, or any rule or
10 order pertaining to the disposal, storage or transportation of waste tires, as defined by ORS
11 459.705, shall incur a civil penalty not to exceed \$500 a day for each day of the violation.

12 (b) Any person who violates the provisions of ORS 459.420 to 459.426 shall incur a civil penalty
13 not to exceed \$500 for each violation. Each battery that is disposed of improperly shall be a separate
14 violation. Each day an establishment fails to post the notice required under ORS 459.426 shall be a
15 separate violation.

16 (2) The civil penalty authorized by subsection (1) of this section shall be established, imposed,
17 collected and appealed in the same manner as civil penalties are established, imposed and collected
18 under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605
19 to 454.745 and ORS chapter 468.

20 SECTION 14. ORS 314.840 is amended to read:

21 314.840. (1) The department may:

22 (a) Furnish any taxpayer or authorized representative, upon request of the taxpayer or repre-
23 sentative, with a copy of the taxpayer's income tax return filed with the department for any year,
24 or with a copy of any report filed by the taxpayer in connection with the return.

25 (b) Publish lists of taxpayers who are entitled to unclaimed tax refunds.

26 (c) Publish statistics so classified as to prevent the identification of income or any particulars
27 contained in any report or return.

28 (d) Disclose a taxpayer's name, address and social security number or employer identification
29 number to the extent necessary in connection with the processing and mailing of forms for any re-
30 port or return required in the administration of ORS 310.630 to 310.690, any local tax under ORS
31 305.620, or any law imposing a tax upon or measured by net income.

32 (2) The department also may disclose and give access to information described in ORS 314.835
33 to:

34 (a) The Governor of the State of Oregon or the authorized representative of the Governor:

35 (A) With respect to an individual who is designated as being under consideration for appoint-
36 ment or reappointment to an office or for employment in the office of the Governor. The information
37 disclosed shall be confined to whether the individual:

38 (i) Has filed returns with respect to the taxes imposed by ORS chapter 316 for those of not more
39 than the three immediately preceding years for which the individual was required to file an Oregon
40 individual income tax return.

41 (ii) Has failed to pay any tax within 30 days from the date of mailing of a deficiency notice or
42 otherwise respond to a deficiency notice within 30 days of its mailing.

43 (iii) Has been assessed any penalty under the Oregon personal income tax laws and the nature
44 of the penalty.

1 (iv) Has been or is under investigation for possible criminal offenses under the Oregon personal
2 income tax laws. Information disclosed pursuant to this paragraph shall be used only for the purpose
3 of making the appointment, reappointment or decision to employ or not to employ the individual in
4 the office of the Governor.

5 (B) For use by an officer or employee of the Executive Department duly authorized or employed
6 to prepare revenue estimates, or a person contracting with the Executive Department to prepare
7 revenue estimates, in the preparation of revenue estimates required for the Governor's budget under
8 ORS 291.202 to 291.226, or required for submission to the Emergency Board, or if the Legislative
9 Assembly is in session, to the Joint Committee on Ways and Means, and to the Legislative Revenue
10 Officer under ORS 291.342 to 291.348. The information disclosed or to which access is given under
11 this subparagraph shall be confined to the identity of a corporate taxpayer, the amount of the cor-
12 porate tax liability of the corporate taxpayer and the amount of the payments made by the corpo-
13 ration to the Department of Revenue under the corporate excise and income tax laws of this state.
14 Any officer, employee or person furnished or granted access to information under this subparagraph
15 shall not remove the information from the premises of the Department of Revenue.

16 (b) The Commissioner of Internal Revenue or authorized representative, for tax purposes only.

17 (c) The proper officer of any state or the District of Columbia, or their authorized represen-
18 tatives, for tax purposes only, if such state or district has a provision of law which meets the re-
19 quirements of any applicable provision of the Internal Revenue Code as to confidentiality.

20 (d) The Multistate Tax Commission or its authorized representatives, for tax purposes only.
21 However, the Multistate Tax Commission may make such information available to the Commissioner
22 of Internal Revenue or the proper officer of any state or the District of Columbia, or their author-
23 ized representatives, for tax purposes only, if the state or district has a provision of law which meets
24 the requirements of any applicable provision of the Internal Revenue Code as to confidentiality.

25 (e) The Attorney General, assistants and employees in the Department of Justice, or other legal
26 representative of the State of Oregon, to the extent the department deems disclosure or access
27 necessary for the performance of the duties of advising or representing the department pursuant to
28 ORS 180.010 to 180.240 and the tax laws of this state.

29 (f) Employee of the State of Oregon, other than of the Department of Revenue or Department
30 of Justice, to the extent the department deems disclosure or access necessary for such employees
31 to perform their duties under contracts or agreements between the department and any other de-
32 partment, agency or subdivision of the State of Oregon, in the department's administration of the
33 tax laws.

34 (g) Other persons, partnerships, corporations and other legal entities, and their employees, to
35 the extent the department deems disclosure or access necessary for the performance of such others'
36 duties under contracts or agreements between the department and such legal entities, in the de-
37 partment's administration of the tax laws.

38 (h) The Legislative Revenue Officer or authorized representatives upon compliance with ORS
39 173.850. Such officer or representative shall not remove from the premises of the department any
40 materials that would reveal the identity of any taxpayer or any other person.

41 (i) The Department of Insurance and Finance, to the extent the department requires such in-
42 formation to determine whether it is appropriate to adjust those workers' compensation benefits the
43 amount of which is based pursuant to ORS 656.001 to 656.794 on the amount of wages or earned
44 income received by an individual.

1 (j) Any agency of the State of Oregon, or any person, or any officer or employee of such agency
2 or person to whom disclosure or access is given by state law and not otherwise referred to in this
3 section, including but not limited to the Secretary of State as Auditor of Public Accounts under
4 section 2, Article VI of the Oregon Constitution; the Adult and Family Services Division of the De-
5 partment of Human Resources pursuant to ORS 314.860 and 418.135; the Support Enforcement Divi-
6 sion of the Department of Justice and district attorneys pursuant to ORS 418.135; the State Board
7 of Tax Service Examiners, pursuant to ORS 673.710; and the State Board of Accountancy, pursuant
8 to ORS 673.415.

9 (k) The Director of the Department of Insurance and Finance to determine that a person com-
10 plies with ORS chapter 656 and the Assistant Director for Employment of the Department of Human
11 Resources to determine that a person complies with ORS chapter 657, the following employer in-
12 formation:

13 (A) Identification numbers.

14 (B) Names and addresses.

15 (C) Inception date as employer.

16 (D) Nature of business.

17 (E) Entity changes.

18 (F) Date of last payroll.

19 (L) The Assistant Director for Mental Health and Developmental Disability Services to deter-
20 mine that a person has the ability to pay for care that includes services provided by the state in-
21 stitutions as described in ORS 179.321 or the Mental Health and Developmental Disability Services
22 Division or to collect any unpaid cost of care as provided by ORS chapter 179.

23 (m) Employees of the Employment Division of the Department of Human Resources to the extent
24 the department deems disclosure or access to information on a combined tax report filed under ORS
25 316.168 is necessary to performance of their duties in administering the tax imposed by ORS chapter
26 657.

27 (n) A designated employee of the Department of Environmental Quality. The information
28 shall consist of a copy of the Oregon tire fee quarterly return filed or obtained pursuant to
29 ORS 459.504 to 459.619 (1989 Edition), to the extent necessary for the Department of Envi-
30 ronmental Quality to determine qualification as a tire retailer as defined in ORS 459.705.
31 Such information shall not include audit materials.

32 (3) Each officer or employee of the department and each person described or referred to in
33 paragraph (a), (e) to (k) or (m) of subsection (2) of this section to whom disclosure or access to the
34 tax information is given under subsection (2) of this section or any other provision of state law,
35 prior to beginning employment or the performance of duties involving such disclosure or access,
36 shall be advised in writing of the provisions of ORS 314.835 and 314.991, relating to penalties for the
37 violation of ORS 314.835, and shall as a condition of employment or performance of duties execute
38 a certificate for the department, in a form prescribed by the department, stating in substance that
39 the person has read these provisions of law, that the person has had them explained and that the
40 person is aware of the penalties for the violation of ORS 314.835.

41 (4) The Department of Revenue may recover the costs of furnishing the information described
42 in paragraphs (k) and (L) of subsection (2) of this section from the respective agencies.

43 **SECTION 15.** Notwithstanding ORS 459.509 (1989 Edition), the fee imposed under ORS 459.509
44 (1989 Edition) is imposed upon the retail sale of all new replacement tires sold in this state on or

1 after July 1, 1991, and before October 1, 1992. For periods beginning on or after July 1, 1991, and
2 prior to the effective date of this Act, and for periods beginning on or after the effective date of this
3 Act and prior to October 1, 1992, all of the provisions of ORS 459.504 to 459.619 (1989 Edition) shall
4 apply to the fee, including but not limited to its imposition, rate, measure, collection, administration
5 and distribution.

6 **SECTION 16.** ORS 459.705, 459.710, 459.715, 459.720, 459.725, 459.730, 459.735, 459.740, 459.745,
7 459.750, 459.755, 459.760, 459.765, 459.770, 459.775, 459.780, 459.785 and 459.790 are added to and
8 made a part of ORS 459.005 to 459.426.

9 **SECTION 17.** ORS 459.504, 459.509, 459.514, 459.519, 459.524, 459.529, 459.534, 459.539, 459.544,
10 459.549, 459.554, 459.559, 459.564, 459.569, 459.574, 459.579, 459.584, 459.589, 459.594, 459.599, 459.604,
11 459.609, 459.614, 459.619, 459.770 and 459.997 are repealed on January 1, 1996.

12 **SECTION 18.** Notwithstanding any other law, the amount of \$1,209,671 is established for the
13 biennium beginning July 1, 1991, as the maximum limit for payment of expenses incurred by the
14 Department of Environmental Quality under ORS 459.705 to 459.790 from fees, moneys or other re-
15 venues, including Miscellaneous Receipts, excluding federal funds, collected or received by the De-
16 partment of Environmental Quality under ORS 459.504 to 459.619.

17

66th OREGON LEGISLATIVE ASSEMBLY--1991 Regular Session

D-Engrossed Senate Bill 66

Ordered by the House June 17
Including Senate Amendments dated March 4 and April 25 and House
Amendments dated June 7 and June 17

Printed pursuant to Senate Interim Rule 213.28 by order of the President of the Senate in conformance with pre-session filing rules, indicating neither advocacy nor opposition on the part of the President (at the request of Joint Interim Committee on Environment, Energy and Hazardous Materials)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Establishes statewide integrated solid waste management program. Establishes solid waste reduction goals and rates. Specifies duties of local governments on solid waste reduction. Establishes procurement requirements for state and public agencies for reused or recycled products. Modifies waste disposal rates and schedules. Establishes education requirements. Creates Recycling Markets Development Council and Oregon Newsprint Recycling Task Force. Establishes minimum content requirements for newsprint and labeling requirements for plastic containers. Appropriates money. **Limits expenditures.**

Declares emergency, effective July 1, 1991.

A BILL FOR AN ACT

1

2 **Relating to solid waste; creating new provisions; amending ORS 182.375, 279.731, 279.733, 279.739,**
3 **459.005, 459.015, 459.165, 459.175, 459.180, 459.185, 459.190, 459.235, 459.294 and 459.995; appro-**
4 **priating money; limiting expenditures; and declaring an emergency.**

5 **Be It Enacted by the People of the State of Oregon:**

6 **SECTION 1.** ORS 459.292, 459.293, 459.294 and 459.295 and sections 2, 4, 5 and 13a of this Act
7 are added to and made a part of ORS 459.165 to 459.200.

8 **SECTION 2.** (1) It is the goal of the State of Oregon that by January 1, 2000, the amount of
9 recovery from the general solid waste stream shall be at least 50 percent.

10 (2) In addition to the requirements of ORS 459.165, the "opportunity to recycle" shall include
11 the requirements of subsection (3) of this section, which shall be implemented on or before July 1,
12 1992, by using the following program elements:

13 (a) Provision of at least one durable recycling container to each residential service customer
14 by not later than January 1, 1993.

15 (b) On-route collection at least once each week of source separated recyclable material to resi-
16 dential customers, provided on the same day that solid waste is collected from each customer.

17 (c) An expanded education and promotion program conducted to inform citizens of the manner
18 and benefits of reducing, reusing and recycling material. The program shall include:

19 (A) Provision of recycling notification and education packets to all new residential, commercial
20 and institutional collection service customers that includes at a minimum the materials collected,
21 the schedule for collection, the way to prepare materials for collection and reasons that persons
22 should separate their material for recycling;

23 (B) Provision of quarterly recycling information to residential, commercial and institutional
24 collection service customers that includes at a minimum the materials collected, the schedule for

NOTE: Matter in bold face in an amended section is new; matter *(italic and bracketed)* is existing law to be omitted.

1 contain higher or lower recycled content or recycling rate standards for the year 2000.

2 **SECTION 35.** (1) By January 1, 1995, the Department of Education, in cooperation with the
3 Department of Environmental Quality, shall integrate a recycling and waste reduction component
4 into a required curriculum for all Oregon students in grades kindergarten through 12.

5 (2) The Department of Environmental Quality, in cooperation with the Department of Education,
6 as appropriate in paragraphs (a) and (c) of this subsection, shall provide statewide promotion, edu-
7 cation and technical assistance to local government units and schools in each watershed to increase
8 participation in recycling. The assistance provided shall include but need not be limited to:

9 (a) Beginning July 1, 1993, developing a current teacher's guide which shall be supplied to every
10 school in the state for use in complying with this section. The Department of Environmental Quality
11 first shall provide a current teacher's guide by July 1, 1993, and at a minimum, every fourth year
12 thereafter, shall update, revise and replace the teacher's guide as necessary to keep the teacher's
13 guide current and effective. The teacher's guide also shall be available to local government units
14 and recycling educators upon request. The Department of Environmental Quality shall participate
15 each year as requested in teacher in-service workshops to present and facilitate use of the teacher's
16 guide.

17 (b) Beginning July 1, 1993, providing professionally produced informational materials including
18 but not limited to camera-ready art and recycling and waste reduction copy for use by local gov-
19 ernment units, schools or recycling educators in each watershed for public information correspond-
20 ence, brochures, flyers, newsletters and news releases, camera-ready newspaper public service
21 advertisements and two annual workshops on recycling and waste reduction education and pro-
22 motion, one to be held within and one to be held outside, the Portland metropolitan area. The De-
23 partment of Environmental Quality first shall provide this material by July 1, 1993, and shall revise
24 the material annually to keep the information presented current and effective.

25 (c) On or before July 1, 1993, providing professionally produced instructional audiovisual mate-
26 rials to each school in the state to be used as part of the school's recycling and waste reduction
27 education component. The audiovisual materials shall be appropriate to the grade level of the school
28 to which they are supplied and shall be reviewed every two years and updated as necessary to keep
29 the information presented current and effective. The materials also shall be available to local gov-
30 ernment units and recycling educators upon request.

31 **SECTION 36.** The Department of Education shall report to the Sixty-seventh Legislative As-
32 sembly on the development and implementation of the integrated solid waste management curric-
33 ulum and recycling and waste reduction education component established pursuant to section 35 of
34 this Act.

35 **SECTION 37.** Sections 38 to 52 of this Act are added to and made a part of ORS 459.005 to
36 459.426.

37 **SECTION 38.** On and after January 1, 1992, any retail establishment that offers plastic bags to
38 customers for purchases of goods made at the establishment shall offer at the location where the
39 customer pays for the goods, paper bags as an alternative to plastic bags and inform customers that
40 a choice is available. Nothing in this subsection shall be construed as requiring retail establishments
41 to use plastic bags.

42 **SECTION 39.** (1) No person shall dispose of and no disposal site operator shall knowingly ac-
43 cept for disposal the following types of solid waste at a solid waste disposal site:

44 (a) Discarded or abandoned vehicles;

- 1 (b) Discarded large home or industrial appliances;
- 2 (c) Used oil;
- 3 (d) Tires; or
- 4 (e) Lead-acid batteries.

5 (2) As used in this section, "used oil" has the meaning given that term in ORS 468.850.

6 (3) Nothing in this section shall prohibit a disposal site operator from accepting and storing, for
7 purposes of recycling or recovering, any of the types of solid waste listed in subsection (1) of this
8 section.

9 **NOTE:** Sections 40 to 44 were deleted by amendment. Subsequent sections were not renumbered.

10 **SECTION 45.** (1) The Recycling Markets Development Council is created. The council shall
11 consist of 12 members at least one of whom shall have expertise in national and international mar-
12 ket development. The members appointed to the council shall represent the following interests:

- 13 (a) Local government;
- 14 (b) Solid waste collectors;
- 15 (c) Environmental organizations;
- 16 (d) Glass industry;
- 17 (e) End-product manufacturers of glass;
- 18 (f) Paper industry;
- 19 (g) End-product manufacturers of paper;
- 20 (h) End-product manufacturers of plastic;
- 21 (i) Persons with expertise in the collection and sorting of recyclable materials;
- 22 (j) Retail industry;
- 23 (k) Processors of recovered materials; and
- 24 (L) Plastics industry.

25 (2) The Governor shall appoint the members of the council, one of whom shall be designated as
26 chairperson. Members of the council serve at the pleasure of the Governor and shall serve a term
27 of two years. Any vacancy on the council shall be filled by the Governor. In making the appoint-
28 ments to the council, the Governor shall consider:

- 29 (a) The person's knowledge of recycling;
- 30 (b) Geographic representation from throughout the state;
- 31 (c) The size of the business represented; and
- 32 (d) Expertise in market development.

33 (3) The council shall meet at least quarterly.

34 (4) The council shall:

- 35 (a) Remain current with national and international market development activities;
- 36 (b) Develop statewide market strategies for each secondary commodity;
- 37 (c) Develop communication with and be a liaison to market development committees represent-
38 ing other states within the region;
- 39 (d) Encourage uniform recycling definitions and standards throughout the states in the region;
- 40 (e) Encourage the expansion of existing businesses and the recruitment of businesses into the
41 region that use recovered materials from Oregon;
- 42 (f) Identify and evaluate financial and other incentives to attract new businesses to Oregon or
43 to expand existing businesses that can use recovered materials from Oregon; and
- 44 (g) Promote the purchase of products made from recovered materials.

ATTACHMENT G

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY * INTEROFFICE MEMORANDUM

DATE: September 16, 1991

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Public Hearing, Proposed Amendments to Waste Tire
Rules, Portland, OR, 10:00 a.m., September 16, 1991

On September 16, 1991, a public hearing regarding proposed rule changes in the waste tire program was held in the Department of Environmental Quality Headquarters, Conference Room 3A, 811 S.W. 6th Avenue, Portland, Oregon. One individual attended the hearing, and no one provided testimony.

The official hearing record was opened and closed at 10:30 a.m. The individual in attendance represented a radio station.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 4, 1991

TO: Environmental Quality Commission

FROM: Anne V. Cox, Hearing Officer

SUBJECT: Waste Tire Public Hearing, Springfield OR, 7:00 p.m.,
September 17, 1991

On September 17, 1991, a public hearing regarding proposed rule changes in the waste tire program was held at the City Council Chambers, Room 184, 225 5th Street in Springfield, Oregon. No members of the public attended the hearing, and no comments were submitted.

The official hearing record was opened and closed at 7:30 p.m.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 1, 1991

TO: Deanna Mueller-Crispin

FROM: Bradford D. Price, Hearings Officer

SUBJECT: Waste Tire Public Hearings

I conducted public hearings pertaining to proposed rule and statute changes relating to the regulation of transportation and storage of waste tires; cleanup of tires piles; and reimbursement to users of waste tires. The hearings I conducted were at:

Klamath County Library, 126 South 3rd Street, Klamath Falls, Oregon, on Wednesday, September 18, 1991 at 7:00pm; and

Malheur County Library, 388 SW 2nd Avenue, Ontario, Oregon, on Thursday, September 19, 1991, at 7:00pm.

No testimony was given. Three individuals attended the Klamath Falls hearing and were interested in having the rules explained. They had no specific questions. There was no attendance at the Ontario, Oregon hearing.

ATTACHMENT H

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 4, 1991

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin

SUBJECT: Written Testimony, and Response to Public Comments

Written testimony was received by the Department in response to a request for public comment regarding proposed revisions to existing rules pertaining to waste tire storage, hauling and cleanup and reimbursement to persons using waste tires. The written testimony consisted of a letter from James E. Britton, Executive Director of the Asphalt Pavement Association of Oregon, a copy of which is attached.

No oral testimony was received at the four hearings held by the Department on the proposed rules. The following Department "responses" relate to comments received from Mr. Britton.

Comment: Requiring that records of waste tire disposal be kept for three years seems longer than necessary. What purpose will be served by the three-year retention?

Response: There is often some delay between the time when waste tires are improperly disposed of, and when such disposal comes to the Department's attention. The record-keeping requirement is meant to ensure that DEQ can verify proper disposal of waste tires, and thereby discourage illegal dumping. For that to be effective, disposal records must be retained for a period of time reasonably long enough for any complaints about improper disposal to be received by DEQ. The Department requires three-year retention of records by waste tire carrier permittees. However, the Department agrees that a three-year retention of tire-disposal records by members of the public may be longer than needed, and is reducing the requirement to two years.

The Department also proposes to exempt from the record-keeping requirement those persons who generate waste tires and transport fewer than five at one

time. This will remove most private individuals from having to retain any records of tire disposal. They are still required to properly dispose of the waste tires.

Comment: Re. the requirement to obtain a waste tire storage permit in the case of waste tires or tire chips to be used as materials in fulfilling an existing contract with a government agency (such as for a highway embankment project using tire chips). The suggestion was that such storage of such tires or chips be exempt from regulation as a waste tire storage site.

Response: With this proposed rule revision, DEQ is adding regulation of the storage of waste tire chips. The above suggestion concerning regulation of storage of tires and chips might facilitate certain public works projects which use these materials.

The Department partially agrees with this suggestion, and proposes a rule change that would exempt storage of tire chips (but not whole tires) on land owned by a unit of government when that government has an existing contract to use the tire material. The Department believes that the exemption should be restricted to land owned by a unit of government rather than also allowing it on private land. It is not equitable to exempt some private landowners from waste tire storage regulation when others who may wish to operate the same sort of business, but do not have existing government contracts, must obtain permits. The Department also believes that the exemption should be limited in time to six months, and that the exemption should not be automatic, but at DEQ's discretion.

Comment: OAR 340-64-080(2)(c) appears to bar the generators of waste tires from hauling them to a retreader. Or would a retreader qualify as "...another site authorized by the Department"?

Response: A legitimate retreader would qualify as "another site authorized by the Department" to which a generator of waste tires could appropriately haul waste tires.

Comment: It was suggested that, under the DEQ reimbursement for use of waste tires, it would be more cost-

efficient to allow Oregon waste tires to be traded for rubber granules made out-of-state from non-Oregon tires, rather than requiring the granules be made from Oregon tires.

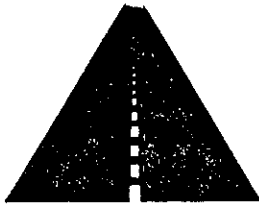
Response: Mr. Britton's comment is in part based on the fact that there are presently no processors in Oregon that make rubber granules suitable for use in such projects as rubber asphalt paving. Shipping Oregon waste tires out of state for processing may increase the cost of rubber granules returned for use in Oregon projects. However, the Department does not recommend accepting this suggestion since the statute requires the reimbursement to be for use of waste tires generated in Oregon (ORS 459.770(1)).

Comment: Concerning the deadline for use of waste tires eligible for the reimbursement, the Department should remember that projects in the paving industry may be delayed for reasons beyond the control of the contractors.

Response: This comment was in relation to the wording in the draft rule that waste tires must "be used before July 1, 1992" to be eligible for the reimbursement. This date is early in the 1992 summer paving season. Mr. Britton was concerned that a paving project which had received DEQ approval for the reimbursement might be delayed beyond the June 30 date. 1991 House Bill 2246 terminating the reimbursement reads as follows:

All reimbursements shall cease not later than July 1, 1992, although the commission may provide reimbursements to users of waste tires or chips or similar materials after July 1, 1992, for those purchases made in the calendar quarter immediately preceding July 1, 1992.

The Department has changed the proposed wording to correspond more closely to that in the statute. The proposed rule now specifies that waste tires must "be purchased before July 1, 1992" to be eligible for the reimbursement. This would cover the situation described above if the user "purchased" the rubber before July 1, 1992, even though the project might not be completed by that date.



Asphalt Pavement Association of Oregon

3747 Market Street NE ▲ Salem, Oregon 97301 ▲ (503) 363-3858

JAMES E. BRITTON
Executive Director
STEVE LOOSLEY
President
PAT DEAN
Vice President
JAY COMPTON
Secretary/Treasurer

August 28, 1991

BOARD OF DIRECTORS:
Steve Ausland
Dave Elsner
Chuck Gaskill
Kip Johnson
Bob Reinhard
Steve Schetky
Jim Turin

Mr. Charles W. Donaldson, Manager
Solid Waste Permits and Compliance Section
DEQ
811 S.W. Sixth Avenue
Portland, OR 97204-1390

RECEIVED

AUG 29 1991

Hazardous & Solid Waste Division
Department of Environmental Quality

RE: SB66-TIRES

Dear Mr. Donaldson:

With reference to your memo of August 15, 1991 and the rules revisions prepared for the July 24, 1991 EQC meeting for hearing authorization the following is offered:

- 1) The rules present many lengthy lists of "don'ts".
- 2) Record keeping with 3 year retention for moving tires seems to be a little bit more than really necessary. What purpose will be served with a 3 year retention?
- 3) Specific sections:

340-64-015 It is suggested that storage of stockpiling preparatory for use in fulfilling an existing contract with a federal, state or local agency be exempt from permits and size restriction. The quantity could be limited to the estimated quantity of the contract plus 5% to allow for estimated changes. This should apply to tires and parts in any form for an approved use.

340-64-080 (2)(c) This appears to bar the generator from hauling their tires to a retreader - or does (b) "... or to another site authorized by the Department." leave that option open? Some contractors do all of their tire work and haul tires to a retreader of their choice.


340-64-100 (2) It is suggested that it may be more cost efficient to allow Oregon tires to be traded to out of state for granules already made from non-Oregon tires. The main point is the material will be used and Oregon tires will leave Oregon.

To: Donaldson
Fm: Britton
Re: SB66-Tires
Dt: August 28, 1991
Pg: 2

340-64-120 Please keep in mind, relative to reimbursement in the paving industry, that schedules are not always followed for reasons beyond the control of the contractors.

Thank you for the opportunity to comment and I do wish to be informed as to drafts, hearings and new rules.

Very truly yours,



James E. Britton
Executive Director

JEB/dl
DEQ.Doc

DEQ LAND USE EVALUATION STATEMENT

1. Explain the purpose of the proposed program/rules. To implement changes made in the waste tire program by the 1991 Oregon Legislature (in House Bill 2246), and to make housekeeping changes required for better program operation. Includes allowing the Department to regulate storage and transportation of waste tire chips, with a waste tire storage permit requirement for chip piles over a certain size.

2. Does the proposed program/rules affect existing rules/programs/activities that have been determined land use programs in the DEQ State Agency Coordination(SAC) Program?

yes XX no

If yes, identify existing program/rule/activity Issuance of waste tire storage permits.

If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed program/rule? yes XX no if no, explain

If no, apply criteria 1. and 2., from the other side of this form and from Section III Subsection 2 of the SAC program document, to the proposed program/rules. In the space below, state if the proposed rules/programs are considered programs affecting land use. Be specific in citing the criteria and reasons for the determination.

3. If the proposed program/rules have been determined a land use program, under 2. above, and are not subject to existing land use compliance and compatibility procedures, explain the new procedures that will be used to ensure compliance and compatibility.

(Requirement for waste tire storage permit for tire chip piles of a certain size will be subject to same existing land use compliance procedures as for other waste tire storage permits for whole tires.)

Jessica Neville-Cispi
DEQ staff signature

SW Permit Compliance, HSW
Section, Division

7/5/91
Date

REQUEST FOR EQC ACTION

Meeting Date: November 7, 1991
Agenda Item: H
Division: Water Quality
Section: Surface Water

SUBJECT:

Establishment of program administration and compliance fees for the implementation of the Oil Spill Prevention Act of 1991 (Senate Bill 242).

PURPOSE:

Request to the Environmental Quality Commission for adoption of proposed rules for establishing a fee schedule to implement the provisions of Senate Bill 242.

ACTION REQUESTED:

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

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

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment



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



Meeting Date: November 7, 1991
Agenda Item: H
Page 2

<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

Senate Bill 242 sets up an oil spill prevention program to be administered by the Department. Four sectors of the regulated community are to be assessed fees to cover the costs for administering the program: 1) oil barges, 2) self-propelled tank vessels (oil tankers), 3) cargo vessels, and 4) oil storage facilities.

Section 17 of the Act authorizes the Environmental Quality Commission to establish by rule a schedule of reasonable fees for two sectors of the regulated community, self-propelled tank vessels and oil storage facilities. It also establishes an annual cap for that portion of the budget at \$153,600. The proposed rule sets the following schedule of fees:

1. Oil storage facilities: \$3000 per year
2. Self-propelled tank vessels: \$650 per trip

This schedule is expected to generate sufficient revenue to cover the costs of about 3/5 of the program but stay within the annual \$153,600 cap. The remainder of the total annual program costs of \$256,000 will be generated by statutorily set fees on cargo vessels (\$25 per trip) and oil transport barges (\$28 per trip).

Mandated Department actions covered by the fees include the review of vessel and facility oil spill prevention and emergency response plans, annual compliance certification of the plans, inspections of the vessels and facilities, and exercises of the approved plans.

The fees will also cover the DEQ expenses for:

- 1) developing a method of natural resource valuation for assessing damages to the environment;
- 2) implementing spill prevention education and training programs;
- 3) oversight of oil transfer operations;
- 4) adopting an incident command system;
- 5) coordinating oil spill research with other west coast states;
- 6) annually reviewing and exercising the spill plan developed under ORS 468.831 and 468.833, providing training in its use and conducting spill exercises to test its adequacy.

Meeting Date: November 7, 1991
Agenda Item: H
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AUTHORITY/NEED FOR ACTION:

- | | | |
|-------------------------------------|---|---------------------|
| <input checked="" type="checkbox"/> | Required by Statute: <u>ORS 468B.300 - 468B.420</u> | Attachment <u>E</u> |
| | Enactment Date: <u>July 22, 1991</u> | |
| <input type="checkbox"/> | Statutory Authority: _____ | Attachment _____ |
| <input type="checkbox"/> | Pursuant to Rule: _____ | Attachment _____ |
| <input type="checkbox"/> | Pursuant to Federal Law/Rule: _____ | Attachment _____ |
| <input type="checkbox"/> | Other: _____ | Attachment _____ |
- Time Constraints: Implementation of the program is dependent on establishing the fee schedule and beginning the collection of those fees.

DEVELOPMENTAL BACKGROUND:

- | | | |
|-------------------------------------|--|---------------------|
| <input type="checkbox"/> | Advisory Committee Report/Recommendation | Attachment _____ |
| <input checked="" type="checkbox"/> | Hearing Officer's Report/Recommendations | Attachment <u>F</u> |
| <input checked="" type="checkbox"/> | Response to Testimony/Comments | Attachment <u>G</u> |
| <input type="checkbox"/> | Prior EQC Agenda Items: (list) | Attachment _____ |
| <input type="checkbox"/> | Other Related Reports/Rules/Statutes: | Attachment _____ |
| <input checked="" type="checkbox"/> | Supplemental Background Information
(EQC Staff Report - Request for Hearing
Authorization - 7/24/91 Agenda Item D) | Attachment _____ |

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The statutorily mandated fees in SB 242 and the fees adopted under this proposed rule will directly impact the four sectors of the regulated community identified above. The fees are based on our estimates of the cost of administering the program not on the volume of oil transported or stored. If the costs were to be evaluated on a per volume basis, the cost to the regulated community are estimated to be no more than .01 cents per gallon. It is not anticipated that this will affect costs at the gas pump for consumers.

The Department has worked closely with the regulated community in developing the language and concepts in SB 242. The industry groups agreed to the distribution of fees. In July, the Department met with representatives of the facilities and tank vessels to attempt to reach agreement on the method of assessment. At that time, it was determined that an annual fee of \$3000 per facility and self propelled tank vessel would spread the cost most fairly.

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The proposed rules were sent out for public comment and a hearing was held on October 1, 1991 in Portland. One group, the Portland Steamship Operators Association, presented oral and written testimony arguing for an alternative approach for assessing the fees. Written testimony was received from two organizations, Chevron Shipping Company and Arco Transportation Company, both in favor of the proposed rule.

PROGRAM CONSIDERATIONS:

The program is part of the legislatively adopted 1991-93 budget. It will support 1 FTE under the existing program mandated by ORS 468.831 -.833 to continue development and implementation of the state spill contingency plan. In addition, two new technical positions and one office specialist will be added to develop and implement the new program. One technical position and the office specialist will be hired immediately and one position will be phased in during the second year of the biennium to review the plans as they begin to be submitted.

The proposed fee schedule will support this program. It also contains \$60,000 of contract dollars which will be used to: 1) support 1/2 FTE at the Fish and Wildlife Department to assist in plan reviews and 2) implement a spill prevention education program with the OSU Sea Grant Program.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

Two methods of assessing the fees on facilities and self-propelled tank vessels were considered by the Department.

1. An annual compliance fee for both.
2. A per trip fee for tank vessels and an annual fee for facilities.

All parties agreed to the annual fee for facilities but there was disagreement over the best way to assess tank vessels. The large oil transport companies favored an annual fee. The Department also generally favored the annual fee for two reasons: 1) ease of administration, and 2) the amount of effort expended by the Department on each vessel would be the same irrespective of the number of trips a vessel made on an annual basis.

A per trip fee was favored by the independent tank vessel operators. Their argument focused on the inequity of charging a vessel that makes one trip the same as a vessel that makes multiple trips. In addition, they argued that a tank vessel could make multiple trips annually under different charter operators but with an annual fee, only the first charter operator would pay.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

After considering the testimony, the Department's recommendation is to spread the annual cost of \$153,600 equitably between the two sectors of the community; covered facilities and tank vessels, by assessing an annual fee of \$3000 per oil storage facility and a per trip fee of \$650 on self-propelled tank vessels.

The Department's rationale for this approach is as follows:

1. A per trip charge appears to be more equitable for those vessels that make only 1 or 2 trips per year. This group accounts for more than two thirds of the total number of tank vessels that call on the Columbia River annually.
2. All other vessels affected by the legislation pay on a per trip basis and the maritime community in general works on a per trip basis.
3. The Maritime Commission in Washington which assesses fees to support its program charges all vessels on a per trip basis.
4. For charter vessels that make multiple trips annually, a per trip fee ensures that each operator pays a share of the program.
5. A mechanism exists for collecting the per trip fees which will ease the administrative burden.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Oregon has participated on the States/BC Oil Spill Task Force formed in the wake of the Exxon Valdez spill. In October 1990, the Task Force issued a report that contained 43 recommendations for preventing spills and improving response capabilities on the west coast. The report emphasized the need for states to develop programs to prevent spills. Senate Bill 242 is a direct response to that concern. It contains many of the Task Force recommendations and it is consistent with agency and legislative policy of protecting and preserving the water quality of the state.

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Oregon has also worked closely with the state of Washington to ensure that consistent rules and programs are implemented on the Columbia River where we share a common border. The language and concepts in SB 242 are consistent with legislation already passed in Washington state.

ISSUES FOR COMMISSION TO RESOLVE:

Does the proposed rule spread the costs for the program equitably among the affected parties?

INTENDED FOLLOWUP ACTIONS:

Once fees are established by rule, the Department will implement the collection mechanism and begin the process of developing rules for standards for the preparation of contingency plans. The rules will include: 1) the date for submission of contingency plans; 2) the required contents of the plans; and 3) the methods for determining the adequacy of those plans. The rules committee will have its first meeting on November 12, 1991. Our goal is to have the rules drafted and ready for EQC approval in May 1992. The first plans will be due by January 1, 1993.

Approved:

Section: *R. Whittell*
Division: *Lydia Taylor*
Director: *Julian*

Report Prepared By: Bruce Sutherland

Phone: 229-6035

Date Prepared: October 2, 1991.

Bruce Sutherland:crw
SW\WC9\WC9171
10-22-91

ATTACHMENT A

Proposed Rule

Definitions

340-47-010 (add the following definitions)

(8) "Facility" means any structure, group of structures, equipment, pipeline, or device, other than a vessel located on or near navigable waters of a state, that is used for producing, storing, handling, transferring, processing or transporting oil in bulk and that is capable of storing or transporting 10,000 or more gallons of oil. "Facility" does not include:

(a) A railroad car, motor vehicle or other rolling stock while transporting oil over the highways or rail lines of this state;

(b) An underground storage tank regulated by the Department of Environmental Quality or a local government under ORS 466.705 to 466.835 and 466.895; or

(c) Any structure, group of structures, equipment, pipeline or device, other than a vessel located on or near navigable waters of a state, that is used for producing, storing, handling, transferring, processing or transporting oil in bulk and that is capable of storing or transporting 10,000 or more gallons of oil but does not receive oil from tank vessels, barges or pipelines.

(9) "Bulk" means material stored or transported in loose, unpackaged liquid, powder or granular form capable of being conveyed by a pipe, bucket, chute or belt system.

(10) "Offshore facility" means any facility located in, on or under any of the navigable waters of the state.

(11) "Onshore facility" means any facility located in, on or under any land of the state, other than submerged land, that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters of the state or adjoining shorelines.

(11) "Navigable waters" means the Columbia River, the Willamette River up to Willamette Falls, the Pacific Ocean and estuaries to the head of tide water.

(12) "Pipeline" means an onshore facility, including piping, compressors, pump stations and storage tanks, used to transport oil between facilities or between facilities and tank vessels.

(13) "Ship" means any boat, ship, vessel, barge, or other floating craft of any kind.

(14) "Tank vessel" means a ship that is constructed or adopted to carry oil in bulk as cargo or cargo residue. "Tank vessel" does not include:

(a) A vessel carrying oil in drums, barrels or other packages;

(b) A vessel carrying oil as fuel or stores for that vessel;
or

(c) An oil spill response barge or vessel.

(14) "Self-propelled tank vessel" means a tank vessel that is capable of moving under its own power.

(15) "Trip" means travel to the appointed destination and return travel to the point of origin within the navigable waters of the State of Oregon.

Program Administration and Compliance Fees

340-47-035 (1) All offshore and onshore facilities required to develop oil spill prevention and emergency response plans under ORS 468B.345 shall be assessed an annual fee of \$3000. The fee period shall correspond with the state's fiscal year (July 1 through June 30) and the fee shall be paid annually during the month of July. For the 1991 - 1992 fiscal year only, fees will be due on or before January 1, 1992.

(2) All self-propelled tank vessels required to develop oil spill prevention and emergency response plans under ORS 468B.345 shall be assessed a per trip fee of \$650. The fee shall be remitted to the Department within 30 days of conclusion of each trip.

(3) Fees assessed under this rule may be used by the Department to administer the Oil Spill Prevention Act under ORS 468B.300 to 468B.420, including the review of facility and vessel oil spill prevention and emergency response plans, plan compliance inspections, exercises, training, and other duties pursuant to administration and implementation of the Act.

(4) Moneys collected under this rule shall be deposited in the State Treasury to the credit of the Oil Spill Prevention Fund established by ORS 468B.410.

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335 (7), this statement provides information on the Environmental Quality Commission's intended action to adopt a rule.

(1) Legal Authority

Senate Bill 242 amends Oregon Revised Statutes (ORS) 468.780 and authorizes the Department to adopt by rule a schedule of fees to be assessed on offshore facilities, onshore facilities and on self-propelled tank vessels in an amount not to exceed \$153,600 per year for all such facilities and vessels.

(2) Need for the Rule

The fee schedule set forth by statute in Senate Bill 242 does not specifically identify how the \$153,600 is to be divided between the covered facilities and vessels. The schedule must be established by rule in order to implement the requirements of SB 242.

(3) Principal Documents Relied Upon in this Rulemaking

Oregon Revised Statutes 468.780 to 468.833, Oil Spillage Regulation.

Senate Bill 242 C-Engrossed

LAND USE COMPATIBILITY STATEMENT

Land Use Consistency

This fee schedule does not directly affect land use. It does indirectly affect Goal 6 (Air, Water and Land Resources Quality) in that the fees are to be used to implement an oil spill prevention program to control the accidental release of pollutants into waters of the state.

FISCAL AND ECONOMIC IMPACT

DIRECTLY IMPACTED REGULATED COMMUNITY

- (1). Cargo vessels over 300 gross tons: # of vessels = est 1400
of companies = unknown

Assessment by DEQ = \$25/trip, est. 2000 trips/year

Annual revenue = est \$50,000

Other costs: \$100/trip assessment by the Marine Fire and Safety Assn. to cover:

- contingency plan development/update
- exercise of plan
- response contract
- equipment acquired
- training

Liability insurance (required by federal law)
Financial assurance (, , ,)

- (2). Oil transport barges > 300 gross tons: # of vessels = 50
of companies = 4

Assessment by DEQ = \$28/trip, est. 1700 trips/year

Annual revenue = est. \$47,600

- Other costs:
- contingency plan development/update
 - exercise of plan
 - response contract
 - response equipment
 - training
 - liability insurance (required by feds)
 - financial assurance (, ,)

- (3). Oil storage facilities > 10,000 gallons: # of facilities = 25
(includes private and public facilities)

Assessment by DEQ = \$3000 annual fee per facility

Annual revenue = est. \$75,000

- Other costs:
- contingency plan development/update
 - exercise of plan
 - response contract
 - response equipment
 - training
 - liability insurance (required by feds)

(4). Oil tankers > 300 gross tons: # of vessels = 30
of companies = 10
of trips = 120

Assessment by DEQ = \$650 per trip

Annual revenue = est. \$78,000

Other costs: - contingency plan development/update
- exercise of plan
- response contract
- response equipment
- training
- liability insurance (required by feds)
- financial assurance (, ,)

(5). It is estimated that costs to the regulated community as a result of the fees assessed by DEQ on oil transported or stored in Oregon will range from .006 to .01 cents/gallon. Our assumption is that this will not affect the price of gas to the consumer at the gas pump.

(6). With the exception of the direct assessment by DEQ to manage the program mandated by SB 242, all of the identified costs above would will be required by the Federal Oil Pollution Act of 1990. In addition, cargo vessels, barges and tankers would have been covered by existing Washington state legislation and would have been required to develop nearly identical programs with similar expenses.

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

OIL SPILL PREVENTION PROGRAM ADMINISTRATION FEES

Hearing Date: 10-1-91
Comments Due: 10-1-91

WHO IS AFFECTED: All owners or operators of self-propelled tank vessels over 300 gross tons and all owners or operators of oil storage facilities over 10,000 gallons that receive oil by pipeline or vessel and are on or near navigable waters.

WHAT IS PROPOSED: The Department of Environmental Quality is proposing to establish an annual fee of \$3000 on all covered facilities and self-propelled tank vessels over 300 gross tons to cover the administrative costs of implementing Senate Bill 242 passed at the 1991 Legislature.

WHAT ARE THE HIGHLIGHTS: An annual cap of \$153,600 was established by Senate Bill 242 to be assessed on the affected parties. The \$3000 annual fee meets this limitation and divides the cost of the program equitably between two sectors of the regulated community.

HOW TO COMMENT: Copies of the proposed rule may be obtained from the Water Quality Division in Portland (811 SW 6th Ave). For further information contact Bruce Sutherland at 229-6035.

A public hearing will be held before a hearings officer at:

Time - 1:00 pm
Date - October 1, 1991
Place - Room 3A, Executive Building
811 S.W. 6th Avenue, Portland

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ Water Quality Division, 811 S.W. 6th Avenue, Portland, Oregon 97204, but must be received by no later than 5:00 pm October 1, 1991.



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

WHAT IS THE
NEXT STEP:

After public hearing the Environmental Quality Commission may adopt rules identical to the proposed rules, adopt modified rules, or decline to act. The Commissions decision should come on November 7, 1991 as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

SW\WC5thru8\WC8819

66th OREGON LEGISLATIVE ASSEMBLY--1991 Regular Session

C-Engrossed Senate Bill 242

Ordered by the House June 27
Including Senate Amendments dated April 19 and House Amendments
dated June 17 and June 27

Printed pursuant to Senate Interim Rule 213.23 by order of the President of the Senate in conformance with pre-session filing rules, indicating neither advocacy nor opposition on the part of the President (at the request of Budget and Management Division, Executive Department)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Requires oil contingency plans for oil facilities and vessels. Directs Environmental Quality Commission to adopt standards for plan. Permits Environmental Quality Commission to establish reasonable fees for review and approval of plan. Provides for compliance with Federal Oil Pollution Act of 1990. Directs Environmental Quality Commission to adopt rules to test adequacy of plan. Requires Department of Environmental Quality to assess fees on certain structures and vessels to pay costs incident to administration of Act. Establishes safety committee for Oregon coast to operate under direction of Ports Division of Economic Development Department. Creates Oil Spill Prevention Fund. Imposes civil and criminal penalties. Requires study regarding application of Act to hazardous materials spills. Appropriates money. Limits expenditures.

A BILL FOR AN ACT

1
2 Relating to oil spills; creating new provisions; amending ORS 468.780 and 777.817; appropriating
3 money; limiting expenditures; and declaring an emergency.

4 **Be It Enacted by the People of the State of Oregon:**

5 **SECTION 1.** Sections 2 and 4 to 19 of this Act are added to and made a part of ORS 468.780
6 to 468.815.

7 **SECTION 2.** (1) The Legislative Assembly finds that:

8 (a) Oil spills present a serious danger to the fragile natural environment of the state.

9 (b) Commercial vessel activity on the navigable waters of the state is vital to the economic in-
10 terests of the people of the state.

11 (c) Recent studies conducted in the wake of disastrous oil spills have identified the following
12 problems in the transport and storage of oil:

13 (A) Gaps in regulatory oversight;

14 (B) Incomplete cost recovery by states;

15 (C) Despite research in spill cleanup technology, it is unlikely that a large percentage of oil can
16 be recovered from a catastrophic spill;

17 (D) Because response efforts cannot effectively reduce the impact of oil spills, prevention is the
18 most effective approach to oil spill management; and

19 (E) Comprehensive oil spill prevention demands participation by industry, citizens, environ-
20 mental organizations and local, state, federal and international governments.

21 (2) Therefore, the Legislative Assembly declares it is the intent of sections 4 to 19 of this 1991
22 Act to establish a program to promote:

23 (a) The prevention of oil spills especially on the large, navigable waters of the Columbia River,

NOTE: Matter in bold face in an amended section is new; matter *(italic and bracketed)* is existing law to be omitted.

1 the Willamette River and the Oregon coast;

2 (b) Oil spill response preparedness, including the identification of actions and content required
3 for an effective contingency plan;

4 (c) A consistent west coast approach to oil spill prevention and response;

5 (d) The establishment, coordination and duties of safety committees as provided in section 19
6 of this 1991 Act; and

7 (e) To the maximum extent possible, coordination of state programs with the programs and
8 regulations of the United States Coast Guard and adjacent states.

9 SECTION 3. ORS 468.780 is amended to read:

10 468.780. As used in ORS 468.020, 468.095, 468.140 (3) and 468.780 to 468.833:

11 (1) "Bulk" means material stored or transported in loose, unpackaged liquid, powder or
12 granular form capable of being conveyed by a pipe, bucket, chute or belt system.

13 (2) "Cargo vessel" means a self-propelled ship in commerce, other than a tank vessel, of
14 300 gross tons or more. "Cargo vessel" does not include a vessel used solely for commercial
15 fish harvesting.

16 (3) "Commercial fish harvesting" means taking food fish with any gear unlawful for an-
17 gling under ORS 506.006, or taking food fish in excess of the limits permitted for personal
18 use, or taking food fish with the intent of disposing of such food fish or parts thereof for
19 profit, or by sale, barter or trade, in commercial channels.

20 (4) "Contingency plan" means an oil spill prevention and emergency response plan re-
21 quired under section 4 of this 1991 Act.

22 (5) "Covered vessel" means a tank vessel, cargo vessel or passenger vessel.

23 (6) "Discharge" means any emission other than natural seepage of oil, whether inten-
24 tional or unintentional. "Discharge" includes but is not limited to spilling, leaking, pumping,
25 pouring, emitting, emptying or dumping oil.

26 (7) "Exploration facility" means a platform, vessel or other offshore facility used to ex-
27 plore for oil in the navigable waters of the state. "Exploration facility" does not include
28 platforms or vessels used for stratigraphic drilling or other operations that are not author-
29 ized or intended to drill to a producing formation.

30 (8) "Facility" means any structure, group of structures, equipment, pipeline or device,
31 other than a vessel located on or near navigable waters of a state, that is used for producing,
32 storing, handling, transferring, processing or transporting oil in bulk and that is capable of
33 storing or transporting 10,000 or more gallons of oil. "Facility" does not include:

34 (a) A railroad car, motor vehicle or other rolling stock while transporting oil over the
35 highways or rail lines of this state;

36 (b) An underground storage tank regulated by the Department of Environmental Quality
37 or a local government under ORS 466.705 to 466.835 and 466.895; or

38 (c) Any structure, group of structures, equipment, pipeline or device, other than a vessel
39 located on or near navigable waters of a state, that is used for producing, storing, handling,
40 transferring, processing or transporting oil in bulk and that is capable of storing or trans-
41 porting 10,000 or more gallons of oil but does not receive oil from tank vessels, barges or
42 pipelines.

43 [(1)] (9) "Hazardous material" has the meaning given that term in ORS 466.605.

44 (10) "Maritime association" means an association or cooperative of marine terminals,

1 facilities, vessel owners, vessel operators, vessel agents or other maritime industry groups,
2 that provides oil spill response planning and spill related communications services within the
3 state.

4 (11) "Maximum probable spill" means the maximum probable spill for a vessel operating
5 in the navigable waters of the state considering the history of spills of vessels of the same
6 class operating on the west coast of the United States.

7 (12) "Navigable waters" means the Columbia River, the Willamette River up to
8 Willamette Falls, the Pacific Ocean and estuaries to the head of tide water.

9 (13) "Offshore facility" means any facility located in, on or under any of the navigable
10 waters of the state.

11 [(2)] (14) "Oils" or "oil" means oil, including gasoline, crude oil, fuel oil, diesel oil, lubricating
12 oil, sludge, oil refuse and any other petroleum related product.

13 (15) "Onshore facility" means any facility located in, on or under any land of the state,
14 other than submerged land, that, because of its location, could reasonably be expected to
15 cause substantial harm to the environment by discharging oil into or on the navigable waters
16 of the state or adjoining shorelines.

17 (16) "Passenger vessel" means a ship of 300 or more gross tons carrying passengers for
18 compensation.

19 (17) "Person" has the meaning given the term in ORS 468.005.

20 [(3)] (18) "Person having control over oil" includes but is not limited to any person using, stor-
21 ing or transporting oil immediately prior to entry of such oil into the navigable waters of the state,
22 and shall specifically include carriers and bailees of such oil.

23 (19) "Pipeline" means an onshore facility, including piping, compressors, pump stations
24 and storage tanks, used to transport oil between facilities or between facilities and tank
25 vessels.

26 (20) "Region of operation" with respect to the holder of a contingency plan means the
27 area where the operations of the holder that require a contingency plan are located.

28 [(4)] (21) "Ship" means any boat, ship, vessel, barge or other floating craft of any kind.

29 (22) "Tank vessel" means a ship that is constructed or adapted to carry oil in bulk as
30 cargo or cargo residue. "Tank vessel" does not include:

31 (a) A vessel carrying oil in drums, barrels or other packages;

32 (b) A vessel carrying oil as fuel or stores for that vessel; or

33 (c) An oil spill response barge or vessel.

34 (23) "Worst case spill" means:

35 (a) In the case of a vessel, a spill of the entire cargo and fuel of the tank vessel compli-
36 cated by adverse weather conditions; and

37 (b) In the case of an onshore or offshore facility, the largest foreseeable spill in adverse
38 weather conditions.

39 SECTION 4. (1) Unless an oil spill prevention and emergency response plan has been approved
40 by the Department of Environmental Quality and has been properly implemented, no person shall:

41 (a) Cause or permit the operation of an onshore facility in the state;

42 (b) Cause or permit the operation of an offshore facility in the state; or

43 (c) Cause or permit the operation of a covered vessel within the navigable waters of the state.

44 (2) It is not a defense to an action brought for a violation of subsection (1) of this section that

1 the person charged believed that a current contingency plan had been approved by the department.

2 (3) A contingency plan shall be renewed at least once every five years.

3 **SECTION 5.** (1) On or before July 1, 1992, the Environmental Quality Commission shall adopt
4 by rule standards for the preparation of contingency plans for facilities and covered vessels.

5 (2) The rules adopted under subsection (1) of this section shall be coordinated with rules and
6 regulations adopted by the State of Washington and the United States Coast Guard and shall require
7 contingency plans that at a minimum meet the following standards. The plan shall:

8 (a) Include complete details concerning the response to oil spills of various sizes from any cov-
9 ered vessel or facility covered by the contingency plan.

10 (b) To the maximum extent practicable, be designed, in terms of personnel, materials and
11 equipment, to:

12 (A) Remove oil and minimize any damage to the environment resulting from a maximum probable
13 spill; and

14 (B) Remove oil and minimize any damage to the environment resulting from a worst case spill.

15 (c) Consider the nature and number of facilities and marine terminals in a geographic area and
16 the resulting ability of a facility to finance a plan and pay for department review.

17 (d) Describe how the contingency plan relates to and is coordinated with the response plan de-
18 veloped by the Department of Environmental Quality under ORS 468.831 and 468.833 and any rele-
19 vant contingency plan prepared by a cooperative, port, regional entity, the state or the Federal
20 Government in the same area of the state covered by the plan.

21 (e) Provide procedures for early detection of an oil spill and timely notification of appropriate
22 federal, state and local authorities about an oil spill in accordance with applicable state and federal
23 law.

24 (f) Demonstrate ownership of or access to an emergency response communications network
25 covering all locations of operation or transit by a covered vessel. The emergency response commu-
26 nications network also shall provide for immediate notification and continual emergency communi-
27 cations during cleanup response.

28 (g) State the number, training preparedness and fitness of all dedicated, pre-positioned personnel
29 assigned to direct and implement the plan.

30 (h) Incorporate periodic training and drill programs to evaluate whether the personnel and
31 equipment provided under the plan are in a state of operational readiness at all times.

32 (i) State the means of protecting and mitigating the effects of a spill on the environment, in-
33 cluding fish, marine mammals and other wildlife, and insuring that implementation of the plan does
34 not pose unacceptable risks to the public or to the environment.

35 (j) Provide a detailed description of equipment, training and procedures to be used by the crew
36 of a vessel, or the crew of a tugboat involved in the operation of a nonself-propelled tank vessel, to
37 minimize vessel damage, stop or reduce spilling from the vessel and only when appropriate and the
38 vessel's safety is assured, contain and clean up the spilled oil.

39 (k) Provide arrangements for pre-positioning oil spill containment and cleanup equipment and
40 trained personnel at strategic locations from which the personnel and equipment can be deployed
41 to the spill site to promptly and properly remove the spilled oil.

42 (L) Provide arrangements for enlisting the use of qualified and trained cleanup personnel to
43 implement the plan.

44 (m) Provide for disposal of recovered oil in accordance with local, state and federal laws.

1 (n) State the measures that have been taken to reduce the likelihood a spill will occur, including
2 but not limited to design and operation of a vessel or facility, training of personnel, number of per-
3 sonnel and backup systems designed to prevent a spill.

4 (o) State the amount and type of equipment available to respond to a spill, where the equipment
5 is located and the extent to which other contingency plans rely on the same equipment.

6 (p) If the commission has adopted rules permitting the use of dispersants, describe the circum-
7 stances and the manner for the application of dispersants in conformance with the rules of the
8 commission.

9 **SECTION 6.** (1) A contingency plan for a facility or covered vessel shall be submitted to the
10 Department of Environmental Quality within 12 months after the commission adopts rules under
11 section 5 of this 1991 Act. The department may adopt a schedule for submission of an oil contin-
12 gency plan within the 12-month period. The schedule for the Columbia River shall be coordinated
13 with the State of Washington. The department may adopt an alternative schedule for the Oregon
14 coast and the Willamette River.

15 (2) The contingency plan for a facility shall be submitted by the owner or operator of the facility
16 or by a qualified oil spill response cooperative in which the facility owner or operator is a partic-
17 ipating member.

18 (3) The contingency plan for a tank vessel shall be submitted by:

19 (a) The owner or operator of the tank vessel;

20 (b) The owner or operator of the facility at which the vessel will be loading or unloading its
21 cargo; or

22 (c) A qualified oil spill response cooperative in which the tank vessel owner or operator is a
23 participating member.

24 (4) Subject to conditions imposed by the department, the contingency plan for a tank vessel, if
25 submitted by the owner or operator of a facility, may be submitted as a single plan for all tank
26 vessels of a particular class that will be loading or unloading cargo at the facility.

27 (5) The contingency plan for a cargo vessel or passenger vessel may be submitted by the owner
28 or operator of the vessel, or the agent for the vessel resident in this state. Subject to conditions
29 imposed by the department, the owner, operator, agent or a maritime association may submit a sin-
30 gles contingency plan for cargo vessels or passenger vessels of a particular class.

31 (6) A person that has contracted with a facility or covered vessel to provide containment and
32 cleanup services and that meets the standards established by the commission under section 5 of this
33 1991 Act may submit the contingency plan for any facility or covered vessel for which the person
34 is contractually obligated to provide services. Subject to conditions imposed by the department, the
35 person may submit a single plan for more than one covered vessel.

36 (7) The requirements of submitting a contingency plan under this section may be satisfied by a
37 covered vessel by submission of proof of assessment participation by the vessel in a maritime asso-
38 ciation. Subject to conditions imposed by the department, the association may submit a single plan
39 for more than one facility or covered vessel or may submit a single plan providing contingencies to
40 respond for different classes of covered vessels.

41 (8) A contingency plan prepared for an agency of the Federal Government or an adjacent state
42 that satisfies the requirements of sections 4 to 7 of this 1991 Act and the rules adopted by the En-
43 vironmental Quality Commission may be accepted as a plan under section 4 of this 1991 Act. The
44 commission shall assure that to the greatest extent possible, requirements for a contingency plan

1 under sections 4 to 7 of this 1991 Act are consistent with requirements for a plan under federal law.

2 (9) Covered vessels may satisfy the requirements of submitting a contingency plan under this
3 section through proof of current assessment participation in an approved plan maintained with the
4 department by a maritime association.

5 (10) A maritime association may submit a contingency plan for a cooperative group of covered
6 vessels. Covered vessels that have not previously obtained approval of a plan may enter the
7 navigable waters of the state if, upon entering such waters, the vessel pays the established assess-
8 ment for participation in the approved plan maintained by the association.

9 (11) A maritime association shall have a lien on the responsible vessel if the vessel owner or
10 operator fails to remit any regular operating assessments and shall further have a lien for the re-
11 covery for any direct costs provided to or for the vessel by the maritime association for oil spill
12 response or spill related communications services. The lien shall be enforced in accordance with
13 applicable law.

14 (12) Obligations incurred by a maritime association and any other liabilities or claims against
15 the association shall be enforced only against the assets of the association, and no liability for the
16 debts or action of the association exists against either the State of Oregon or any other subdivision
17 or instrumentality thereof, or against any member, officer, employee or agent of the association in
18 an individual or representative capacity.

19 (13) Except as otherwise provided in this chapter, neither the members of the association, its
20 officers, agents or employees, nor the business entities by whom the members are regularly em-
21 ployed, may be held individually responsible for errors in judgment, mistakes or other acts, either
22 of commission or omission, as principal, agent, person or employee, save for their own individual
23 acts of dishonesty or crime.

24 (14) Assessment participation in a maritime association does not constitute a defense to liability
25 imposed under sections 4 to 19 of this 1991 Act or other state or federal law. Such assessment par-
26 ticipation shall not relieve a covered vessel from complying with those portions of the approved
27 maritime association contingency plan that may require vessel specific oil spill response equipment,
28 training or capabilities for that vessel.

29 **SECTION 7.** In reviewing the contingency plan required by section 4 of this 1991 Act, the De-
30 partment of Environmental Quality shall consider at least the following factors:

31 (1) The adequacy of containment and cleanup equipment, personnel, communications equipment,
32 notification procedures and call-down lists, response time and logistical arrangements for coordi-
33 nation and implementation of response efforts to remove oil spills promptly and properly and to
34 protect the environment;

35 (2) The nature and amount of vessel traffic within the area covered by the plan;

36 (3) The volume and type of oil being transported within the area covered by the plan;

37 (4) The existence of navigational hazards within the area covered by the plan;

38 (5) The history and circumstances surrounding prior spills of oil within the area covered by the
39 plan;

40 (6) The sensitivity of fisheries and wildlife and other natural resources within the area covered
41 by the plan;

42 (7) Relevant information on previous spills contained in on-scene coordinator reports covered
43 by the plan; and

44 (8) The extent to which reasonable, cost-effective measures to reduce the likelihood that a spill

1 will occur have been incorporated into the plan.

2 **SECTION 8.** (1) The department shall approve a contingency plan only if it determines that the
3 plan meets the requirements of sections 4 to 7 of this 1991 Act and:

4 (a) The covered vessel or facility demonstrates evidence of compliance with section 13 of this
5 1991 Act; and

6 (b) If implemented, the plan is capable, to the maximum extent practicable in terms of personnel,
7 materials and equipment, of removing oil promptly and properly and minimizing any damage to the
8 environment.

9 (2) An owner or operator of a covered vessel or facility shall notify the department in writing
10 immediately of any significant change affecting the contingency plan, including changes in any fac-
11 tor set forth in this section or in rules adopted by the Environmental Quality Commission. The de-
12 partment may require the owner or operator to update a contingency plan as a result of these
13 changes.

14 (3) A holder of an approved contingency plan does not violate the terms of the contingency plan
15 by furnishing to another plan holder, after notifying the department, equipment, materials or per-
16 sonnel to assist the other plan holder in a response to an oil discharge. The plan holder shall re-
17 place or return the transferred equipment, materials and personnel as soon as feasible.

18 (4) The department may attach any reasonable term or condition to its approval or modification
19 of a contingency plan that the department determines is necessary to insure that the applicant:

20 (a) Has access to sufficient resources to protect environmentally sensitive areas and to prevent,
21 contain, clean up and mitigate potential oil discharges from the facility or tank vessel;

22 (b) Maintains personnel levels sufficient to carry out emergency operations; and

23 (c) Complies with the contingency plan.

24 (5) The contingency plan must provide for the use by the applicant of the best technology
25 available at the time the contingency plan was submitted or renewed.

26 (6) The department may require an applicant or a holder of an approved contingency plan to
27 take steps necessary to demonstrate its ability to carry out the contingency plan, including:

28 (a) Periodic training;

29 (b) Response team exercises; and

30 (c) Verification of access to inventories of equipment, supplies and personnel identified as
31 available in the approved contingency plan.

32 (7) The department may consider evidence that oil discharge prevention measures such as dou-
33 ble hulls or double bottoms on vessels or barges, secondary containment systems, hydrostatic test-
34 ing, enhanced vessel traffic systems or enhanced crew or staffing levels have been implemented and
35 in its discretion, may make exceptions to the requirements of this section to reflect the reduced risk
36 of oil discharges from the facility or tank vessel for which the plan is submitted or being modified.

37 (8) Before the department approves or modifies a contingency plan required under section 4 of
38 this 1991 Act, the department shall provide a copy of the contingency plan to the State Department
39 of Fish and Wildlife, the office of the State Fire Marshal and the Department of Land Conservation
40 and Development for review. The agencies shall review the plan according to procedures and time
41 limits established by rule of the Environmental Quality Commission.

42 (9) Upon approval of a contingency plan, the department shall issue to the plan holder a certif-
43 icate stating that the plan has been approved. The certificate shall include the name of the facility
44 or tank vessel for which the certificate is issued, the effective date of the plan and the date by

1 which the plan must be submitted for renewal.

2 (10) The approval of a contingency plan by the department does not constitute an express as-
3 surance regarding the adequacy of the plan or constitute a defense to liability imposed under this
4 chapter or any other state law.

5 **SECTION 9.** (1)(a) The Environmental Quality Commission by rule shall adopt procedures to
6 determine the adequacy of a contingency plan approved under section 8 of this 1991 Act.

7 (b) The rules shall require random practice drills without prior notice to test the adequacy of
8 the responding entities. The rules may provide for unannounced practice drills of an individual
9 contingency plan.

10 (c) The rules may require the contingency plan holder to publish a report on the drills. This
11 report shall include an assessment of response time and available equipment and personnel com-
12 pared to those listed in the contingency plan relying on the responding entities and requirements,
13 if any, for changes in the plans or their implementation. The department shall review the report and
14 assess the adequacy of the drill.

15 (d) The department may require additional drills and changes in arrangements for implementing
16 the approved plan that are necessary to insure the effective implementation of the plan.

17 (2) The Environmental Quality Commission by rule may require any tank vessel carrying oil as
18 cargo in the navigable waters of the state to:

19 (a) Place booms, in-water sensors or other detection equipment around tank vessels during
20 transfers of oil; and

21 (b) Submit to the department evidence of a structural and mechanical integrity inspection of the
22 tank vessel equipment and hull structures.

23 (3) A tank vessel that is conducting, or is available only for conducting, oil discharge response
24 operations is exempt from the requirements of subsection (1) of this section if the tank vessel has
25 received prior approval of the department. The department may approve exemptions under this
26 subsection upon application and presentation of information required by the department.

27 **SECTION 10.** (1) In addition to any other right of access or inspection conferred upon the de-
28 partment by section 9 of this 1991 Act, the department may at reasonable times and in a safe manner
29 enter and inspect facilities and tank vessels in order to insure compliance with the provisions of
30 sections 4 to 19 of this 1991 Act.

31 (2) The department shall coordinate with the State of Washington in the review of the tank
32 vessel structural integrity inspection programs conducted by the United States Coast Guard and
33 other federal agencies to determine whether the programs as actually operated by the federal
34 agencies adequately protect the navigable waters of the state. If the department determines that
35 tank vessel inspection programs conducted by the federal agencies are not adequate to protect the
36 navigable waters of the state, the department shall establish a state tank vessel inspection program.

37 **SECTION 11.** If the department determines under section 10 of this 1991 Act that a state tank
38 vessel inspection program is necessary, the Environmental Quality Commission shall adopt rules
39 necessary to enable the department to implement the state tank vessel inspection program.

40 **SECTION 12.** (1) Upon request of a plan holder or on the department's own initiative, the de-
41 partment, after notice and opportunity for hearing, may modify its approval of a contingency plan
42 if the department determines that a change has occurred in the operation of the facility or tank
43 vessel necessitating an amended or supplemental plan, or that the operator's discharge experience
44 demonstrates a necessity for modification.

1 (2) The department, after notice and opportunity for hearing, may revoke its approval of a con-
2 tingency plan if the department determines that:

3 (a) Approval was obtained by fraud or misrepresentation;

4 (b) The operator does not have access to the quality or quantity of resources identified in the
5 plan;

6 (c) A term or condition of approval or modification has been violated; or

7 (d) The plan holder is not in compliance with the plan and the deficiency materially affects the
8 plan holder's response capability.

9 (3) Failure of a holder of an approved or modified contingency plan to comply with the plan or
10 to have access to the quality or quantity of resources identified in the plan or to respond with those
11 resources within the shortest possible time in the event of a spill is a violation of sections 4 to 19
12 of this 1991 Act for purposes of ORS 466.890, 468.140, 468.992 and any other applicable law.

13 (4) If the holder of an approved or modified contingency plan fails to respond to and conduct
14 cleanup operations of an unpermitted discharge of oil with the quality and quantity of resources
15 identified in the plan and in a manner required under the plan, the holder is strictly liable, jointly
16 and severally, for the civil penalty assessed under ORS 466.890 and 468.140.

17 (5) In order to be considered in compliance with a contingency plan, the plan holder must:

18 (a) Establish and carry out procedures identified in the plan as being the responsibility of the
19 holder of the plan;

20 (b) Have access to and have on hand the quantity and quality of equipment, personnel and other
21 resources identified as being accessible or on hand in the plan;

22 (c) Fulfill the assurances espoused in the plan in the manner described in the plan;

23 (d) Comply with terms and conditions attached to the plan by the department under sections 4
24 to 11 of this 1991 Act; and

25 (e) Successfully demonstrate the ability to carry out the plan when required by the department
26 under section 9 of this 1991 Act.

27 **SECTION 13.** (1) No person shall cause or permit the operation of a facility in the state unless
28 the person has proof of compliance with Section 1016 of the Federal Oil Pollution Act of 1990 (P.L.
29 101-380), if such compliance is required by federal law.

30 (2) No person may cause or permit the operation of an offshore exploration or production facility
31 in the state unless the person has proof of compliance with Section 1016 of the Federal Oil Pollution
32 Act of 1990 (P.L. 101-380).

33 (3) Except for a barge that does not carry oil as cargo or fuel or a spill response vessel or barge,
34 the owner of any vessel over 300 gross tons shall have proof of financial responsibility for the fol-
35 lowing vessels:

36 (a) For tank vessels over 300 gross tons:

37 (A) \$1,200 per gross ton or \$2 million for vessels of 3,000 gross tons or less, whichever is
38 greater; and

39 (B) \$1,200 per gross ton or \$10 million for vessels over 3,000 gross tons, whichever is greater;
40 or

41 (b) For any other covered vessel over 300 gross tons, \$600 per gross ton or \$500,000, whichever
42 is greater.

43 (4) On or before January 1, 1992, the department shall enter into an agreement with the United
44 States Coast Guard to receive notification of noncompliance with the provisions of this section.

1 **SECTION 14.** The Department of Environmental Quality shall:

2 (1) In cooperation with other natural resource agencies, develop a method of natural resource
3 valuation that fully incorporates nonmarket and market values in assessing damages resulting from
4 oil discharges;

5 (2) Work with other potentially affected states to develop a joint oil discharge prevention edu-
6 cation program for operators of fishing vessels, ferries, ports, cruise ships and marinas;

7 (3) Review the adequacy of and make recommendations for improvements in equipment, operat-
8 ing procedures and the appropriateness of west coast locations for transfer of oil;

9 (4) In cooperation with industry and the United States Coast Guard, develop local programs to
10 provide oil discharge response training to fishing boat operators and marinas;

11 (5) Adopt an incident command system to enhance the department's ability to manage responses
12 to a major oil discharge;

13 (6) Coordinate oil spill research with other west coast states and develop a framework for in-
14 formation sharing and combined funding of research projects;

15 (7) Annually review and revise the interagency response plan for oil spills in certain navigable
16 waters of the state developed under ORS 468.831 and 468.833;

17 (8) On the Oregon coast, assist affected local agencies and industry groups to complete an in-
18 ventory of existing plans and resources and to identify or establish an organization to coordinate
19 oil spill contingency planning as part of the alternative schedule adopted for the Oregon coast de-
20 scribed in section 6 (1) of this 1991 Act;

21 (9) Where adequate resources do not exist to prevent, contain, clean up and mitigate potential
22 oil spills, assist local agencies and industry groups to secure necessary funds and equipment; and

23 (10) In its annual review and revision of the plan developed under ORS 468.831 and 468.833:

24 (a) Consult with all affected local, state and federal agencies, municipal and community officials
25 and representatives of industry;

26 (b) Provide training in the use of the plan; and

27 (c) Conduct spill exercises to test the adequacy of the plan.

28 **SECTION 15.** The State Department of Fish and Wildlife shall develop and implement a pro-
29 gram to provide wildlife rescue training for volunteers. In developing the program, the department
30 shall:

31 (1) Work with agencies responsible for wildlife protection in other west coast states;

32 (2) Rely upon the oil wildlife rehabilitation plan developed under ORS 468.831; and

33 (3) Take such action as is required for reimbursement in accordance with the provisions of the
34 Federal Oil Pollution Act of 1990 (P.L. 101-380).

35 **NOTE:** Section 16 was deleted by amendment. Subsequent sections were not renumbered.

36 **SECTION 17.** (1) The Department of Environmental Quality shall assess fees on covered vessels
37 and offshore and onshore facilities to recover the costs of reviewing the plans and conducting the
38 inspections, exercises, training and activities required under sections 4 to 15 of this 1991 Act.

39 (2) The fees assessed by the department on cargo vessels and nonself-propelled tank vessels un-
40 der subsection (1) of this section shall be:

41 (a) On all cargo vessels, \$25 per trip.

42 (b) On all nonself-propelled tank vessels, \$28 per trip.

43 (3) As used in this subsection, "trip" means travel to the appointed destination and return travel
44 to the point of origin within the navigable waters of Oregon. For the purpose of assessing trip fees

1 under this section, self-propelled tank vessels transiting the navigable waters of the state in ballast
2 shall be considered cargo vessels.

3 (4) The Environmental Quality Commission shall establish by rule a schedule of fees to be as-
4 sessed under subsection (1) of this section on offshore facilities, onshore facilities and on self-
5 propelled tank vessels in an amount not to exceed \$153,600 per year for all such facilities and
6 vessels.

7 (5) Moneys collected under this section shall be deposited in the State Treasury to the credit
8 of the Oil Spill Prevention Fund established under section 18 of this 1991 Act.

9 **SECTION 18.** (1) The Oil Spill Prevention Fund is established separate and distinct from the
10 General Fund in the State Treasury. Interest earned on the fund shall be credited to the fund.
11 Moneys received by the Department of Environmental Quality for the purpose of oil and hazardous
12 material spill prevention and the fees collected under section 17 of this 1991 Act shall be paid into
13 the State Treasury and credited to the fund.

14 (2) The State Treasurer shall invest and reinvest moneys in the Oil Spill Prevention Fund in the
15 manner prescribed by law.

16 (3) The moneys in the Oil Spill Prevention Fund are appropriated continuously to the Depart-
17 ment of Environmental Quality to be used in the manner described in subsection (4) of this section.

18 (4) The Oil Spill Prevention Fund may be used by the Department of Environmental Quality to:

19 (a) Pay all costs of the department incurred to:

20 (A) Review the contingency plans submitted under section 7 of this 1991 Act;

21 (B) Conduct training, response exercises, inspection and tests in order to verify equipment in-
22 ventories and ability to prevent and respond to oil release emergencies and to undertake other ac-
23 tivities intended to verify or establish the preparedness of the state, a municipality or a party
24 required by sections 4 to 19 of this 1991 Act to have an approved contingency plan to act in ac-
25 cordance with that plan; and

26 (C) Verify or establish proof of financial responsibility required by section 13 of this 1991 Act.

27 (b) Review and revise the oil spill response plan required by ORS 468.831 and 468.833.

28 **SECTION 19.** (1) There is established a safety committee for the Oregon coast. A subcommittee
29 shall be appointed for Coos Bay and Yaquina Bay. In addition, the department also shall consult
30 with the State of Washington to establish a joint regional safety committee for the Columbia River
31 and may appoint a subcommittee for the Willamette River. The safety committee shall operate under
32 the direction of the Ports Division of the Economic Development Department pursuant to ORS
33 777.817.

34 (2) Each committee shall consist of not more than 11 members, appointed by the Director of the
35 Economic Development Department in consultation with the Director of the Department of Envi-
36 ronmental Quality. At a minimum, the following groups should be considered for representation on
37 the committees:

38 (a) Local port authorities;

39 (b) Tank vessel operators;

40 (c) Tug and barge operators;

41 (d) Pilots' organizations;

42 (e) Cargo vessel operators;

43 (f) Commercial fishermen;

44 (g) Pleasure boat operators;

- 1 (h) Environmental organizations;
- 2 (i) Local planning authorities; and
- 3 (j) The public at large.

4 (3) The members shall be appointed to the safety committee for a term of four years. The Di-
5 rector of the Economic Development Department in consultation with the Director of the Depart-
6 ment of Environmental Quality shall appoint the chairperson of each committee to serve a term of
7 four years.

8 (4) A majority of the members shall constitute a quorum for the transaction of business.

9 (5) The duties of the safety committees shall include but are not limited to:

10 (a) Planning for safe navigation and operation of covered vessels within each harbor;

11 (b) Developing safety plans;

12 (c) Reviewing and making recommendations to the Oregon Board of Maritime Pilots, ports and
13 the United States Coast Guard on the following:

14 (A) Pilotage requirements for all single boiler or single engine and single screw tank vessels
15 carrying oil in pilotage grounds;

16 (B) Reducing deadweight tonnage specifications for pilotage service for vessels carrying oil;

17 (C) Guidelines for tugs on tank vessels for tow cable size and material specifications, cable
18 maintenance practices, cable handling equipment design and barge recovery plan preparation;

19 (D) Establishing regional speed limits, based on escort vehicle limitations, for all tank vessels
20 in inland navigable waters and critical approaches to inland navigable waters;

21 (E) Requiring towing systems and plans on all tank vessels carrying oil; and

22 (F) The feasibility of establishing a pilot program for a near-miss reporting system that is coor-
23 dinated with vessel inspection information compiled as a result of inspections under sections 9 and
24 10 of this 1991 Act.

25 (6) Members of the safety committees established under this section are entitled to compensation
26 and expenses as provided in ORS 292.495.

27 (7) The Department of Environmental Quality shall serve in an advisory capacity to the safety
28 committees and review the safety plans. In addition, the United States Coast Guard shall be invited
29 to also act in an advisory capacity to the safety committees and may participate in the review of
30 safety plans.

31 **SECTION 19a.** If a safety committee established under section 19 of this Act determines that
32 the United States Coast Guard has not acted on the recommendations submitted under section 19
33 (5)(c)(C) and (E) of this Act in a timely and adequate manner, the committee may recommend to the
34 port that the port adopt rules to implement the committee's recommendations under section 19
35 (5)(c)(C) and (E) of this Act.

36 **SECTION 20.** Section 21 of this Act is added to and made a part of ORS chapter 776.

37 **SECTION 21.** In addition to its authority under ORS 776.115, the board may:

38 (1) Establish pilotage requirements for all single boiler or single engine and single screw tank
39 vessels carrying oil in pilotage grounds;

40 (2) Review and, if appropriate, reduce deadweight tonnage specifications for pilotage service for
41 vessels carrying oil;

42 (3) Establish regional speed limits, based on escort vehicle limitations, for all tank vessels in
43 inland navigable waters and critical approaches to inland navigable waters; and

44 (4) Establish a pilot program for a near-miss reporting system.

1 **SECTION 22.** ORS 777.817 is amended to read:

2 777.817. (1) The Ports Division shall provide managerial assistance and technical referral ser-
3 vices to ports organized under this chapter.

4 (2) The Ports Division shall:

5 (a) Disseminate such research and technical information as is available to the division; and

6 (b) Provide managerial assistance to ports and the safety committees created under section
7 19 of this 1991 Act requesting such assistance.

8 (3) The Ports Division shall work cooperatively with existing organizations and agencies that
9 provide research and technical services, including, but not limited to:

10 (a) The Division of State Lands;

11 (b) The State Marine Board; and

12 (c) The Sea Grant College and marine extension services at Oregon State University.

13 **SECTION 23.** In cooperation with the State Fire Marshal, the Department of Environmental
14 Quality shall conduct a study regarding whether the provisions of this Act also should apply to the
15 hazardous material spills in the navigable waters of the state. As used in this section, "hazardous
16 material" has the meaning given in ORS 466.605.

17 **SECTION 24.** In addition to and not in lieu of any other appropriation, there is appropriated
18 to the State Department of Fish and Wildlife, out of the General Fund, for the biennium beginning
19 July 1, 1991, the sum of \$108,401 for the purpose of carrying out the department's responsibilities
20 under this Act.

21 **SECTION 25.** In addition to and not in lieu of any other appropriation, there is appropriated
22 to the Economic Development Department, out of the General Fund, for the biennium beginning July
23 1, 1991, the sum of \$70,551 for purpose of carrying out the responsibilities of the safety committees
24 under this Act.

25 **SECTION 26.** Notwithstanding any other law, the amount \$456,688 is established for the
26 biennium beginning July 1, 1991, as the maximum limit for payment of expenses from fees, moneys
27 or other revenues, including Miscellaneous Receipts, excluding federal funds, collected or received
28 by the Department of Environmental Quality for the purpose of carrying out the provisions of this
29 Act.

30 **SECTION 27.** This Act being necessary for the immediate preservation of the public peace,
31 health and safety, an emergency is declared to exist, and this Act takes effect July 1, 1991.

32

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 3, 1991

TO: Environmental Quality Commission

FROM: Andy Schaedel

SUBJECT: Agenda Item No. H , November 7, 1991 EQC Meeting

Hearings Officer's Report on: Summary of Testimony
at the Public Hearings Concerning the Implementation
Fees for Senate Bill 242.

A public hearing was held at 1:00 pm on October 1, 1991 to consider proposed rules for the assessment of fees to implement the provisions of Senate Bill 242. One person provided oral testimony.

C. Kent Roberts, representing the Portland Steamship Operators Association, argued for an alternative approach to assessing fees on self-propelled tank vessels. It was their opinion that a per trip fee was more equitable for those vessels that make 1 or 2 trips per year. An annual fee would cause the independent operators to bear a disproportionate part of the total costs of the program. In addition, he noted that a vessel could make multiple trips annually under different charter operators. In this circumstance, the first charter operator would have to pay the annual fee and the later operators would pay nothing. The Steamship Operators Association also submitted a written statement.

Attachments:

1. Summary of Written Testimony
2. Copies of Written Testimony

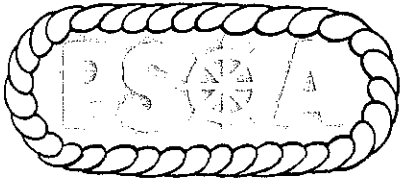
Author: Bruce Sutherland
Phone: 229-6035
Date: October 3, 1991

SUMMARY OF WRITTEN TESTIMONY

The Department received 3 letters postmarked on or before October 1, 1991, the close of the hearing record. The three letters are included in Attachment 2.

Two of the letters received were from major petroleum transporters, ARCO Transportation Company and Chevron Shipping Company. Both letters were in support of the \$3000 annual fee on both facilities and self-propelled tank vessels. The reasons for support centered on ease of administration, equitability and the relationship of fees to Departmental work loads.

One letter was received from the Portland Steamship Operators Association. The contents of the letter were identical to the oral testimony presented by C. Kent Roberts (see Hearings Officer Memo to EQC).



Portland Steamship Operators' Association, Inc.

200 S.W. Market St. • Suite 190

PORTLAND, OREGON 97201

September 25, 1991

DEQ Water Quality Division
811 S.W. 6th Avenue
Portland, Oregon 97204

re: Oil Spill Prevention Program Administration Fees

Gentlemen;

The Portland Steamship Operators Association (PSOA) wishes to comment on the DEQ's proposal to establish a \$3,000 annual fee for self propelled tank vessels over 300 gross tons to cover the administrative costs of implementing SB-242.

The PSOA applauds the efforts of the DEQ to simplify the collection of their administrative fees through the use of an annual fee. This idea, we are sure, works very well for the tank vessels which regularly call the Oregon area. Unfortunately there are more than just regular calling vessels which transport petroleum products into Oregon. We have been able to identify 17 vessels which called Oregon ports in 1990. Of these one called 3 times, one twice, 2 called once each for emergency repairs and the remaining 13 vessels also called once. If you were to apply the \$3,000 annual fee to this group of vessels you would collect a total of \$51,000 or a little over 33 percent of the annual administrative cap of \$153,600. The PSOA, therefore, strongly feels the annual fee for tank vessels as a means for collection of the administrative fee to be unfair and highly prejudicial to the occasional vessel caller.

The PSOA recommends that the DEQ give consideration to a more balanced approach to the collection of administrative fees. We believe that the vessel should be given the choice of paying either an annual fee or a per trip charge against a total maximum amount equal to the annual fee. We further recommend that the per trip charge be \$250. This way vessels chartered for a single voyage can be assessed a fair prorata administration fee based on the frequency of their calling. Conversely, vessels which anticipate multiple callings in Oregon may elect to pay a single annual fee.

We hope you appreciate our concerns and give them appropriate consideration. Should you have any questions, please do not hesitate to contact us.

Sincerely,

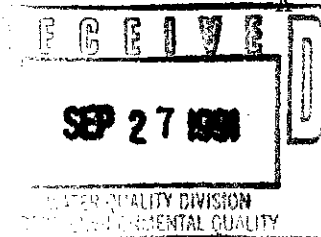
Portland Steamship Operators Association


Michael Hoff
President

OCT 1 1991

ARCO Transportation Company
300 Oceangate
Post Office Box 22617
Long Beach, California 90801-5617
Telephone 213 590 4513

Kurt Robert Oxley
Consultant
Government Relations



September 26, 1991

Oregon Department of
Environmental Quality
Water Quality Division
811 S. W. 6th Avenue
Portland, OR 97204

To whom it may concern:

Enclosed please find comments on behalf of ARCO in response to your proposed rule on Oil Spill Prevention Program Administration Fees. ARCO appreciates this opportunity to comment and to be a part of the rule-making process.

With best regards, I am

Sincerely,

Kurt R. Oxley

enclosure

WRITTEN COMMENTS OF KURT R. OXLEY
ON BEHALF OF ARCO
IN RESPONSE TO THE OREGON DEPARTMENT OF
ENVIRONMENTAL QUALITY REQUEST FOR COMMENTS
OIL SPILL PREVENTION PROGRAM ADMINISTRATION FEES
OCTOBER 1, 1991

I would like to begin by thanking you for the opportunity to provide written comments on the Department's proposed establishment of a fee to cover the costs of implementing Senate Bill 242, the Oil Spill Prevention Act of 1991. On behalf of ARCO, whose contacts with the State of Oregon include a fuel distribution terminal in Portland, occasional visits of our crude oil tankers to the Portland Shipyard, and an ownership interest in the Olympic Pipeline which carries refined petroleum product from refineries on Puget Sound to the terminals in Portland, I offer the following comments.

As you know, the oil spill prevention legislation established the fees to be assessed against cargo vessels and barges but left the final resolution of the split between facilities and tankers to the rule-making process. The proposed rule would serve to allocate the maximum annual cost of \$153,600 for the spill prevention program between the facility and tanker sectors. ARCO supports the rule as proposed by the Department of Environmental Quality.

ARCO believes that the funding formula proposed by the agency is the best possible funding alternative for three reasons:

1. The purpose of the fee is to recover administrative costs for contingency plan review, personnel training, and inspections. These activities are based on the physical presence of a tanker, barge, or terminal and are not related to the volume of oil involved. The fee does not reflect relative risk but focuses on prevention of spills from activity generated by tankers and oil barges.

2. This fee reflects a balance between ships and barges that have a high volume of activity and the terminal where storage and operational needs cause that activity.

3. This formula avoids placing an undue financial burden on any one company or operator. Financial burden has also been equitably allocated by the law's specifying a per trip fee for cargo vessels and for oil barges.

We appreciate the time and effort spent by the Department in researching this issue and in seeking the input and advice of all affiliated parties.

ARCO will continue to remain active in the contingency plan rule-making process as we all work to make Oregon waters safer and cleaner.

FACSIMILE COVER LETTER

**CHEVRON SHIPPING COMPANY
555 MARKET ST., ROOM 2041
SAN FRANCISCO, CA 94105-2870
FACSIMILE NO. (415) 894-4463**

2570

DATE: October 1, 1991

**TO: [REDACTED]
Oregon Dept. of Environmental Quality
FAX: (503) 229-6124**

MESSAGE: We understand that at the hearing today, before the Dept. of Environmental Quality, regarding Oregon Senate Bill 242, testimony was given suggesting that the contingency plan fee be assessed against tankers on a terminal visit, or port call, basis. We also know that the Western States Petroleum Association (WSPA) testified at the hearing in support of the proposed fixed \$3,000 per vessel fee. Chevron wishes to reiterate its support for the WSPA position and concurs fully with the State's suggested fixed fee. We see no justification for assessing fees on a port call basis.

The total number of vessel contingency plans required under SB 242 will be proportional to the number of vessels calling at Oregon ports. The number of contingency plans bear no relationship to the number of port calls made. Whether a vessel makes one call or ten, the State will devote an identical amount of time in reviewing and approving that vessel's contingency plan. Since the intent of the fee is to cover the State's costs for this activity, it seems only reasonable to establish a fee based on a number of plans to be reviewed and approved.

Chevron hopes you can appreciate the logic behind the proposed \$3,000 per vessel fee and will not reconsider a fee on a port call basis.

If you have any questions or wish to discuss this further, please give me a call at (415) 894-2570. We appreciate the opportunity to comment on this important piece of Oregon legislation.

**SENT BY: G. C. KRAATZ
GOVERNMENT & PUBLIC AFFAIRS DIVISION**

NUMBER OF PAGES INCLUDING COVER SHEET

IF YOU DO NOT RECEIVE ALL OF THE PAGES OR HAVE ANY PROBLEMS WITH TRANSMISSION, PLEASE CALL TERRI RUELOS (415) 894-4335.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 3, 1991

TO: Environmental Quality Commission

FROM: Bruce Sutherland

SUBJECT: Response to Comment Summary

Proposed Rules for Assessing Fees to Implement Senate
Senate Bill 242.

COMMENT

One sector of the regulated community felt that an annual fee on self-propelled tank vessels places an unfair proportion of the program costs on the operators of vessels who make one to two trips on an annual basis.

DEPARTMENT'S RESPONSE

After further evaluation, the Department concurred. The proposed rules have been altered so that self-propelled tank vessels will be assessed on a per trip basis.

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: I
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption: New Industrial PM₁₀ Emission Standard Rules and Other Related Housekeeping Rule Amendments.

PURPOSE:

New and amended industrial PM₁₀ emission standards and other housekeeping rule revisions are needed to implement air pollution control strategies for PM₁₀ nonattainment areas required under the 1990 Clean Air Act.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

Authorize Rulemaking Hearing

Adopt Rules

- Proposed Rules
- Rulemaking Statements
- Land Use Evaluation Statement
- Fiscal and Economic Impact Statement
- Public Notice

Attachment A
Attachment B
Attachment G
Attachment C
Attachment D

Issue a Contested Case Order

Approve a Stipulated Order

Enter an Order

Proposed Order

Attachment

811 SW Sixth Avenue
Portland, OR 97204-1790
(503) 229-5696



Meeting Date: November 8, 1991
Agenda Item: I
Page 2

<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

The requested action is to adopt a package of new rules and rule revisions needed in support of revised and new PM₁₀ control strategies which must be submitted to the U.S. Environmental Protection Agency (EPA) by November 15, 1991 as required by the Clean Air Act. The requested action is divided into four parts of related rules.

PART 1: Industrial Contingency Measures

Part 1 consists of new industrial particulate emission standards that would be applicable to industrial sources located in any PM₁₀ nonattainment area that fails to reach attainment of the PM₁₀ air quality standard by the Clean Air Act deadline of December 31, 1994, as well as to industrial sources adjacent to the PM₁₀ nonattainment area which significantly impact the area.

Initially, the Department of Environmental Quality (Department, DEQ) proposed to establish the contingency emission limits at a level that met the Reasonably Available Control Technology (RACT) and the Best Available Control Technology (BACT) requirements of the Clean Air Act. These proposed rules were substantially equivalent to the current Medford/Grants Pass industrial particulate emission standards adopted in 1989 for wood-fired boilers, veneer dryers, particle dryers, hardboard plants, air handling (primarily wood dust) systems and charcoal plants.

The Department had initially proposed combined RACT/BACT emission limits for the contingency measures to meet two related requirements under the 1990 Clean Air Act (Act). First, the Act requires contingency measures to be adopted which go into effect with no additional regulatory action in any nonattainment area that fails to meet the attainment deadline. The Act requires that these measures be at least as stringent as RACT, and EPA guidance requires RACT to be implemented within 30 months (i.e. late 1997). Second, the Act requires that each PM₁₀ nonattainment area which fails to meet the deadline be reclassified as a serious nonattainment area within six months of the attainment deadline and requires the state to submit new control strategies for these

The Department was concerned that the timing of these two requirements would result in sources completing installation of RACT one year after the adoption of BACT and only 18 months before the compliance deadline for installing BACT, leading to cost-ineffectiveness. The original proposal was designed to eliminate this cost-ineffectiveness by combining the RACT and BACT requirements with a 48 month compliance schedule.

Testimony from industry, government officials and members of the public overwhelmingly opposed the Department's proposal to combine the RACT and BACT requirements, although some comments supported BACT in the contingency plan (see Hearing Officers Report in attachment H). Most of the comments focused on the cost of BACT and the potential impact on shutdowns and unemployment, the smaller portion of emissions from industry relative to woodburning, the possibility that EPA guidance will change by 1996, and the desirability of assessing the cause of the failure to attain prior to adopting additional control measures. In addition, some environmental groups informally expressed concern to the Department about establishing BACT now when BACT could be more stringent if established in late 1996. The Clean Air Act clearly allows the Environmental Quality Commission (EQC) to adopt RACT for the contingency plan and wait to adopt BACT until 18 months after an area is redesignated as a serious PM₁₀ nonattainment area. Therefore, the Department revised the proposal to establish RACT as contingency measures with 30 month compliance schedules.

The proposed revised contingency rules are substantially equivalent to the Medford/Grants Pass industrial particulate emission standards adopted in 1978 which the Department believes represent RACT. The rules establish contingency emission standards for large wood-fired boilers, particle dryers, hardboard plants, and air handling systems. Contingency rules for boilers at facilities with small boiler capacities, veneer dryers, and charcoal plants were eliminated from the revised proposal because the existing statewide rules are equivalent to the 1978 Medford/Grants Pass rules for these sources.

In actuality, the contingency rules would only activate controls for Klamath Falls and Eugene-Springfield. Sources in La Grande will be subject to RACT in the attainment control strategy, and existing sources in Medford-Ashland and Grants Pass are already subject to RACT/BACT (some rules in Grants Pass would be tightened, but no sources would be affected).

in La Grande will be subject to RACT in the attainment control strategy, and existing sources in Medford-Ashland and Grants Pass are already subject to RACT/BACT (some rules in Grants Pass would be tightened, but no sources would be affected).

Attachment F summarizes the industrial particulate emission contingency rules. Attachment J summarizes the changes from the rules as authorized for public hearings and the rules as proposed for adoption. Attachment K provides a basis for the Department's determination of RACT.

PART 2: Statewide Veneer Dryer Rules, and
PART 3: Medford-Ashland, Grants Pass and La Grande Rules

Parts 2 and 3 include a number of proposed housekeeping measures brought about by EPA comment to clarify enforcement of statewide industrial rules applicable to veneer dryers (Part 2), including those in PM₁₀ nonattainment areas, and a number of additional PM₁₀ sources subject to special PM₁₀ control rules in the Medford-Ashland and Grants Pass areas (Part 3). EPA has been more stringent over time in its review of state rules to improve enforceability and national consistency, and has requested a number of changes in Oregon industrial rules affecting PM₁₀ nonattainment areas. EPA cannot fully approve the State PM₁₀ control strategies until these supporting industrial rules have been approved. Attachment L contains EPA's objections to the existing rules.

The proposed changes in Parts 2 and 3 include clarification and addition of certain definitions including the definitions of "Average Operating Opacity", "Design Criteria", "EPA Method 9", "Fuel Moisture Content", "Major Source", "Maximum Opacity", "Offset" and "Particulate Matter". The Proposed changes also include deletion of the design opacity requirement (average operating and maximum opacity limits would still apply), deletion of the exemption for wet plumes from opacity limits (opacity readings of wet plumes is addressed by EPA Method 9), and clarification of the application of the emission limit for exhaust gases vented to the veneer dryer from steam generation. Part 3 also includes rule changes, supported by the Department and previously authorized for public hearing by the EQC involving the monitoring of small wood-fired boiler particulate emissions in the Medford-Ashland areas. This item is included as it is being incorporated into the other necessary changes to the Medford-Ashland rules and will be on the same hearing and adoption schedule.

A number of changes are incorporated into the revised rules proposed for adoption in response to hearing comments. One industry noted that defining "average operating opacity" as possibly 3 consecutive daily readings results in a more restrictive (and unobtainable) standard for veneer dryers. The definition was proposed in response to EPA comments that the existing rules - based on an undefined average (statewide rule) and unacceptably defined average (Medford-Ashland rule) - were unenforceable and therefore not approvable. The Department recognizes that the original intent of the "average operating opacity" standard was to consider variations in opacity performance over time and operating conditions. The proposed definition has been revised to ensure that the three opacity determinations are separated from each other by at least 30 days. The Department believes that this revision is enforceable and reflective of the intent of the rule with respect to a long-term average condition. In addition, sources which are subject to a tighter standard in the Medford-Ashland area continue to have the option to obtain a less stringent opacity limit provided they demonstrate by source test that the mass emission limit can be met at a higher opacity.

Comments were also received regarding the dual-fueling feasibility study proposed for wood-fired boilers in the Medford-Ashland nonattainment area. Some industry representatives commented that the study should not be initiated unless and until the attainment date is missed. Other members of the public commented that rather than studying feasibility, the dual-fueling requirement should be imposed in the control strategy now. The Department continues to propose that the feasibility study be completed prior to the attainment deadline so that a dual-fueling requirement can be added to the contingency plan if found by the EQC to be feasible and needed. A new rule is proposed to clarify the timing and criteria for an acceptable feasibility study.

EPA comments on the La Grande control PM_{10} control strategy proposed for concurrent adoption resulted in a determination that attainment could not be demonstrated without applying RACT to industry in the attainment plan. Accordingly, new rules are proposed in Division 30 to require RACT as part of the attainment strategy in La Grande with an outside compliance date of May 15, 1994 (30 months). The proposed rules are equivalent to the proposed RACT contingency measures. One existing source in La Grande, Boise Cascade, is affected by these rules. This source accepts the requirement and has already committed to a compliance date of

December 31, 1992. This issue is further discussed in the agenda item for the La Grande control strategy.

Technical revisions were also made to the definition of "Particulate Matter" and the opacity standard for particle dryers based on internal review.

PART 4: Ambient Air Quality Standards

In Part 4, the Department is proposing to remove the restriction established in May of 1988 that limited applicability of PM₁₀ and other ambient air standards to locations that meet EPA monitoring site guidelines. EPA has indicated to the Department that such a restriction makes the Department's rules less stringent than the Clean Air Act requirement and thus makes Oregon's State Implementation Plan (SIP) not approvable. EPA points out that flexibility must be maintained to deviate from the monitoring site guidelines if warranted by a particular situation.

One comment was received that this would result in nonattainment designations in more areas of the state because the standard would apply adjacent to emission sources. While it is true that the standard would apply anywhere in the ambient air, the Department's and EPA's intent in monitoring has been to follow the EPA monitoring site guidelines which would keep monitoring sites from being established at unreasonable locations. Furthermore, the revision simply makes the standards equivalent to the federal standards. If the proposed amendments are not adopted, EPA will disapprove the SIP and enforce the federal standards.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 468.280-468.340</u>	Attachment <u>E</u>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment _____
<input checked="" type="checkbox"/> Pursuant to Federal Law/Rule:	
Federal Clean Air Act Amendments of 1990.	Attachment _____
<input type="checkbox"/> Other:	Attachment _____
<input checked="" type="checkbox"/> Time Constraints:	

The 1990 Clean Air Act requires states to submit approvable PM₁₀ control strategies, including the specific industrial and other supporting rules necessary to implement the strategies, by November 15, 1991.

Meeting Date: November 8, 1991
Agenda Item: I
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DEVELOPMENTAL BACKGROUND:

<u> </u> Advisory Committee Report/Recommendation	Attachment <u> </u>
<u> X</u> Hearing Officer's Report/Recommendations	Attachment <u> H</u>
<u> X</u> Response to Testimony/Comments	Attachment <u> I</u>
<u> X</u> Prior EQC Agenda Items:	Attachment <u> </u>

Agenda Item E, April 1, 1977	Veneer Dryer Rules
Agenda Item F, March 30, 1979	Veneer Dryer Rules
Agenda Item I, July 19, 1985	Veneer Dryer Rules
Agenda Item L, April 29, 1988	Ambient Standards
Agenda Item E, September 8, 1989	Medford Industrial Rules
Agenda Item G, April 26, 1991	Small Wood-fired Boilers
Agenda Item E, August 22, 1991	Hearing authorization for these rules

<u> </u> Other Related Reports/Rules/Statutes:	Attachment <u> </u>
<u> X</u> Supplemental Background Information	Attachment <u> F,J,K,L</u>

- F. Summary of Industrial Contingency Requirements by area.
- J. Summary of changes from rules authorized for public hearing and rules proposed for adoption.
- K. Rationale for RACT determination.
- L. EPA correspondence describing objections to board products rules, Medford-Ashland special PM₁₀ control rules, and PM₁₀ and other ambient air quality standards.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The revised industrial contingencies (Part 1) will affect industrial PM₁₀ sources only in or near the Klamath Falls and Eugene-Springfield nonattainment areas if the Clean Air Act attainment deadline is missed. Other nonattainment areas now have at least RACT in their attainment strategies. With the proposed delaying of BACT establishment, the initial cost impact on sources from contingency measures would be lower than originally proposed. (Note that BACT will still be required to be established in a future rulemaking if an area fails to meet the attainment deadline.)

There would be no impact from the contingency rules in Medford because existing rules meet or exceed RACT. (Note that depending on the results of the dual-fueling feasibility study required under Part 3, a contingency dual-fueling requirement for Medford sources may be proposed for a future

rulemaking.) There would be no impact in Grants Pass because existing sources meet or exceed RACT. In La Grande, RACT would be required in the control strategy under Part 3, so there would be no impact from the contingency rules. The impact from the contingency rules would be more significant in Eugene-Springfield and Klamath Falls areas where several sources would be subject to tighter controls.

The proposed industrial housekeeping rule revisions in Parts 2 and 3 are intended to provide clarification, improve enforceability, and ensure EPA approval of the State Implementation Plan. Since these revisions do not change the intent of the rules, the Department does not expect the revisions to materially affect the operation of the emission sources subject to the rules.

The dual-fueling feasibility study in Part 3 would be funded by owners of wood-fired boilers in the Medford area. The revisions to boiler monitoring requirements would reduce emission monitoring costs for small boiler operators. The new RACT rules for sources in the La Grande area will affect one facility with large wood-fired boilers. However, this facility has already committed to a program to switch to natural gas boilers which will more than meet RACT requirements.

The proposed housekeeping revisions to the ambient standard (Part 4) should have no effect on the determination of the ambient air pollutant concentrations. Ambient air pollutant concentrations should continue to be monitored by approved methods at sites which meet the EPA monitoring siting guidelines.

PROGRAM CONSIDERATIONS:

If an area fails to meet the December 31, 1994, or extended deadlines of the Clean Air Act, the new industrial contingency requirements (Part 1) would necessitate additional plan reviews, permit modifications, inspections, and other compliance assurance activities by Department of Environmental Quality staff. This additional work could require additional staff which would need to be supported by permit emission fees.

The industrial housekeeping revisions (Parts 2 and 3) should be helpful to DEQ staff in interpreting the intent and enforcing existing rules. The dual-fueling feasibility study will require limited DEQ staff resources for oversight. The La Grande RACT rules are not expected to significantly

increase the existing permitting activities for the affected source. The housekeeping amendments to ambient standards would have no programmatic effects.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Adopt a combined RACT/BACT requirement for the industrial contingency plan as originally proposed by the Department. This alternative was dropped based on opposing public comment from all sectors.
2. Do not adopt an industrial contingency plan. The Department evaluated whether existing industrial rules could be determined to meet RACT and whether industry could be found to be an insignificant contributor to PM₁₀ levels and thus need no further controls. Technical justification could not be developed for either of these alternatives.
3. Delay the dual-fueling feasibility study until after the contingency plan is triggered, or require dual-fueling in Medford as part of the attainment strategy. The option of delaying the feasibility study was rejected because it would not meet the Clean Air Act intent that contingency measures are to be implemented immediately to provide interim air quality improvement while a revised plan is being developed. The option of requiring dual-fueling in Medford as part of the attainment strategy was rejected because it is not needed to project attainment.
4. Do not adopt RACT in the control strategy for La Grande. Alternatives to applying RACT to industry to achieve the needed emission reductions to demonstrate attainment were evaluated for La Grande, and no other reasonable measures were identified. Additional reductions from industry were determined to be necessary to attain the standard.
5. Maintain the existing definition of ambient standards (Part 4). This option was rejected because it could jeopardize approval of the PM₁₀ control strategies.
6. Adopt the proposed amendments to Divisions 20, 25, 30 and 31, including changes made in response to public testimony.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission adopt the proposed amendments to Divisions 20, 25, 30 and 31 in Attachment A as revisions to the State Implementation Plan. These rules are key components to the overall emission reduction strategies for PM₁₀ nonattainment areas, and are required for the Department to submit fully approvable PM₁₀ control strategies to the Environmental Protection Agency within the time frame required by the Clean Air Act.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The Department is not aware of any conflicts with the strategic plan, agency policy, or legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

1. Does the Commission agree to adopt RACT for the industrial contingency plan and delay BACT establishment per minimum Clean Air Act requirements, or should RACT and BACT be implemented at the same time as originally proposed?
2. Does the proposed definition of "average operating opacity" (three readings of veneer dryer opacity separated by at least 30 days) meet the EPA enforceability criteria consistent with the stringency intent of the original rule?
3. Should the dual-fueling feasibility study be completed prior to the attainment date or initiated only if the Medford-Ashland contingency plan is triggered?

INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan revisions (amendments to Divisions 20, 25, 30 and 31) to EPA for approval.
2. Implement and enforce the rules.

Meeting Date: November 8, 1991
Agenda Item: I
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Approved:

Section:

John F. Kowalzyk

Division:

Public Affairs

Director:

Paul Hansen

Report Prepared By: Andy Ginsburg (229-5581)

Date Prepared: October 25, 1991

ADG:e
RPT\AH20047
(10/25/91)

Part 1: Industrial Contingency Requirements; Amendments to
Division 21

Industrial Contingency Requirements for PM₁₀ Nonattainment Areas

Purpose

340-21-200 OAR 340-21-200 through 340-21-245 establish contingency control requirements for existing industrial sources as required under section 172(c) of the Clean Air Act. These requirements become effective in a PM₁₀ nonattainment area if the area fails to attain the national ambient air quality standard for PM₁₀ by the applicable attainment date in the Clean Air Act.

Relation to Other Rules

340-21-205 OAR 340-21-200 through 340-21-245 shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent conflict, the most stringent rule shall apply.

Applicability

340-21-210 (1) OAR 340-21-200 through 340-21-245 shall apply in a PM₁₀ nonattainment area upon publication by EPA of notice in the Federal Register that the area has failed to attain the national ambient air quality standard for PM₁₀ by the attainment date required in the Clean Air Act.

(2)(a) OAR 340-21-200 through 340-21-245 shall apply to a major source located outside of a PM₁₀ nonattainment area upon a determination by the Department based upon a study conducted under subsection (b) of this section that the source has a significant impact on a PM₁₀ nonattainment area affected under section (1) of this rule.

(b) Upon request of the Department, the owner or operator of any source with the potential to have a significant impact on a PM₁₀ nonattainment area shall conduct, prior to the attainment date required in the Clean Air Act and in accordance with a study protocol approved by the Department, a receptor and dispersion modeling study of the impact of emissions from the source on the PM₁₀ nonattainment area.

Definitions

340-21-215 As used in OAR 340-21-200 through 340-21-245, unless otherwise required by context:

(1) "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 air stream.

(2) "Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of wood to obtain the fixed carbon in the wood.

(3) "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.

(4) "Contingency Requirements" means the requirements of OAR 340-21-200 through 340-21-245.

(5) "Design Criteria" means the numerical as well as narrative description of the basis of design including, but not necessarily limited to, design flow rates, temperatures, humidities, descriptions of the types and chemical species of contaminants, uncontrolled and expected controlled mass emission rates and concentrations, scopes of any vendor-supplied and owner-supplied equipment and utilities, and a description of any operational controls.

(6) "EPA" means the United States Environmental Protection Agency.

(7) "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.

(8) "General Arrangement", in the context of the compliance schedule requirements in this division, 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, the location and elevation above grade of the ultimate point of contaminant emission to the atmosphere, and the diameter of the emission vent.

(9) "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.

(10) "Large Sawmill" means a sawmill and/or planing mill which produces 25,000 or more board feet/shift of finished product.

(12) "Major Source" is defined in OAR 340-20-225.

(13) "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.

(14) "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 shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run shall 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 shall have a minimum

sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Wood waste boilers shall be tested with DEQ Method 5; wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8.

(15) "Plywood" means a flat panel built generally of an odd number of thin sheets of veneers of wood in which the grain direction of each ply or layer is at right angles to the one adjacent to it.

(16) "Press/Cooling Vents" means any openings, generally located immediately above the board press or board cooling area, through which particulate and gaseous emissions from panelboard manufacturing (including, but not limited to, particleboard and hardboard) are exhausted, either by natural draft or by powered fan, from the building housing the process.

(17) "Significant Impact" means an annual average impact of 1.0 $\mu\text{g}/\text{m}^3$ or 24-hour average impact of 5.0 $\mu\text{g}/\text{m}^3$ of PM₁₀ from a source at the point of maximum concentration within a PM₁₀ nonattainment area as computed by a receptor and dispersion model approved by the Department.

(18) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

Compliance Schedule for Existing Sources

340-21-220 (1) Except as provided in sections (2) and (3) of this rule, compliance with applicable contingency requirements for a source that is located in an area prior to the date the contingency requirements first apply under OAR 340-21-210 shall be demonstrated as expeditiously as possible, but in no case later than the following schedule:

(a) No later than three months after the date the contingency requirements first apply under OAR 340-21-210, the owner or operator shall submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval; and if the Department disapproves the Design Criteria, the owner or operator shall revise the Design Criteria to meet the Department's objections and submit the revised Design Criteria to the Department no later than one month after receiving the Department's disapproval;

(b) No later than three months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department a General Arrangement and copies of purchase orders for any emission-control devices;

(c) No later than eight months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department vendor drawings as approved for construction of any emission-control devices and specifications of any other major equipment in the emission

control system in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;

(d) No later than nine months after receiving the Department's approval of the Design Criteria, the owner or operator shall begin construction of any emission-control devices;

(e) No later than sixteen months after receiving the Department's approval of Design Criteria, the owner or operator shall complete construction in accordance with the Design Criteria;

(f) No later than thirty months from the date the contingency requirements first apply under OAR 340-21-210 the owner or operator shall demonstrate compliance with the applicable contingency requirements.

(2) Section (1) of this rule shall not apply if the owner or operator has demonstrated within six months after the date the contingency requirements first apply under OAR 340-21-210 that the source is capable of being operated and is operated in continuous compliance with applicable contingency requirements and the Department has agreed with the demonstration in writing. The Department may grant an extension of up to twelve months after the date the contingency requirements first apply under OAR 340-21-210 for a source to demonstrate compliance under this section. The applicable contingency requirements shall be incorporated in the Air Contaminant Discharge Permit issued to the source.

(3) The Department may adjust the schedule specified in paragraphs (a) through (e) of section (1) of this rule if necessary to ensure timely compliance with paragraph (f) of section (1) of this rule.

Wood-Waste Boilers

340-21-225 No person shall cause or permit the emission into the atmosphere from any wood-waste boiler that is located on a plant site where the total heat input capacity from all wood-waste boilers is greater than 35 million BTU/hr:

(1) Any air contaminant for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 10% opacity, unless the permittee demonstrates by source test that the source can comply with the emission limit in section (2) of this rule at higher opacity but in no case shall emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

(2) Particulate matter in excess of 0.05 grains per standard cubic foot, corrected to 12% CO₂.

Wood Particle Dryers at Particleboard Plants

340-21-230 (1) No person shall 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 shall cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed 10% opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) can be achieved at higher visible emissions, but in no case shall emissions equal or exceed 20% opacity. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

Hardboard Manufacturing Plants

340-21-235 (1) No person shall cause or permit the total emissions of particulate matter from all sources within a hardboard plant, other than press/cooling vents, in excess of 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

Air Conveying Systems

340-21-240 (1) No person shall cause or permit the emission of particulate matter in excess of 0.1 grains per standard cubic foot from any air conveying system emitting less than or equal to 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990.

(2) All air conveying systems emitting greater than 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990 shall be equipped with a control system with a collection efficiency of at least 98.5 percent or equivalent control as approved by the Department.

(3) No person shall cause or permit the emission of any air contaminant which is equal to or greater than 5% opacity from any air conveying system subject to section (2) of this rule.

Fugitive Emissions

340-21-245 The owner or operator of a large sawmill, any plywood mill or veneer manufacturing plant, particleboard plant, hardboard plant, or charcoal manufacturing plant that is located in an area subject to contingency requirements under OAR 340-21-210 shall comply with OAR 340-30-043.

Part 2: House-keeping Amendments to State-wide Veneer Dryer
Rules: Amendments to Division 25.

Board Products Industries
(Veneer, Plywood,
Particleboard, Hardboard)

Definitions

340-25-305 As used in OAR 340-25-305 through 340-25-325, unless otherwise required by context:

(1) "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.

~~{(1)}~~ (2) "Department" means Department of Environmental Quality.

~~{(2)}~~ (3) "Emission" means a release into the outdoor atmosphere of air contaminants.

(4) "EPA Method 9" means the method for Visual Determination of the Opacity of Emissions From Stationary Sources as promulgated by the U.S. Environmental Protection Agency in Title 40 of the Code of Federal Regulations, Part 60, Appendix A, Method 9.

(5) "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.

(6) "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.

~~{(13)}~~ (7) "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 ~~{are defined by section 340-21-050(1)}.~~

~~{(3)}~~ (8) "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.

(9) "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).

(10) "Opacity" ~~{is defined by section 340-21-005(4)}~~ means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.

~~{(12) "Opacity readings" are the individual readings which comprise a visual opacity determination.}~~

~~{(4)}~~ (11) "Operations" includes plant, mill, or facility.

(13) "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 shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 7, each run shall 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 shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Veneer dryers, wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8.

~~{(5)}~~ (12) "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.

~~{(6)}~~ (13) "Person" ~~{means the same as ORS 468.005(5)}~~ 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.

~~{(7)}~~ (14) "Plywood" means flat panel built generally of an odd number of thin sheets of veneers of wood in which the grain direction of each ply or layer is at right angles to the one adjacent to it.

~~{(14)}~~ (15) "Special problem area" means the formally designated Portland, Eugene-Springfield, and Medford AQMAs and other specifically defined areas that the Environmental Quality Commission may formally designate in the future. The purpose of such designation will be to assign more stringent emission limits as may be necessary to attain and maintain ambient air standards or to protect the public health or welfare.

~~{(8)}~~ (16) "Tempering oven" means any facility used to bake hardboard following an oil treatment process.

~~{(9)}~~ (17) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

~~{(11) "Visual opacity determination" consists of a minimum of 25 opacity readings recorded every 15 to 30 seconds and taken by a trained observer.}~~

~~{(15)}~~ (18) "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.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 26, f.3-31-71, ef.4-25-71; DEQ 132, f.& ef.4-11-

77

Veneer and Plywood Manufacturing Operations

340-25-315 (1) Veneer Dryers:

(a) Consistent with section 340-25-310 (1) through (4), it is the object of this section to control air contaminant emissions, including, but not limited to, condensible hydrocarbons such that visible emissions from each veneer dryer are limited to a level which does not cause a characteristic "blue haze" to be observable;

(b) No person shall operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed:

~~{(A) A design opacity of 10%;}~~

~~{(B)}~~ (A) An average operating opacity of 10%; and

~~{(C)}~~ (B) A maximum opacity of 20%. ~~{Where the presence of uncombined water is the only reason for the failure to meet the above requirements, said requirements shall not apply.}~~

(c) Particulate emissions from wood fired veneer dryers shall not exceed:

(A) 0.75 pounds per 1000 square feet of veneer dried (3/8" basis) for units using fuel which has a moisture content by weight of 20% or less;

(B) 1.50 pounds per 1000 square feet of veneer dried (3.8" basis) for units using fuel which has a moisture content by weight of greater than 20%;

(C) In addition to paragraphs (9)(c)(A) and (B) of this section, 0.40 pounds per 1000 pounds of steam generated in boilers which exhaust gases to the veneer dryer. ~~{The heat source of wood fired veneer dryers is exempted from rule 340-21-030.}~~

(d) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from OAR 340-21-020.

~~{(d)}~~ (e) Each veneer dryer shall be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment shall be at full efficiency and effectiveness so that the emission of air contaminants are kept at the lowest practicable levels;

~~{(e)}~~ (f) No person shall 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

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violate this rule;

~~f(f)~~ (g) 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;

~~f(g)~~ (h) The Department may require more restrictive emission limits than provided in subsection (1)(b) and (c) of this rule for an individual plant upon a finding by the Commission that the individual plant is located or is proposed to be located in a special problem area. The more restrictive emission limits for special problem areas may be established on the basis of allowable emissions expressed in opacity, pounds per hour, or total maximum daily emissions to the atmosphere, or a combination thereof.

(2) Other Emission Sources:

(a) No person shall cause to be emitted particulate matter from veneer and plywood mill sources, including, but not limited to , sanding machines, saws, presses, barkers, hogs, chippers, and other material size reduction equipment, process or space ventilation systems, and truck loading and unloading facilities in excess of a total from all sources within the plant site of one (1.0) pound per 1000 square feet of plywood or veneer production on a 3/8 inch basis of finished product equivalent'

(b) Excepted from subsection (2)(a) of this rule, are veneer dryers, fuel burning equipment, and refuse burning equipment.

(3) Monitoring and Reporting: The Department may require any veneer dryer facility to establish an effective program for dryer emission point. The program shall be subject to review and approval by the Department and shall consist of the following:

(a) A specified minimum frequency for performing visual opacity determinations on each veneer dryer emission point;

(b) All data obtained shall be recorded on copies of a "Veneer Dryer Visual Emissions Monitoring Form" which shall be provided by the Department of Environmental Quality or on an alternative form which is approval by the Department; and

(c) A specified period during which all records shall be maintained at the mill site for inspection by authorized representatives of the Department.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 26, f.3-31-71, ef.4-25-71; DEQ 37, f.2-15-72, ef. 3-1-72; DEQ 43(Temp), f. & ef.5-5-72 thru 9-1-72; DEQ 48, f.9-20-72, ef.10-1-72; DEQ 52, f.4-9-73, ef.5-1-73; DEQ 83, f.1-30-75, ef.2-25-75; DEQ 132, f. & ef.4-11-77; DEQ 7-1979, f. & ef. 4-20-79; DEQ 10-1985, f. & ef.8-8-85

Part 3: House-keeping amendments to Medford/Ashland and Grants
Pass rules; Addition of RACT rules for La Grand;
Amendments to Division 30.

DIVISION 30

SPECIFIC AIR POLLUTION CONTROL RULES FOR
~~{THE MEDFORD-ASHLAND AIR QUALITY
MAINTENANCE AREA AND THE
GRANTS-PASS URBAN GROWTH AREA}~~
AREAS WITH UNIQUE AIR QUALITY CONTROL NEEDS

Purpose and Application

340-30-005 ~~{The rules in this division shall apply in the Medford-Ashland Air Quality Maintenance Area (AQMA) and the Grants Pass Urban Growth Area (Area).}~~ The purpose of these rules is to deal specifically with the unique air quality control needs of ~~{the Medford-Ashland AQMA and the Grants Pass Area}~~ areas of the state specified in OAR 340-30-012 and OAR 340-30-200. These rules shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability in the ~~{Medford-Ashland AQMA and the Grants Pass Area}~~ specified areas of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent conflict, the most stringent rule shall apply.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 4-1978, f. & ef. 4-7-78

Definitions

340-30-010 As used in ~~{these rules}~~ this Division, and unless otherwise required by context:

(1) "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.

(2) "Average Operating Opacity" means ~~{the average of}~~ the opacity [determinations] 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 ~~{with a minimum of 48 opacity readings taken at 15-second intervals on each day}~~; a violation of the average operating opacity limitation is judged to have occurred if the ~~{average}~~ opacity of emissions on each of the three days is greater than the specified average operating opacity limitation.

(3) "Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of wood to obtain the fixed carbon in the wood.

(4) "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.

~~{(5)} "Criteria Pollutants" means Particulate Matter, Sulfur Oxides, Nonmethane Hydrocarbons, Nitrogen Oxides, or Carbon Monoxide, or any other criteria pollutant established by the U.S. Environmental Protection Agency.~~

~~{(6)}~~ (5) "Department" means Department of Environmental Quality.

~~{(7)}~~ (6) "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)} "Design Opacity" means the opacity for which the veneer drying emission control system is designed that is consistent with the average operating opacity during normal operation of the proposed pollution control equipment or operating procedures on similar veneer dryers operating under similar process conditions.~~

~~{(9)}~~ (7) "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.

~~{(10)}~~ (8) "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.

~~{(11)}~~ (9) "Emission" means a release into the outdoor atmosphere of air contaminants.

~~{(12)}~~ (10) "EPA Method 9" means the method for Visual Determination of the Opacity of Emissions From Stationary Sources as promulgated by the U.S. Environmental Protection Agency in Title 40 of the Code of Federal Regulations, Part 60, Appendix A, Method 9.

~~{(13)}~~ (11) "Facility" means an identifiable piece of process equipment. A stationary source may be comprised of one or more pollutant-emitting facilities.

~~{(14)}~~ (12) "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)}~~ **(13)** "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)}~~ **(14)** "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)}~~ **(15)** "General Arrangement", in the context of the compliance schedule requirements in section 340-32-045(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.

~~{(18)}~~ **(16)** "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.

~~{(19)}~~ **(17)** "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.

(18) "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)}~~ **(19)** "Lowest Achievable Emission Rate" or "LAER" is defined by section 340-20-225~~{(13)}~~

~~{(21)}~~ **(20)** "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).

~~{(22)}~~ **(21)** "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 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, T1E; thence west to the SW corner of Section 12, T#(S, 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

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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.

~~{(23)}~~ **(22)** "Modified Source" means any source with a "major modification" as defined in OAR 340-20-225. ~~{any physical change in, or change in the method of, operation of a stationary source which increases the potential emission of criteria pollutants over permitted limits, including those pollutants not previously emitted.~~

~~(a) A physical change shall not include routine maintenance, repair, and replacement~~

~~(b) A change in the method of operation, unless limited by previous permit conditions, shall not include:~~

~~(A) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;~~

~~(B) Use of an alternative fuel or raw material, if prior to December 21, 1976, the source was capable of accommodating such fuel or material; or~~

~~(C) Change in ownership of a source.}~~

~~{(24)}~~ **(23)** "New Source" means any source not previously existing or having an Air Contaminant Discharge Permit on the effective date of these rules.

~~{(25)}~~ **(24)** "Offset" is defined by OAR 340-20-225. ~~{means the reduction of the same or similar air contaminant emissions by the source}~~

~~(a) Through in-plant controls, change in process, partial or total shut-down of one or more facilities or by otherwise reducing criteria pollutants; or~~

~~(b) By securing from another source, through rule or permit action by DEQ, in an irrevocable form, a reduction in emissions similar to that provided in subsection (a) of this section.}~~

~~{(26)}~~ **(25)** "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background.

~~{(27)}~~ **(26)** "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.

~~{(28)}~~ **(27)** "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binders.

~~{(29)}~~ **(28)** "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 shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run shall 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 shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Wood waste boilers and charcoal producing plants shall be tested with DEQ Method 5; veneer dryers, wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8. ~~any matter, except uncombined water, which exists as a liquid or solid at standard conditions.~~

~~{(30)}~~ (29) "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.

~~{(31)}~~ (30) "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.

~~{(32)}~~ (31) "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.

~~{(33)}~~ (32) "Standard Conditions" means a temperature of 60 degrees Fahrenheit (15.6 degrees Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 Kilograms per square centimeter).

~~{(34)}~~ (33) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

~~{(35)}~~ (34) "Veneer Dryer" means equipment in which veneer is dried.

~~{(36)}~~ (35) "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.

~~{(37)}~~ (36) "Wigwam Waste 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.

~~{(38)}~~ (37) "Wood Waste Boiler" means equipment which uses indirect heat transfer from the products of combustion of wood waste to provide heat or power.

Stat. Auth.: ORS Ch. 468

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

**SPECIFIC AIR POLLUTION CONTROL RULES FOR
THE MEDFORD-ASHLAND AIR QUALITY
MAINTENANCE AREA AND THE
GRANTS PASS URBAN GROWTH AREA**

Application

340-30-012 OAR 340-30-012 through 340-30-115 shall apply in the Medford-Ashland Air Quality Maintenance Area (AQMA) and the Grants Pass Urban Growth Area (Area) except where expressly provided that a rule applies only in the Medford-Ashland AQMA.

Wood Waste Boilers

340-30-015 (1) No person shall cause or permit the emission of particulate matter from any wood waste boiler with a heat input greater than 35 million BTU/hr in excess of 0.050 grain per dry standard cubic foot ~~{(1.4 grams per cubic meter)}~~ of exhaust gas, corrected to 12 percent carbon dioxide.

(2) No person owning or controlling any wood waste boiler with a heat input greater than 35 million BTU/hour shall cause or permit the emission of any air contaminant into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour equal to or greater than 10 percent opacity, unless the permittee demonstrates by source test that the emission limit in paragraph (1) of this section can be achieved at higher visible emissions ~~{in which case emissions shall not}~~, but in no case shall emissions equal or exceed {the visible air contaminant limitations of section 340-21-015(2)} 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

(3) In accordance with the compliance schedule in 340-30-046(2), {N}no person shall cause or permit the emission of particulate matter from any boiler with a heat input greater than 35 million Btu/hour unless the boiler has been equipped with emission control equipment which:

(a) Limits emissions of particulate matter to LAER as defined by the Department at the time the Department approves the control device; and

(b) Limits visible emissions such that their opacity does not exceed 5% for more than an aggregate of 3 minutes in any one hour, unless the permittee demonstrates by source test that emissions can be limited to LAER at higher visible emissions ~~in which case emissions shall not~~, but in no case shall emissions equal or exceed ~~the visible air contaminant limitations of section 340-30-015(2)~~ 10% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

(c) For purposes of OAR 340-20-265~~-(3)~~ and 340-20-310~~-(b)~~, the boiler mass emission limits shall be based on particulate matter emissions of 0.030 grains per standard dry cubic foot, corrected to 12% CO₂.

Stat. Auth.: ORS Ch. 468

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

Veneer Dryer Emission Limitations

340-30-021 (1) No person shall 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) or such that emissions of particulate matter exceed the mass emission limits of subsections (c) through (g):

~~-(a) A design opacity of 5%;~~

~~-(b)~~(a) An average operating opacity of 5%; and

~~-(c)~~(b) A maximum opacity of 10%, unless the permittee demonstrates by source test that the emission limits in ~~-(1)-(d) through (g)~~ subsections (c) through (g) can be achieved at higher visible emissions than specified in ~~subsections (1)-(a) through (e)~~ subsections (a) and (b), but in no case shall emissions ~~in which case the emissions shall not~~ exceed the visible air contaminant limitations of section 340-25-315(1)(b). Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source. ~~Where the presence of uncombined water is the only reason for the failure to meet the above requirements, said requirements shall not apply.~~

~~-(d)~~(c) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct natural gas or propane fired veneer dryers;

~~-(e)~~(d) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for steam heated veneer dryers;

~~-(f)~~(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%;

~~-(g)~~(f) 0.45 pounds per 1,000 square feet of veneer dried

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(3/8" basis) for direct wood fired veneer dryers using fuel which has a moisture content by weight greater than 20%;

~~[(h)]~~(g) In addition to ~~{paragraphs (1)(f) and (g) of this section}~~ subsections (e) and (f), 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 340-21-020.

~~[(2)]~~ (3) No person shall 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) ~~[(b) and (e)]~~ through (g);

(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) ~~[(b) and (e)]~~ (a) through (g); or

(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) ~~[(b) and (e)]~~ (a) through (g).

~~[(3)]~~ (4) Each veneer dryer shall be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment shall be at full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable levels.

~~[(4)]~~ (5) No person shall 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.

~~[(5)]~~ (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.

~~[(6)]~~ Compliance with the visible emission limits in section (1) of this rule shall be determined in accordance with the Department's Method 9 on file with the Department as of November 16, 1979.

Stat. Auth.: ORS Ch 468

Hist.: DEQ 22-1989, f. & cert.ef.9-26-89

Air Conveying Systems (Medford-Ashland AQMA Only)

340-30-025 All air conveying systems emitting greater than 10 tons per year of particulate matter to the atmosphere at the

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time of adoption of these rules shall, with the prior written approval of the Department, be equipped with a control system with collection efficiency of at least 98.5 percent.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 4-1978, f. & ef.4-7-78; DEQ 22-1989, f. & cert.ef.9-26-89

Wood Particle Dryers at Particleboard Plants

340-30-030 (1) No person shall 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 shall cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed 10% opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) can be achieved at higher visible emissions, but in no case shall emissions equal or exceed 20% opacity. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

Stat. Auth.: ORS Ch. 468

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

Hardboard Manufacturing Plants

340-30-031 No person shall cause or permit the total emissions of particulate matter from all facilities at a hardboard plant to exceed 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 14-1981, f. & ef.5-6-81; DEQ 14-1986, f. & ef. 6-20-86

Wigwam Waste Burners

340-30-035 No person owning or controlling any wigwam burner shall cause or permit the operation of the wigwam burner.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 4-1978, f. & ef.4-7-78; DEQ 29-1980, f. & ef. 10-29-80

Charcoal Producing Plants

340-30-040 (1) No person shall 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).

(3) Charcoal producing plants as described in section (1) of this rule shall be exempt from the limitations of 340-21-030(1) and (2) and 340-21-040 which concern particulate emission concentrations and process weight.

Stat. Auth.: ORS Ch. 468

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

Control of Fugitive Emissions (Medford-Ashland AOMA Only)

340-30-043 (1) Large sawmills, all plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, stationary asphalt plants and stationary rock crushers shall prepare and implement site-specific plans for the control of fugitive emissions. (The air contaminant sources listed are described in OAR 340-20-155, Table 1, paragraphs 10a, 14a, 14b, 15, 17, 18, 29, 34a and 42a, respectively.)

(2) Fugitive emission control plans shall identify reasonable measures to prevent particulate matter from becoming airborne. Such reasonable measures shall include, but not be limited to the following:

(a) 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;

(b) 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;

(c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;

(d) Adequate containment during sandblasting or other similar operations;

(e) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and

(f) Procedures for the prompt removal from paved streets of earth or other material which does or may become airborne.

(3) Fugitive emission control plans shall be prepared and implemented in accordance with the schedule outline in OAR 340-30-045.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert.ef. 9-26-89

Requirement for Operation and Maintenance Plans (Medford-Ashland AOMA Only)

340-30-044 (1) Operation and Maintenance Plans shall be prepared by all holders of Air Contaminant Discharge permits except minimal source permits and special letter permits. All sources subject to regular permit requirements shall be subject to operation and maintenance requirements.

(2) The purposes of the operation and maintenance plans are to:

(a) Reduce the number of upsets and breakdown 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 upsets to identify the cause of the problem and changes needed to prevent a recurrence;

(e) Periodic source testing of pollution control units as required by air contaminant discharge permits;

(f) Inspection of internal wear points of pollution control equipment during scheduled shutdowns; and

(g) Inventory of key spare parts.

(4) The operation and maintenance plan shall be prepared and implemented in accordance with the schedule outlined in OAR 340-30-045.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert.ef. 9-26-89

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**Compliance Schedules
340-30-045**

Stat. Auth. ORS Ch. 468

Hist.: [DEQ 4-1978, f. & ef.4-7-78; DEQ 27-1980 f. & ef.10-29-80; DEQ 14-1981, f. & ef.5-6-81; DEQ 6-1983, f. & ef.4-18-83; Repealed by DEQ 22-89, f.& cert.ef. 9-26-89]

Emission-Limits Compliance Schedules

340-30-046 (1) Compliance with the emission limits for wood-waste boilers in the Grants Pass area and veneer dryers established in sections OAR 340-30-015(1) and (2) and OAR 340-30-02~~0~~1 shall be provided according to the following schedules:

(a) Within three months of the effective date of these rules, 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 fifteen 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 section 340-30-015(3) shall be provided according to OAR 340-30-067 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 fifteen months of receiving the Department's approval of Design Criteria, but no later than December 31, 1994, demonstrate compliance.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89

Continuous Monitoring

340-30-050 (1) The Department will require the installation and operation of instrumentation for measuring and recording emissions and/or the parameters which affect the emission of air contaminants from wood-waste fired boilers, veneer dryers, fiber dryers, and particle dryers to ensure that the sources and the air pollution control equipment are operated at all times at their full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable level. The instrumentation shall be periodically calibrated. The method and frequency of calibration shall be approved in writing by the Department. Continuous monitoring equipment and operation shall be in accordance with continuous emission monitoring systems guidance provided by the Department and shall be consistent, where applicable, with the EPA performance specifications and quality assurance procedures outlined in 40 CFR 60, Appendices B and F, and the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III. The recorded information shall be kept for a period of at least one year and shall be made available to the Department upon request. The selection, installation, and use of the instrumentation shall be done according to the following schedule:

(a) Within six months from the effective date of these rules, the persons responsible for the affected facilities shall submit to the Department a plan for process and/or emission monitoring. The Department's primary criterion for review and approval of the plans will be the ability of proposed instrumentation to demonstrate continuous compliance with these regulations.

(b) Within one year from the Department's approval of the plan(s), but no later than July 1, 1992, the persons responsible for the affected facilities shall purchase, install, place in operation the instrumentation as approved, verify that it is capable of demonstrating continuously the compliance status of the affected facilities, and commence continuous monitoring and reporting results to the Department, at a frequency and in a form agreed upon by the Department and the responsible persons.

(c) The implementation date in paragraph (1)(b) of this section can be extended up to one year, subject to Department approval, if justified by the persons responsible for the

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affected facilities based on unavailability of suitable equipment or other problems.

(2) At a minimum, the monitoring plan submitted under paragraph (1)(a) of this section shall include:

(a) Continuous monitoring and monthly reporting of carbon monoxide concentration~~{,}~~ and oxygen concentration~~{,}~~ for any wood-waste fired boiler with a heat input greater than 35 million BTU/hr or for any wood-waste boiler using a wet scrubber as pollution control equipment and steam production rate for any wood-waste fired boiler;

(b) Continuous monitoring and monthly reporting of pressure drop, scrubber water pressure, and scrubber water flow for any wood-waste fired boiler, veneer dryer, particle dryer, or fiber dryer using a wet scrubber as pollution control equipment;

(c) Continuous monitoring and monthly reporting of opacity for any wood-waste fired boiler not controlled by a wet scrubber; and

(d) Continuous availability by electronic means to the Department of the emission and performance data specified in paragraphs (2)(a) through (c) of this section for any wood-waste fired boiler subject to the emission requirements of OAR 340-30-015.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 4-1978, f. & ef.4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89

Source Testing

340-30-055 (1) The person responsible for the following sources of particulate emissions shall make or have made tests to determine the type, quantity, quality, and duration of emissions, and/or process parameters affecting emissions, in conformance with test methods on file with the Department at the following frequencies:

(a) Wood Waste Boilers with heat input 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 equal to or less than 35 million BTU/hr with dry emission control equipment -- Once in 1992 and once every 3 years thereafter.

(2) Source testing shall begin at these frequencies within 90 days of the date by which compliance is to be achieved for each individual emission source.

(3) These source testing requirements shall remain in effect

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unless waived in writing by the Department because of adequate demonstration that the source is consistently operating at lowest practicable levels, or that continuous emission monitoring systems are producing equivalent information.

(4) Source tests on wood waste boilers shall not be performed during periods of soot blowing, grate cleaning, or other abnormal operating conditions. The steam production rate during the source test shall be considered the maximum permittee's steaming rate for the boiler.

(5) Source tests shall be performed within 90 days of the startup of air pollution control systems.

Stat. Auth.: ORS Ch. 468

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

Total Plant Site Emissions

340-30-060 [DEQ 4-1978, f. & ef. 4-7-78;
Repealed by DEQ 25-1981, f. & ef. 9-8-81]

New Sources

340-30-065 New sources shall be required to comply with rules 340-30-015(3) and 340-30-020 through 340-30-110 immediately upon initiation of operation.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1988, f. & cert. ef. 9-26-89

Rebuilt ~~[Sources]~~ Boilers

340-30-067 Rebuilt ~~[sources]~~ boilers shall immediately comply with the requirements of 340-30-015(3) except that in the Grants Pass Urban Growth Area this provision will apply to sources that are rebuilt after they have complied with 340-30-015(1).

Stat. Auth.: ORS 468

Hist.: DEQ 22-1988, f. & cert. ef. 9-26-89

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Open Burning

340-30-070 No open burning of domestic waste shall be initiated on any day or any time when the Department advises fire permit issuing agencies that open burning is not allowed because of adverse meteorological or air quality conditions.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 4-1978, f. & ef. 4-7-78

Emission Offsets

340-30-110 [DEQ 9-1979, f. & ef. 5-3-79;
Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Emission Offsets

340-30-111 In the Medford-Ashland AQMA, emission offsets required in accordance with OAR 340-20-240 for new or modified sources shall provide reductions in emissions equal to 1.2 times the emission increase from the new or modified sources.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 22-1989, f. & cert.ef. 9-26-89

Dual-Fueling Feasibility Study For Wood-Waste Boilers

340-30-115 (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 shall 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 shall 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 shall 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 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 shall 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 shall be conducted by an independent contractor hired by the participating persons and approved by the Department.

SPECIFIC AIR POLLUTION CONTROL RULES FOR
THE LA GRANDE URBAN GROWTH AREA

Application

340-30-200 OAR 340-30-200 through 340-30-230 shall apply in the La Grande Urban Growth Area.

Compliance Schedule for Existing Sources

340-30-205 (1) Except as provided in sections (2) and (3) of this rule, compliance with applicable requirements of OAR 340-30-200 through 340-30-230 for a source that is located in the La Grande Urban Growth Area prior to November 15, 1991 shall be demonstrated as expeditiously as possible, but in no case later than the following schedule:

(a) No later than May 15, 1992, the owner or operator shall submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval; and if the Department disapproves the Design Criteria, the owner or operator shall revise the Design Criteria to meet the Department's objections and submit the revised Design Criteria to the Department no later than one month after receiving the Department's disapproval;

(b) No later than three months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department a General Arrangement and copies of purchase orders for any emission-control devices;

(c) No later than eight months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department vendor drawings as approved for construction of any emission-control devices and specifications of any other major equipment in the emission control system in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;

(d) No later than nine months after receiving the Department's approval of the Design Criteria, the owner or operator shall begin construction of any emission-control

devices;

(e) No later than sixteen months after receiving the Department's approval of Design Criteria, the owner or operator shall complete construction in accordance with the Design Criteria;

(f) No later than May 15, 1994, the owner or operator shall demonstrate compliance with the applicable contingency requirements.

(2) Section (1) of this rule shall not apply if the owner or operator has demonstrated by May 15, 1992 that the source is capable of being operated and is operated in continuous compliance with applicable requirements of OAR 340-30-200 through 340-30-230 and the Department has agreed with the demonstration in writing. The Department may grant an extension until November 15, 1992 for a source to demonstrate compliance under this section. The applicable requirements shall be incorporated in the Air Contaminant Discharge Permit issued to the source.

(3) The Department may adjust the schedule specified in paragraphs (a) through (e) of section (1) of this rule if necessary to ensure timely compliance with paragraph (f) of section (1) of this rule or if necessary to conform to an existing compliance schedule with an earlier compliance demonstration date.

Wood-Waste Boilers

340-30-210 No person shall cause or permit the emission into the atmosphere from any wood-waste boiler that is located on a plant site where the total heat input capacity from all wood-waste boilers is greater than 35 million BTU/hr:

(1) Any air contaminant for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 10% opacity, unless the permittee demonstrates by source test that the source can comply with the emission limit in section (2) of this rule at higher opacity but in no case shall emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

(2) Particulate matter in excess of 0.05 grains per standard cubic foot, corrected to 12% CO₂.

Wood Particle Dryers at Particleboard Plants

340-30-215 (1) No person shall 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 shall cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed

10% opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) can be achieved at higher visible emissions, but in no case shall emissions equal or exceed 20% opacity. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

Hardboard Manufacturing Plants

340-30-220 (1) No person shall cause or permit the total emissions of particulate matter from all sources within a hardboard plant, other than press/cooling vents, in excess of 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

Air Conveying Systems

340-30-225 (1) No person shall cause or permit the emission of particulate matter in excess of 0.1 grains per standard cubic foot from any air conveying system emitting less than or equal to 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990.

(2) All air conveying systems emitting greater than 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990 shall be equipped with a control system with a collection efficiency of at least 98.5 percent or equivalent control as approved by the Department.

(3) No person shall cause or permit the emission of any air contaminant which is equal to or greater than 5% opacity from any air conveying system subject to section (2) of this rule.

Fugitive Emissions

340-30-230 The owner or operator of a large sawmill, any plywood mill or veneer manufacturing plant, particleboard plant, hardboard plant, or charcoal manufacturing plant that is located in the La Grande Urban Growth Area shall comply with OAR 340-30-043.

Part 4: House-keeping amendments to Ambient Standards;
Amendments to Division 31.

Suspended Particulate Matter

340-31-015 Concentrations of suspended particulate matter ~~at a location meeting ambient air monitoring site criteria and~~ in ambient air as measured by an approved method for total suspended particulate, (TSP), or by an approved method for the fraction of TSP which is equal to or less than 10 microns in aerodynamic diameter, (PM₁₀), shall not exceed:

(1) 60 micrograms of TSP per cubic meter of air as an annual geometric mean for any calendar year at any site.

(2) 150 micrograms of TSP per cubic meter of air as a 24 hour average concentration more than once per year at any site.

(3) 50 micrograms of PM₁₀ per cubic meter of air as an annual arithmetic mean. This standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with Appendix K of 40 CFR 50 is less than or equal to 50 micrograms per cubic meter at any site.

(4) 150 micrograms of PM₁₀ per cubic meter of air as a 24-hour average concentration for any calendar year. This standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter as determined in accordance with Appendix K of 40 CFR 50 is equal to or less than one at any site.

[**Publication:** The publications referred to in this rule are available for inspection at the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

Sulfur Dioxide

340-31-020 Concentrations of sulfur dioxide in ambient air ~~at a location meeting ambient air monitoring site criteria and~~ as measured by an approved method shall not exceed:

(1) 0.02 ppm as an annual arithmetic mean for any calendar year at any site.

(2) 0.10 ppm as a 24-hour average concentration more than once per year at any site.

(3) 0.50 ppm as a 3-hour average concentration more than once per year at any site.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

Carbon Monoxide

340-31-025 For comparison to the standard, averaged ambient concentrations of carbon monoxide shall be rounded the nearest integer in parts per million (ppm). Fractional parts of 0.5 or greater shall be rounded up. Concentrations of carbon monoxide in ambient air ~~{at a location meeting ambient air monitoring site criteria and,}~~ as measured by an approved method, shall not exceed:

(1) 9 ppm as an 8-hour average concentration more than once per year at any site.

(2) 35 ppm as a 1-hour average concentration more than once per year at any site.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

Ozone

340-31-030 Concentrations of ozone in ambient air ~~{at a location meeting ambient air monitoring site criteria and}~~ as measured by an approved method shall not exceed 0.12 ppm as a 1-hour average concentration. This standard is attained when, at any site the expected number of days per calendar year with maximum hourly concentrations greater than 0.12 ppm is equal to or less than one as determined by the method of Appendix H, 40 CFR 50.~~{9.}~~

[**Publication:** The publications referred to in this rule are available for inspection at the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 15-1979, f. & ef. 6-22-79; DEQ 7-1980, f. & ef. 3-5-80; DEQ 4-1982, f. & ef. 1-29-82; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

Nitrogen Dioxide

340-31-040 Concentrations of nitrogen dioxide in ambient air ~~{at a location meeting ambient air monitoring site criteria and}~~ as measured by an approved method shall not exceed 0.053 ppm as an annual arithmetic mean at any site.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

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Ambient Air Quality Standard for Lead

340-31-055 The lead concentration in ambient air as measured by an approved method ~~[at a location meeting ambient air monitoring site criteria,]~~ shall not exceed 1.5 micrograms per cubic meter as an arithmetic average concentration of all samples collected at ~~[that location]~~ any site during any one calendar quarter.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 85, f. 1-29-75, ef. 2-25-75; DEQ 1-1983, f. & ef. 1-21-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

ADG:MLH:LDB:DKN
RPT\AH20048
(10/24/91)

**RULEMAKING STATEMENTS FOR PROPOSED NEW INDUSTRIAL PM₁₀
EMISSION STANDARD RULES AND OTHER HOUSEKEEPING MEASURES**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340, Divisions 21, 25, 30 and 31. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

The federal Clean Air Act Amendments of 1990 require that states adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ health and welfare standards are brought into attainment with those standards within prescribed time frames. The revisions must be submitted to the U.S. Environmental Protection Agency (EPA) by November 15, 1991, or the state will face serious federal sanctions. The SIP must be based on a foundation of rules that implement all requirements of the Clean Air Act and are approved by EPA as federally enforceable. The new and revised rules in this proposal are required to ensure that the PM₁₀ SIP revisions are approvable by EPA.

Part 1 of these rules would establish contingency control requirements for industrial sources in PM₁₀ nonattainment areas. The Clean Air Act requires that the SIP revisions include such contingency measures which go into effect without further action by the state if an area fails to meet the attainment date. Parts 2 through 4 of these rules contain a number of house-keeping amendments which are required to obtain EPA approval of the SIP. These amendments include revisions in definitions, citations, and format needed to make the requirements consistent with EPA rules. In addition, Part 3 includes a dual-fueling feasibility study for boilers in Medford and new Reasonably Available Control Technology (RACT) emission standards for sources in La Grande.

(3) Principal Documents Relied Upon

- o Federal Clean Air Act Amendments of 1990, PL 101-549, November 15, 1990.
- o Staff report to the Environmental Quality Commission, April 1, 1977, Agenda Item E, regarding Veneer Dryer Rules.
- o Staff report to the Environmental Quality Commission, April 1, 1979, Agenda Item F3, regarding Veneer Dryer Rules.
- o Staff report to the Environmental Quality Commission, July 19, 1985, Agenda Item I, regarding Veneer Dryer Rules.
- o Staff report to the Environmental Quality Commission, September 8, 1989, Agenda Item E, regarding Medford-Ashland and Grants Pass Industrial Rules.
- o Staff report to the Environmental Quality Commission, April 26, 1991, Agenda Item G, regarding Small Wood-fired Boilers.
- o Staff report to the Environmental Quality Commission, April 29, 1988, Agenda Item L, regarding Ambient Air Quality Standards.
- o Correspondence from the U.S. Environmental Protection Agency regarding rule deficiencies (Attachment L).

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

ADG/MLH
RPT\AH20049
(10/24/91)

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED NEW INDUSTRIAL PM₁₀ EMISSION STANDARD
RULES AND OTHER RELATED HOUSEKEEPING MEASURES**

PROPOSAL SUMMARY

The proposed rules would:

- o Establish contingency emission standards for industrial sources in PM₁₀ nonattainment areas to be implemented upon failure of the area to attain the ambient air quality standard for PM₁₀ by the attainment date.
- o Make housekeeping changes to clarify statewide industrial rules applicable to veneer dryers, including those in PM₁₀ nonattainment areas to ensure that they are fully approvable by the U.S. Environmental Protection Agency (EPA).
- o Make housekeeping changes to special PM₁₀ control rules in the Medford-Ashland and Grants Pass areas to ensure that they are fully approvable by EPA.
- o Make housekeeping changes in the area of applicability of PM₁₀ and other ambient air quality standards to ensure that they are fully approvable by EPA.

COSTS TO OWNERS OF INDUSTRIAL PM₁₀ SOURCES

Part 1: Industrial Contingency Requirements for PM₁₀ Nonattainment areas.

The proposed rules would establish new emission standards for industrial sources in PM₁₀ nonattainment areas which fail to meet the attainment deadline. The proposed rules will only result in costs to owners of industrial PM₁₀ sources in the event the area the source is located in fails to meet the attainment deadline. The proposed rules would establish a uniform level of control in all areas that miss the attainment date, but because of varying levels of existing controls, the cost will vary by area.

All industrial sources affected by this rule are wood processing facilities. In the nonattainment area which would be least financially impacted by these rules, Grants Pass, the total capital cost to the four major industries is estimated at about \$500,000. Large boilers and veneer dryers in Grants Pass are currently regulated to the degree of control proposed in the contingency rules. In Klamath Falls, the nonattainment area which would be most

financially impacted by these industrial contingency rules, the four major wood processing plants could experience capital costs of \$4-5 million. If Weyerhaeuser Company becomes subject to the total contingency control measures the Klamath Falls industrial costs would increase to an estimated \$12-15 million.

Ten wood products plants and the single charcoal manufacturing facility in Medford-Ashland would need emission controls to comply with the proposed standards according to Department records. The capital cost to industry in this area is estimated to be in the range of \$2-3 million. Most large emission sources in the area will have emission abatement in place prior to the earliest possible implementation of the proposed contingency standards. The single industrial source affected by these rules in the La Grande nonattainment area could bear capital costs of about \$1 million to install emission controls on their existing boilers. However, plans are already underway to install a new boiler by the end of 1992 which could meet the standards of this rule.

Installing emission controls on boilers would be in the order of \$800,000 at each of the three wood products plants in Klamath Falls and an additional \$4.5-5.5 million if Weyerhaeuser's boilers require emission control. Operation and maintenance costs of boiler emission controls is estimated by the Department to be in neighborhood of \$30,000 per year for each of the smaller operations and upwards of \$180,000 per year for Weyerhaeuser.

Capital costs for veneer dryer emission control would be in the \$250,000 to \$350,000 range for each of the three units likely needing control in the Klamath Falls area. Annual operation and maintenance is estimated at about \$40,000 per year at each of the two affected plywood plants.

Press/cooling vent control and wood particle dryer control is roughly estimated at \$300-500,000 for each of the three potential facilities to be controlled.

Capital expenditures for air conveying systems emission abatement would be necessary in each area that is impacted by implementation of these rules. Installing a bagfilter on one system typically would cost \$90,000. The Department estimates air conveying system emission control costs in the Medford-Ashland area could exceed \$1.3 million. For Weyerhaeuser to control the 42 cyclone emission points that currently are permitted for greater than 3 tons of particulate emissions is expected to be in the \$3-4 million range. Operation and maintenance of a bagfilter to control cyclone emissions generally range from \$4,000 to \$8,000 depending on factors such as size, power consumption and fire protection equipment installed.

The cost of implementing the proposed plant site fugitive emission plan is site specific and the range of cost potential is broad. Capital costs could be \$50,000-150,000 for each operation. Industries in each area, except for Medford-Ashland which is already governed by this regulation, would be impacted.

The industrial contingency emission standards as proposed could have a fiscal impact on small businesses. The Department has identified one such source in the Medford-Ashland AQMA which may need to provide emission controls on an air conveying system.

The following table provides a summary of approximate total cost to industrial sources for each nonattainment area. Estimated capital costs, operation and maintenance costs and the annualized cost amortized over a 15 year period at 10% interest are listed.

	Medford-Ashland	Costs in Millions of Dollars				La Grande
		Grants Pass	Klamath Falls W/O Weyeh.	Klamath Falls W/Weyeh.		
Capital	2 - 3	0.4-0.6	4 - 5	12 - 15	0.8 - 1	
Op. & maint	0.16	0.02	0.2	0.7	0.05	
Annualized	0.4-0.6	0.06-0.09	0.6-0.9	2.3-2.7	0.01-0.02	

The fiscal and economic impact on industry in the Eugene-Springfield nonattainment area will be provided in the attainment strategy developed by Lane Regional Air Pollution Authority.

- Part 2: Housekeeping Amendments to Statewide Veneer Dryer Rules
- Part 3: Housekeeping Amendments to Medford-Ashland and Grants Pass Rules
- Part 4: Housekeeping Amendments to Ambient Standards

The proposed rules in Parts 2, 3 and 4 do not impose any new requirements and will not result in any increased costs to the regulated community, including small business.

COSTS TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY

The new industrial contingency requirements, if an area fails to meet the December 31, 1994, or later deadlines of the Clean Air Act, would require additional plan reviews, permit modifications, inspections, and other compliance assurance activities by Department of Environmental Quality staff. This additional work could require additional staff which would need to be supported by increased permit fees and possibly additional federal or state funding.

ADG:DKN:MLH
 RTP\AH15028
 (8/14/91)

NOTICE OF PUBLIC HEARING

Hearing Dates: September 26,
27, 30 & October
1, 1991

Comments Due: October 2, 1991

WHO IS AFFECTED:

Individuals, especially those with woodstoves, and board product industries statewide, local governments, agricultural operations and industries in or near the Medford-Ashland, Klamath Falls, Grants Pass and La Grande PM₁₀ Nonattainment Areas.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the State of Oregon Clean Air Act Implementation Plan to:

- o Revise fine particulate (PM₁₀) Pollution Control Strategies for the Medford, Grants Pass and Klamath Falls areas;
- o Add a new PM₁₀ Control Strategy for the La Grande area;
- o Add new regulations for woodstoves, OAR Chapter 340, Division 34;
- o Add new contingency industrial particulate emission standards for PM₁₀ nonattainment areas, OAR Chapter 340, Division 21;
- o Revise the Medford/Grants Pass Particulate Standard Rules, OAR Chapter 340, Division 30;
- o Revise Board Products Particulate Emission Standard Rules, OAR Chapter 340, Division 25;
- o Revise Ambient Air Standard Rules, OAR Chapter 340, Division 31;
- o Revise Rogue Basin Open Burning Control Area rules, OAR Chapter 340, Division 23.

WHAT ARE THE HIGHLIGHTS:

The federal Clean Air Act requires states to submit PM₁₀ attainment Control Strategies for PM₁₀ Nonattainment Areas to the U.S. Environmental Protection Agency (EPA) by November 15, 1991. The Control Strategies specify how federal PM₁₀ air quality standards will be attained by the Act's deadline of December 31, 1994. They primarily rely on controlling PM₁₀ emissions from residential woodheating, industry and open burning.

ATTACHMENT D

The proposed rules which would implement PM₁₀ Control Strategies will:

- o Regulate residential woodheating according to new legislative authority including:
 - > Banning the sale of used, uncertified woodstoves statewide;
 - > allowing DEQ to prohibit woodheating on poor air quality days if local governments fail to adopt or implement such programs where needed;
 - > Requiring the destruction of uncertified woodstoves upon the sale of a home as a contingency measure if an area fails to attain compliance with the PM₁₀ standard by December 31, 1994.
- o Require industries in PM₁₀ nonattainment areas to meet Reasonably Available and Best Available Control Technology requirements of the Clean Air Act as a contingency measure if areas fail to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Require tighter meteorological criteria for allowing open burning in the Rogue Basin Open Burning Control Area, and ban open burning from November through February in this area as a contingency if it fails to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Address housekeeping/enforceability issues raised by EPA with respect to existing state regulations covering the Board Products Industry, Medford/Grants Pass Industrial Particulate Emission and Ambient Air Standards.

HOW TO COMMENT:

Copies of the complete proposed rule packages may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact:

Merlyn Hough at (503) 229-6446 (Medford-Ashland)
John Core at (503) 229-5380 (Klamath Falls)
Howard Harris at (503) 229-6086 (Grants Pass)
Brian Finneran at (503) 229-6278 (La Grande)
Andy Ginsburg at (503) 229-5581 (Industry)
David Collier at (503) 229-5177 (Woodstoves)

ATTACHMENT D

Public hearings will be held before a hearings officer at:

7:00 pm
September 26, 1991
Commission Hearing Room
Courthouse Annex
Klamath Falls, Oregon

7:00 pm
September 30, 1991
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
September 27, 1991
City Council Chambers
101 NW "A" Street
Grants Pass, Oregon

7:00 pm
October 1, 1991
City Hall
1000 Adams Avenue
La Grande, Oregon

3:00 pm
October 1, 1991
DEQ Offices
811 SW Sixth Avenue
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received no later than 5 pm, October 2, 1991.

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments and Control Strategies identical to the proposed amendments, adopt modified rule amendments and Control Strategies on the same subject matter, or decline to act. The adopted rules and Control Strategies will be submitted to the EPA as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on November 7, 1991, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

YM:a
RPT\AH15041
(8/14/91)

GENERAL ADMINISTRATION

468.005 Definitions. As used in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter, unless the context requires otherwise:

(1) "Commission" means the Environmental Quality Commission.

(2) "Department" means the Department of Environmental Quality.

(3) "Director" means the Director of the Department of Environmental Quality.

(4) "Order" has the same meaning as given in ORS 183.310.

(5) "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the Federal Government and any agencies thereof.

(6) "Rule" has the same meaning as given in ORS 183.310.

(7) "Standard" or "standards" means such measure of quality or purity for air or for any waters in relation to their reasonable or necessary use as may be established by the commission pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter. [Formerly 449.001]

468.010 Environmental Quality Commission; appointment; confirmation; term; compensation and expenses. (1) There is created an Environmental Quality Commission. The commission shall consist of five members, appointed by the Governor, subject to confirmation by the Senate as provided in ORS 171.562 and 171.565.

(2) The term of office of a member shall be four years, but the members of the commission may be removed by the Governor. Before the expiration of the term of a member, the Governor shall appoint a successor to assume the duties of the member on July 1 next following. A member shall be eligible for reappointment, but no member shall serve more than two consecutive terms. In case of a vacancy for any cause, the Governor shall make an appointment to become immediately effective for the unexpired term.

(3) A member of the commission is entitled to compensation and expenses as provided in ORS 292.195. [Formerly 449.010]

468.015 Functions of commission. It is the function of the commission to establish the policies for the operation of the department in a manner consistent with the policies and purposes of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this

Attachment E

chapter. In addition, the commission shall perform any other duty vested in it by law. [1973 c.33 §4]

468.020 Rules and standards. (1) In accordance with the applicable provisions of ORS 183.310 to 183.550, the commission shall adopt such rules and standards as it considers necessary and proper in performing the functions vested by law in the commission.

(2) Except as provided in ORS 183.335 (5), the commission shall cause a public hearing to be held on any proposed rule or standard prior to its adoption. The hearing may be before the commission, any designated member thereof or any person designated by and acting for the commission. [Formerly 449.173; 1977 c.33 §1]

468.030 Department of Environmental Quality. There is hereby established in the executive-administrative branch of the government of the state under the Environmental Quality Commission a department to be known as the Department of Environmental Quality. The department shall consist of the director of the department and all personnel employed in the department. [Formerly 449.032]

468.035 Functions of department. (1) Subject to policy direction by the commission, the department:

(a) Shall encourage voluntary cooperation by the people, municipalities, counties, industries, agriculture, and other pursuits, in restoring and preserving the quality and purity of the air and the waters of the state in accordance with rules and standards established by the commission.

(b) May conduct and prepare, independently or in cooperation with others, studies, investigations, research and programs pertaining to the quality and purity of the air or the waters of the state and to the treatment and disposal of wastes.

(c) Shall advise, consult, and cooperate with other agencies of the state, political subdivisions, other states or the Federal Government, in respect to any proceedings and all matters pertaining to control of air or water pollution or for the formation and submission to the legislature of interstate pollution control compacts or agreements.

(d) May employ personnel, including specialists, consultants and hearing officers, purchase materials and supplies, and enter into contracts necessary to carry out the purposes set forth in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter.

(e) Shall conduct and supervise programs of air and water pollution control education, including the preparation and distribution of

more air contaminants which contribute to a condition of air pollution.

(4) "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.

(5) "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.

(6) "Area of the state" means any city or county or portion thereof or other geographical area of the state as may be designated by the commission.

(7) "Woodstove" means a wood fired appliance with a closed fire chamber which maintains an air-to-fuel ratio of less than 30 during the burning of 90 percent or more of the fuel mass consumed in the low firing cycle. The low firing cycle means less than or equal to 25 percent of the maximum burn rate achieved with doors closed or the minimum burn achievable. [Formerly 449.760; 1983 c.333 §1]

468.280 Policy. (1) In the interest of the public health and welfare of the people, it is declared to be the public policy of the State of Oregon:

(a) To restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state.

(b) To provide for a coordinated state-wide program of air quality control and to allocate between the state and the units of local government responsibility for such control.

(c) To facilitate cooperation among units of local government in establishing and supporting air quality control programs.

(2) The program for the control of air pollution in this state shall be undertaken in a progressive manner, and each of its successive objectives shall be sought to be accomplished by cooperation and conciliation among all the parties concerned. [Formerly 449.765]

468.285 Purpose. It is the purpose of the air pollution laws contained in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter to safeguard the air resources of the state by controlling, abating and preventing air pollution under a program which shall be consistent with the declaration of policy in this section and with ORS 468.280. [Formerly 449.770]

468.290 Application of air pollution laws. Except as provided in this section and in ORS 468.450, 476.380 and 478.960, the air pollution laws contained in this chapter do not apply to:

(1) Agricultural operations and the growing or harvesting of crops and the raising of fowls or animals, except field burning which shall be subject to regulation pursuant to ORS 468.140, 468.150, 468.455 to 468.480 and this section;

(2) Use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals, except field burning which shall be subject to regulation pursuant to ORS 468.140, 468.150, 468.455 to 468.480 and this section;

(3) Barbecue equipment used in connection with any residence;

(4) Agricultural land clearing operations or land grading;

(5) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families, except woodstoves which shall be subject to regulation under this section and ORS 468.630 to 468.655;

(6) Fires set or permitted by any public agency when such fire is set or permitted in the performance of its official duty for the purpose of weed abatement, prevention or elimination of a fire hazard, or instruction of employees in the methods of fire fighting, which in the opinion of the agency is necessary;

(7) Fires set pursuant to permit for the purpose of instruction of employees of private industrial concerns in methods of fire fighting, or for civil defense instruction; or

(8) The propagation and raising of nursery stock, except boilers used in connection with the propagation and raising of nursery stock. [Formerly 449.775; 1975 c.550 §2, 1983 c.333 §2; 1983 c.720 §3]

468.295 Air purity standards; air quality standards. (1) By rule the commission may establish areas of the state and prescribe the degree of air pollution or air contamination that may be permitted therein, as air purity standards for such areas.

(2) in determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(L) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.785]

468.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.825]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.782]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register

with the department and make reports containing such information as the commission by rule may require concerning location, size and height of air contaminant outlets, processes employed, fuels used and the amounts, nature and duration of air contaminant emissions and such other information as is relevant to air pollution. [Formerly 449.707]

468.325 Notice prior to construction of new sources; order authorizing or prohibiting construction; effect of no order; appeal. (1) The commission may require notice prior to the construction of new air contamination sources specified by class or classes in its rules or standards relating to air pollution.

(2) Within 30 days of receipt of such notice, the commission may require, as a condition precedent to approval of the construction, the submission of plans and specifications. After examination thereof, the commission may request corrections and revisions to the plans and specifications. The commission may also require any other information concerning air contaminant emissions as is necessary to determine whether the proposed construction is in accordance with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto.

(3) If the commission determines that the proposed construction is in accordance with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto, it shall enter an order approving such construction. If the commission determines that the construction does not comply with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto, it shall notify the applicant and enter an order prohibiting the construction.

(4) If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications or any other information required pursuant to this section, the commission fails to issue an order, the failure shall be considered a determination that the construction may proceed. The construction must comply with the plans, specifications and any corrections or revisions thereto or other information, if any, previously submitted.

(5) Any person against whom the order is directed may, within 20 days from the date

of mailing of the order, demand a hearing. The demand shall be in writing, shall state the grounds for hearing and shall be mailed to the director of the department. The hearing shall be conducted pursuant to the applicable provisions of ORS 183.310 to 183.550.

(6) The commission may delegate its duties under subsections (2) to (4) of this section to the Director of the Department of Environmental Quality. If the commission delegates its duties under this section, any person against whom an order of the director is directed may demand a hearing before the commission as provided in subsection (5) of this section.

(7) For the purposes of this section, "construction" includes installation and establishment of new air contamination sources. Addition to or enlargement or replacement of an air contamination source, or any major alteration or modification therein that significantly affects the emission of air contaminants shall be considered as construction of a new air contamination source. [Formerly 449.712; 1983 c.275 §1]

468.330 Duty to comply with laws, rules and standards. Any person who complies with the provisions of ORS 468.325 and receives notification that construction may proceed in accordance therewith is not thereby relieved from complying with any other applicable law, rule or standard. [Formerly 449.739]

468.335 Furnishing copies of rules and standards to building permit issuing agencies. Whenever under the provisions of ORS 468.320 to 468.340 rules or standards are adopted by either the commission or a regional authority, the commission or regional authority shall furnish to all building permit issuing agencies within its jurisdiction copies of such rules and standards. [Formerly 449.722]

468.340 Measurement and testing of contamination sources. (1) Pursuant to rules adopted by the commission, the department shall establish a program for measurement and testing of contamination sources and may perform such sampling or testing or may require any person in control of an air contamination source to perform the sampling or testing, subject to the provisions of subsections (2) to (4) of this section. Whenever samples for air or air contaminants are taken by the department of analysis, a duplicate of the analytical report shall be furnished promptly to the person owning or operating the air contamination source.

(2) The department may require any person in control of an air contamination source to provide necessary holes in stacks or ducts and proper sampling and testing facilities, as may be necessary and reasonable for the ac-

curate determination of the nature, extent, quantity and degree of air contaminants which are emitted as the result of operation of the source.

(3) All sampling and testing shall be conducted in accordance with methods used by the department or equivalent methods of measurement acceptable to the department.

(4) All sampling and testing performed under this section shall be conducted in accordance with applicable safety rules and procedures established by law. [Formerly 449.702]

468.345 Variances from air contamination rules and standards; delegation to local governments; notices. (1) The commission may grant specific variances which may be limited in time from the particular requirements of any rule or standard to such specific persons or class of persons or such specific air contamination source, upon such conditions as it may consider necessary to protect the public health and welfare. The commission shall grant such specific variance only if it finds that strict compliance with the rule or standard is inappropriate because:

(a) Conditions exist that are beyond the control of the persons granted such variance; or

(b) Special circumstances render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause; or

(c) Strict compliance would result in substantial curtailment or closing down of a business, plant or operation; or

(d) No other alternative facility or method of handling is yet available.

(2) The commission may delegate the power to grant variances to legislative bodies of local units of government or regional air quality control authorities in any area of the state on such general conditions as it may find appropriate. However, if the commission delegates authority to grant variances to a regional authority, the commission shall not grant similar authority to any city or county within the territory of the regional authority.

(3) A copy of each variance granted, renewed or extended by a local governmental body or regional authority shall be filed with the commission within 15 days after it is granted. The commission shall review the variance and the reasons therefor within 60 days of receipt of the copy and may approve, deny or modify the variance terms. Failure of the commission to act on the variance within the 60-day period shall be considered a determination that the variance granted by

the local governmental body or regional authority is approved by the commission.

(4) In determining whether or not a variance shall be granted, the commission or the local governmental body or regional authority shall consider the equities involved and the advantages and disadvantages to residents and to the person conducting the activity for which the variance is sought.

(5) A variance may be revoked or modified by the grantor thereof after a public hearing held upon not less than 10 days' notice. Such notice shall be served upon all persons who the grantor knows will be subjected to greater restrictions if such variance is revoked or modified, or are likely to be affected or who have filed with such grantor a written request for such notification. [Formerly 449.810]

468.350 Air and water pollution control permit for geothermal well drilling and operation; enforcement authority of director. (1) Upon issuance of a permit pursuant to ORS 522.115, the director shall accept applications for such appropriate permits under air and water pollution control laws as are necessary for the drilling of a geothermal well for which the permit has been issued and shall, within 30 days, act upon such application.

(2) The director shall continue to exercise enforcement authority over a permit issued pursuant to this section; and shall have primary responsibility in carrying out the policy set forth in ORS 468.280, 468.710 and rules adopted pursuant to ORS 468.725, for air and water pollution control at geothermal wells which have been unlawfully abandoned, unlawfully suspended, or completed. [1975 c.552 §34]

468.355 Open burning of vegetative debris; local government authority. (1) The Environmental Quality Commission shall establish by rule periods during which open burning of vegetative debris from residential yard cleanup shall be allowed or disallowed based on daily air quality and meteorological conditions as determined by the department.

(2) After June 30, 1982, the commission may prohibit residential open burning in areas of the state if the commission finds:

(a) Such prohibition is necessary in the area affected to meet air quality standards; and

(b) Alternate disposal methods are reasonably available to a substantial majority of the population in the affected area.

(3)(a) Nothing in this section prevents a local government from taking any of the following actions if that governmental entity otherwise has the power to do so:

Proposed Contingency of Particulate Emission Standards for Industrial Sources in the Grants Pass PM-10 Non-Attainment Area

Source	Units	Existing Rule	(1) Proposed RACT	(NOTES)
Wood-Waste Boilers <35MM Btu input*	gr/dscf opacity %	0.2/0.1 40	No Change No Change	(2)
Wood-Waste Boilers >35MM Btu input*	gr/dscf opacity %	0.030 5	No Change No Change	
Particleboard Plt.** Wood dryers	lb/ksq-ft gr/dscf opacity %	--- 0.1 20	0.40 0.1 20	
Hardboard Plt.**	lb/ksq-ft opacity %	1 20	0.25 20	
Air Convey<10 T/Yr	gr/scf opacity %	0.2/0.1 20	No Change No Change	(2)
Air Convey>10 T/Yr	gr/scf % CE opacity %	0.1 --- 20	--- 98.5 20	(3)
Industrial Sources listed in note (4)	fugitive particulate	---	plan & implement	(5)

NOTES:

- (1) Limits for Reasonably Available Control Technology (RACT) are established at same levels as were set for Medford-Ashland in 1978. Existing standards for large boiler emissions (gr/dscf & opacity) effective 9/26/89 exceed RACT requirements.
- (2) gr/dscf for State Rule: EXISTING sources prior to June 1, 1970 / NEW sources constructed or modified after June 1, 1970.
- (3) CE means Control Efficiency of system to control cyclone emissions.
- (4) Large sawmills, all plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, stationary asphalt plants and stationary rock crushers (as described in OAR 340-20-155, Table 1).
- (5) Fugitive emissions shall be controlled in accordance with a site-specific plan and implementation (see OAR 340-30-043(2) for detailed requirements).

* This applies as total Btu from all boilers on a plant site.

** There are currently no particleboard or hardboard plants in Grants Pass.

Proposed Contingency of Particulate Emission Standards for Industrial Sources in PM-10 Non-Attainment Areas of La Grande* and Klamath Falls

Source	Units	Existing State Rule	(1) Proposed RACT	(NOTES)
Wood-Waste Boilers <35MM Btu input**	gr/dscf opacity %	0.2/0.1 40	0.2/0.1 40	(2)
Wood-Waste Boilers >35MM Btu input**	gr/dscf opacity %	0.2/0.1 40	0.050 20	(2)
Particleboard Plt. Wood dryers	lb/ksq-ft gr/dscf opacity %	--- 0.1 40/20	0.40 0.1 20	(3)
Hardboard Plt.	lb/ksq-ft opacity %	1 40/20	0.25 20	(3)
Air Convey<10 T/Yr	gr/scf opacity %	0.2/0.1 40/20	0.2/0.1 20	(2) (3)
Air Convey>10 T/Yr	gr/scf % CE opacity %	0.2/0.1 --- 40/20	--- 98.5 20	(2) (4) (3)
Industrial Sources listed in note (5)	fugitive particulate	---	plan & implement	(6)

NOTES:

- (1) Limits for Reasonably Available Control Technology (RACT) are established at same levels as were set for Medford-Ashland in 1978.
- (2) gr/dscf for State Rule: EXISTING sources prior to June 1, 1970 / NEW sources constructed or modified after June 1, 1970.
- (3) Opacity for State Rule: EXISTING sources prior to June 1, 1970, or located in special control areas, / NEW sources constructed or modified after June 1, 1970.
- (4) CE means Control Efficiency of system to control cyclone emissions.
- (5) Large sawmills, all plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, stationary asphalt plants and stationary rock crushers (as described in OAR 340-20-155, Table 1).
- (6) Fugitive emissions shall be controlled in accordance with a site-specific plan and implementation (see OAR 340-30-043(2) for detailed requirements).

- * If RACT is adopted as a primary control strategy element in La Grande as proposed there will be no sources affected by the contingency.
- ** This applies as a total Btu from all boilers on a plant site.

DEQ LAND USE EVALUATION STATEMENT FOR RULEMAKING

PROPOSED NEW INDUSTRIAL PM₁₀
EMISSION STANDARD RULES AND OTHER HOUSE-KEEPING MEASURES

- (1)
- Explain the purpose of the proposed rules.

The purpose of the proposed rules is to adopt new industrial emission standards and implement house-keeping changes to existing rules required by the U.S. Environmental Protection Agency (EPA) to approve PM₁₀ control strategies. Included are proposed contingency control requirements for industrial sources in PM₁₀ nonattainment areas as required by the federal Clean Air Act Amendments of 1990. Also included are revisions in rules for industrial PM₁₀ sources and the applicability of ambient air quality standards needed to address EPA objections.

- (2)
- Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?
- Yes
-
- No
-

- (a)
- If yes, identify existing program/rule/activity:


The rules affect a land use program identified as "Issuance of Air Contaminant Discharge Permits (ACDP)".

- (b)
- If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?
- Yes
-
- No
-

If no, explain: Not Applicable.

- (c)
- If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.
- Not Applicable.

- (3)
- If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.
- Not Applicable.


Division


Intergovernmental Coord.

10-21-91
Date

ADG:a
MISC\AH19054
(9/9/91)

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 24, 1991

TO: Environmental Quality Commission
FROM: Linda Wishart, Hearings Officer *LW*
SUBJECT: Hearings Report for Industrial PM₁₀ Emission Standards
and Housekeeping Rules

Five hearings were held to accept testimony on four PM₁₀ Control Strategies and three packages of supporting rules required to meet the Clean Air Act November 15, 1991 deadline for PM₁₀ State Implementation Plan revisions. These hearings were authorized by the Environmental Quality Commission at an August 22, 1991, telephone conference.

On September 26, 1991 a public hearing, held in the Commission Hearing Room of the Courthouse Annex, Klamath Falls, Oregon, was attended by 24 persons; 15 gave oral comments and 7 submitted written comments.

On September 27, 1991, a public hearing was held at the City Council Chambers, 101 NW "A" Street, Grants Pass, Oregon. There were nine persons in attendance, one gave oral testimony and two submitted written comments.

On September 30, 1991, a public hearing was held at the Smullin Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 34 persons present, 15 gave oral testimony and 13 submitted written comments.

On October 1, 1991, a public hearing, held in Zabel Hall, room 110, Eastern Oregon State College, La Grande, Oregon, was attended by 21 persons; five gave oral comments, four submitted written comments.

On October 1, 1991, a public hearing was held at the conference room of the Oregon Operations office of the U.S. Environmental Protection Agency (EPA), 811 SW Sixth Avenue, Portland, Oregon. Four people attended. Three gave oral testimony. No written testimony was received.

Additional testimony was received prior to the October 2, 1991 deadline. Copies of written comments have been provided to the Environmental Quality Commission. The following is a summary of all comments received, both oral and written.

Industrial PM₁₀ Emission Standards and Housekeeping Rules

No. Testimony Summary/Issues	Whose Comment
<p>1. BACT should not be required in the contingency plan.</p> <p>Many people (industry, government, members of the public) were strongly opposed to including Best Available Control Technology (BACT) industrial requirements in the contingency plan and indicated that the federal Clean Air Act only requires Reasonably Available Control Technology (RACT). They expressed concern that the high cost of BACT would force industry to cut back operations and employment. They noted that industry has a long history of regulations and has already spent a lot to reduce PM₁₀. Industry is now a small percent of the emissions so that additional controls will not solve the problem.</p> <p>It would be more appropriate to wait until 1994, determine source of problem, and design a comprehensive approach. Less costly alternatives to controls such as taller stacks should be explored. Since BACT is more stringent than required by EPA for contingency plans and no one knows how effective RACT will be, BACT should not be required.</p>	<p>K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K14, G2, P3, P7</p>

2. **BACT should be required in the contingency plan, the contingency measures should apply to facilities near nonattainment areas, the schedule for compliance with contingency measures should be shorter.**

K16,
P4, P6

A few organizations supported BACT in the contingency plan. The League of Women Voters strongly supports the contingency plan for industrial emissions. The Sierra Club commented that, as a contingency, special rules applied to Medford and Grants Pass should be required of Klamath Falls.

Sierra Club also indicated that rather than using modeling, all facilities over 50 tons/yr of PM₁₀ within 10 miles of a nonattainment area should be included in the contingency plan.

EPA stated that a forty-eight month compliance schedule for the contingency plan is too long and recommends 30 months.

3. **A number of comments were received both for and against requiring the dual-fueling feasibility study for Medford wood-fired boilers prior to the attainment deadline.**

M1, M4,
M12,
M16,
M17,
M18,
M19,
M20,
P6

The Coalition suggested two years ago that dual-fueling should be implemented as a means of reducing PM10 output on high pollution days, for cold starts after holiday closures or when poor fuel must be used, and proposed immediate efforts to increase gas supply to area. The Sierra Club stated that dual-fueling feasibility study should be initiated immediately so the results are available in a timely manner if required as a contingency measure.

Industry noted that the requirement for industry to fund a study of dual-fueling on large boilers precedes implementation of original plan before the need is established. The outcome of the study is highly questionable because boilers operated differently and cannot be addressed by industry-wide standards, switching to alternative fuel can actually result in higher emissions, and the cost of conversion is estimated at between \$450,000 and \$500,000 per unit, making the cost/benefit ratio small for the 15-20 days per year use.

4. The proposed new definition of average operating opacity for veneer dryers is unacceptable because it does not recognize variations in opacity performance over time and operating conditions.

G2

One industrial representative noted that the proposed definition of average operating opacity and deletion of the design opacity standard, in effect, makes the average standard a maximum 5% opacity standard. This will do nothing to improve air quality, but will subject veneer dryers to periods of unavoidable noncompliance and continual enforcement action. The million plus dollars spent to date have successfully reduced emissions and opacity to deminimus levels. The average operating opacity standard should give recognition to variables in the process such as moisture and species dried.

5. One industrial representative noted that elimination of the ambient monitoring site criteria from the ambient air quality standard definition subjects any stack, chimney or building to standard requirements which would be difficult for even the most pristine area to meet.

G2

6. **Several comments were received regarding the Medford-Ashland control requirements adopted in 1989.**

Some noted that requirements of BACT and Continuous Emission Monitoring (CEM) will have severe economic impact on both industry and area. Equipment required for these measures is too costly for small operations and therefore favor big business. Recognition of the recent resource problems in the Wood Products Industry should be a factor taken into consideration.

Others noted that because industrial sources are a big source of year-round PM10 pollution, industry claims of hardship should be considered carefully case-by-case. Large boilers should be defined as over 10 million BTU/hr and should not be given exemption from CEM.

The SIP fails to identify the use of emission credits. The potential for accumulating large emission credits by using state of the art technology is seen as a detriment to achieving the best possible standards.

Limits should be set for 0.01 gr/dscf for large boilers in the North Medford area. Biomass has achieved an emission reduction of 80%-90% less than the DEQ minimum requirement - proving it can be done. The emission offset ratio should be increased from 1.2:1 to 1.5:1.

While veneer driers in North Medford are subject to tighter standards, no new controls are proposed for the particle driers, which could be reduced by 50% using off the shelf equipment.

M1, M4,
M10,
M12,
M16,
M17,
M18,
M19,
M20, P6

7. **General Comments**

Industry looks to DEQ for responsible guidance rather than to EPA. EPA guidance is not prescribed by legislation nor does it reflect a vested interest in the community and its needs.

G2

Ambient Air Quality Standards are likely to be tightened in the future.

P1

Environmental concerns must be balanced with economic factors. The cost to industry should be proportional to the amount industry contributes to the problem.

P2

Testimony References

Public Testimony Given in La Grande

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
L1.	A	Grant Darrow, Chimney Sweep
L2.	B	Francis Mohr, Acting Air Resource Manager Wallowa-Whitman National Forest
L3.	B	R.M. Richmond, Forest Supervisor, Wallowa-Whitman National Forest
L4.	C	Jeff Blackwood, Forest Supervisor, Umatilla National Forest
L5.	D	Larry Dalrymple, City Manager, La Grande
L6.	no	Jim Brown, Air Quality Committee, Citizens
L7.	no	Roberta Bates, Resident, La Grande

Public Testimony Given in Klamath Falls

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
K1.	no	Doss Decker, Resident, Klamath Falls
K2.	no	Nancy Roeder, Resident, Klamath Falls
K3.	no	Harry Fredricks, County Commissioner
K4.	E	Stan Meyers, Vice President Engineering, JELD-WEN, INC.
K5.	F	Joseph Riker, Community Development Director, City of Klamath Falls
K6.	G	John D. Monfore, Land Use Manager, Weyerhaeuser

K7. no Leo Dunn, Resident,
Klamath Falls

K8. H Drew Honzel, Columbia Plywood Corp.

K9. I Ron Loveness, Resident, Klamath Falls

K10. no Del Parks, State Representative,
Klamath County

K11. J James Keller, City Manager,
Klamath Falls

K12. K Kurt Schmidt, Employee,
Modoc Lumber Co.

K13. no Roy Ford, Resident,
Klamath Falls

K14. L Steve Kandra,
President Klamath County Chamber of
Commerce

K15. no Bob Flowers, Farmer, Klamath Falls

K16. M Nina Pence, President,
League of Women Voters,
Klamath County

K17. N Carol Yarbrough, President,
Citizens for Quality Living

Public Testimony Given in Grants Pass

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
G1.	no	Paul Brandon, Resident, Grants Pass
G2.	O	Dennis Spencer, Regional General Manager, Stone Forest Industries
G3.	P	Candace Bartow, Mayor, Grants Pass
G4	Q	Josephine County Board of Commissioners

Public Testimony Given in Medford

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
M1.	R	Wallace Skyrman, Resident, Central Point
M2.	S	Anna Hirst, League of Women Voters
M3.	T	Frank Hirst, Audubon Society
M4.	U	Robert Palzer, PhD., Coalition to Improve AQ
M5.	no	James Dodson, Resident, Medford
M6.	no	Gary Stevens, Environmental Health Department, Jackson County
M7.	V	Vera Morrell, Chairperson, Coalition to Improve Air Quality
M8.	W	Paul Wyntergreen Regional Director, Oregon Environmental Council
M9.	X	Neil Robbins, Resident, Medford
M10.	Y	Patricia Kuhn, Resident, Medford
M11.	no	Ronald Meyer, Farmer, Talent
M12.	no	Myra Erwin, Chairperson, Rogue Group Sierra Club
M13.	Z	William Barbour, Farmer, Medford
M14.	Z	Victoria Montgomery, Resident, Medford
M15.	AA	Jan Young, Pulmonary Rehabilitation Coordinator, Medford
M16.	BB	Greg Miller, Executive Vice President, Southern Oregon Timber Association

M17. BB Bob Morris,
Environmental Affairs Committee Chair,
Southern Oregon Timber Association

M18. CC Kathleen Muir, Resident, Ashland

M19. DD Phyllis Hughes,
Rogue Group Sierra Club

M20. EE Garl Grigsby, Double Dee Lumber Company

M21. FF Anne & Bob Gottschalk,
Residents, Talent

M22. GG Robert Owens, Co-Executive Council
American Indian Cultural Center

M23. HH C. Herschel King, MD
Retired Anesthesiologist, Ashland

Public Testimony Given in Portland and Misc. Letters Submitted

<u>NO.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
P1.	no	Joe Weller, Lung Association
P2.	no	Jim Britton, Executive Director, Asphalt Paving Association
P3.	no	Harry Fredricks, Klamath County Commissioner
P4.	II	David Kircher, Chief Air Programs Development Section
P5.	JJ	David Kircher, Chief Air Programs Development Section
P6.	KK	Bob Palzer, Air Quality Coordinator, Sierra Club
P7.	LL	James Whitty, Legislative Counsel, Associated Oregon Industries
P8.	MM	Tim Nissen, President, Wood Energy Institute
P9.	NN	John Crouch, Emissions Specialist, Wood Heating Alliance

LLW:a
RPT\AH20050
(10/24/91)

**Response to Testimony/Comments Regarding
Industrial PM₁₀ Emission Standard Rules and
Other Related Housekeeping Measures**

Issue No. 1: BACT should not be required in the contingency plan.

Response: The Department had initially proposed combined RACT/BACT emission limits for the contingency measures to meet both the contingency requirement and the BACT requirement in the most cost-effective manner. However, the Clean Air Act clearly allows the Environmental Quality Commission (EQC) to adopt RACT for the contingency plan and wait to adopt BACT until 18 months after an area is redesignated as a serious PM₁₀ nonattainment area. Because the preponderance of testimony from all sectors strongly supported separating the RACT and BACT requirements, the Department revised the proposal to establish RACT as contingency measures with 30 month compliance schedules. This issue is further discussed on pages 2 and 3 of the staff report.

Issue No. 2: BACT should be required in the contingency plan, the contingency measures should apply to facilities near nonattainment areas, the schedule for compliance with contingency measures should be shorter.

Response: As discussed in the response to issue number 1, the Department revised the proposed contingency plan to require RACT instead of RACT/BACT. If an area fails to meet the attainment deadline, it will be reclassified as a "serious" PM₁₀ nonattainment area and a new control strategy will be developed within 18 months. The new control strategy will require BACT with a compliance schedule ending 48 months after the area is reclassified. While the new strategy is being developed, the contingency plan will take effect to provide continued progress toward meeting the standard, requiring RACT in 30 months.

The contingency plan would apply to all sources in the nonattainment area if triggered. The proposed rule would also apply the contingency plan to a major source near the nonattainment area upon a determination that the source has a significant impact on the nonattainment area. The requirements can not be arbitrarily applied to sources outside the nonattainment area without determining that they have a significant impact on ambient air within the nonattainment area. The potential need to expand the nonattainment area boundary would be assessed at the time the new control strategy is developed (within 18 months after the area is redesignated as serious).

Issue No. 3: A number of comments were received both for and against requiring the dual-fueling feasibility study for Medford wood-fired boilers prior to the attainment deadline.

Response: The Department believes that it is necessary to conduct the feasibility study prior to the attainment deadline so that a dual-fueling requirement can be added to the contingency plan if found by the Environmental Quality Commission to be feasible. The intent of the contingency plan is to require additional control measures that go into effect without further action by the state to provide short-term improvement in air quality while a new control strategy is being developed. The Department does not believe that initiation of the feasibility study upon failure to meet the attainment deadline would meet this intent. The Department does not propose the dual-fueling requirement to be implemented in the attainment control strategy because it is not required to demonstrate attainment and its feasibility is not yet demonstrated.

Issue No. 4: The proposed new definition of average operating opacity for veneer dryers is unacceptable because it does not recognize variations in opacity performance over time and operating conditions.

Response: The definition was proposed to meet Environmental Protection Agency (EPA) requirements concerning the enforceability of the average operating opacity standard. The Department recognizes that the original intent of the standard was to consider variations in opacity performance over time and operating conditions. The proposed definition has been revised to ensure that opacity determinations on three days are separated by at least 30 days. The Department believes that this revision is enforceable and reflective of the intent of the rule with respect to a long-term average condition. In addition, sources which are subject to a tighter standard in the Medford-Ashland area continue to have the option to obtain a less stringent opacity limit provided they demonstrate by source test that the mass emission limit can be met at a higher opacity.

Issue No. 5: One industrial representative noted that elimination of the ambient monitoring site criteria from the ambient air quality standard definition subjects any stack, chimney or building to standard requirements which would be difficult for even the most pristine area to meet.

Response: The revision in the ambient standards rules was proposed to meet EPA objections that the existing rules are inconsistent with federal requirements. While it is true that the standards would apply anywhere in the ambient air, the Department's and EPA's intent in monitoring has been to

follow the EPA monitoring site guidelines which would keep monitoring sites from being established at unreasonable locations. Furthermore, the revision simply makes the standards equivalent to the federal standards. If the proposed amendments are not adopted, EPA will disapprove the SIP and enforce the federal standards.

Issue No. 6: Several comments were received regarding the Medford-Ashland control requirements adopted in 1989.

Response: The Medford-Ashland industrial control requirements adopted in 1989 were required to demonstrate attainment with the PM₁₀ standard. Additional industrial controls are not needed in the control strategy to demonstrate attainment. These comments are discussed in more detail in the agenda item regarding the Medford-Ashland PM₁₀ control strategy proposed for adoption concurrently with these rules.

Issue No. 7: General Comments: EPA guidance is not prescribed by legislation; environmental concerns must be balanced by economic concerns; ambient air quality standards are likely to be tightened in the future.

Response: The Department relies upon EPA guidance to help interpret the Clean Air Act and to determine EPA's requirements for approvability of the State Implementation Plan. However, the Department relies on the statute and regulations themselves to determine legal requirements.

The Department agrees that economic concerns are an integral part of environmental regulation. The establishment of emission standards based on Reasonably Available Control Technology and Best Available Control Technology includes a cost-effectiveness analysis (cost per ton of emissions reduced). The economic impact of a rule is carefully evaluated by the Department and the Environmental Quality Commission prior to proposal and adoption.

The Department recognizes that ambient air quality standards for PM₁₀ and Ozone are under review by EPA, and that more stringent standards may be considered by EPA to protect public health and welfare. The potential affect on attainment and nonattainment designations in Oregon is unknown at this time.

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RPT\AH20051
(10/24/91)

**Summary of Changes From Rules Authorized For
Public Hearing and Rules Proposed For Adoption**

**Industrial PM₁₀ Emission Standard Rules and
Other Related Housekeeping Measures**

Part 1: Division 21, Industrial Contingency Measures

- 340-21-200: Purpose
- Eliminated references to BACT
- 340-21-215: Definitions
- Deleted LAER and Veneer Dryer
- Revised Particulate Matter
- 340-21-220: Compliance Schedule
- Revised to 30 month schedule
- Added option for DEQ to adjust interim milestones
- 340-21-225: Wood-fired Boilers
- Deleted rule for small boilers
- Changed rule for large boilers from LAER and 5% opacity to 0.05 gr/dscf and to 10% opacity (with a maximum 20% if demonstrated by source test that 0.05 gr/dscf can be met at a higher opacity)
- 340-21-230: Veneer Dryers - Deleted entirely
- 340-21-235: Wood Particle Dryers
- Renumbered to 340-21-230
- Substituted copy of Medford language from 340-30-030 for reference to revised 340-30-030; no functional change
- 340-21-240: Hardboard
- Renumbered to 340-21-235
- Deleted section (2) relating to press/cooling vent limits
- 340-21-245: Charcoal Plants
- Deleted entirely
- 340-21-250: Air Conveying Systems
- Renumbered to 340-21-240
- Changed applicability minimum from 3 tons/yr to 10 tons/yr emissions
- Added a 5% opacity limit

- 340-21-255: Fugitive Emissions
- Renumbered to 340-21-245
- Clarified citation to Division 30

Part 2: Division 25, State-wide Veneer Dryer Rules

- 340-25-305: Definitions
- Revised definition of Particulate Matter
- Revised definition of Average Operating Opacity
- Deleted definition of Opacity Readings
- 340-25-315: Veneer and Plywood Manufacturing Operations
- Clarified applicability of emission limit for boilers which vent to the veneer dryer

Part 3: Division 30, Medford-Ashland, Grants Pass and La Grande Rules

- 320-03-005: Purpose and Application
- Revised to apply to specified areas with unique needs including Medford-Ashland, Grants Pass and Medford
- 340-30-010: Definitions
- Revised definition of Particulate Matter
- Revised definition of Average Operating Opacity
- Added definition of La Grande Urban Growth Area
- 340-30-012: Application
- Added new rule to specify the range of rules applicable to Medford and Grants Pass sources
- 340-30-021: Veneer Dryer Emission Limitations
- Clarified applicability of emission limit for boilers which vent to the veneer dryer
- 340-30-030: Particle Dryers
- Deleted exemption for 3 minutes in any one hour from opacity standard.
- 340-30-046: Compliance Schedule
- Fixed underlining problem
- 340-30-115: Dual-Fueling Study
- Added new rule to implement the study previously proposed in the Medford-Ashland control strategy

New Rules For La Grande

- 340-30-200: Application
- Added new rule to specify the range of rules applicable to La Grande sources
- 340-30-205: Compliance schedule
- Added new rule for existing La Grande sources to comply with RACT in 30 months
- 340-30-210: Wood-fired Boilers
- Added new rule to establish RACT for large wood-fired boilers in La Grande
- 340-30-215: Wood Particle Dryers
- Added new rule to establish RACT for wood particle dryers boilers in La Grande
- 340-30-220: Hardboard
- Added new rule to establish RACT for hardboard plants in La Grande
- 340-30-225: Air Conveying Systems
- Added new rule to establish RACT for air conveying systems in La Grande
- 340-30-230: Fugitive Emissions
- Added new rule to establish RACT for fugitive emissions in La Grande

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RPT\AH20052
(10/24/91)

**RATIONALE FOR RACT DETERMINATION FOR INDUSTRIAL
CONTINGENCY REQUIREMENT FOR PM₁₀ NONATTAINMENT AREAS**

Industrial sources were reviewed to determine Reasonably Available Control Technology (RACT) for PM₁₀ emission reductions. The Department has proposed RACT as the contingency requirement for industrial sources located in or impacting a PM₁₀ nonattainment area which fails to meet the Clean Air Act attainment date. This attachment briefly describes the rationale used to determine RACT for affected sources.

The selection of sources to be controlled was based primarily on proven results and control technology applied in the Medford-Ashland Air Quality Maintenance Area. Most sources were controlled in response to adoption of particulate matter emission standards in 1978. Hardboard manufacturing operations emission limits are traced to requirements set for a new plant which began operation in Medford in 1975.

- o Wood-waste fired boilers using low-pressure wet scrubbers have demonstrated the ability to achieve the RACT criteria for several years. The control of small (less than 35 million Btu/hr) boilers to this level with retrofitted equipment is generally considered not to be economically feasible.
- o Emissions from rotary particle dryers have been controlled to the standard of 0.40 pounds per 1000 square feet of product with a sand-air filter technology. There are now other types of control equipment which could be used on this application.
- o Most hardboard plant emissions, excluding press and cooling vents, come from wood particle dryers or air conveying systems. Emissions from dryers are controlled with wet scrubbers. Bagfilters control particulate matter emissions from cyclones handling dry materials at hardboard plants.
- o The technique of reducing emissions by installing bagfilters on cyclones (end device of most air conveying systems) at wood products facilities is an effective control.
- o The development and implementation of a site-specific plan for fugitive emissions is considered a more structured control than that provided by the state-wide general fugitive emission regulation.

A projection of PM₁₀ emissions reductions resulting from implementation of the contingency for each nonattainment area is presented on the following page.

Estimated PM-10 Emission Reductions for Industrial Sources
 Upon Implementation of RACT
 PM-10 Nonattainment Area Contingency Plans

Emission Source	PM-10 Emissions Reductions -- Tons/Year				
	Medford-Ashland (1)	Grants Pass (2)	Klamath Falls NAA(3) AQCA(4)		La Grande (5)
Boiler	--	--	42.6	464.5	--
Hardboard Plt.	--	--	10.5	24.8	--
Part.Bd Dryer	--	--	--	0	--
Air Convey syst.	--	--	6.1	340.1	--
Total per Area	0	0	59.2	829.4	0

- (1) A feasibility study for a possible contingency dual-fueling requirement is proposed for Medford-Ashland.
- (2) The RACT contingency strategy will not affect any point sources in Grants Pass.
- (3) Industrial emission sources within the nonattainment area only.
- (4) Industrial emission sources within the nonattainment area and including the Weyerhaeuser wood products complex.
- (5) Since emissions from industrial sources in La Grande are proposed to be included in the primary control strategy, there is no allocated contingency reduction.

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 (10/24/91)

TECHNICAL SUPPORT DOCUMENT
FOR EPA'S PROPOSED DISAPPROVAL
OF REVISIONS TO OREGON'S RULES FOR
KRAFT PULP MILLS AND
BOARD PRODUCTS INDUSTRIES

INTRODUCTION

This technical support document summarizes the major problems and deficiencies with the submitted revisions to Oregon's rules for kraft pulp mills and board products industries. More detail on these and other deficiencies are included in the attachments to this document as follows:

Attachment 1 - EPA Review of Proposed Revisions to the Rules for Kraft Pulp Mills in the Oregon State Implementation Plan

Attachment 2 - "SIP Approvability Checklist - Enforceability" for the Oregon Kraft Pulp Mill Rules

Attachment 3 - "Determination of Completeness Checklist" for the Oregon Kraft Pulp Mill Rules

Attachment 4 - EPA Review of Proposed Revisions to the Rules for Board Products Industries in the Oregon State Implementation Plan

Attachment 5 - "SIP Approvability Checklist - Enforceability" for the Oregon Board Products Industries Rules

Attachment 6 - "Determination of Completeness Checklist" for the Oregon Board Products Industries Rules

~~BASIS FOR EPA'S PROPOSED DISAPPROVAL OF AMENDMENTS TO OREGON'S
RULES FOR KRAFT PULP MILLS (OAR 340-25-150 THROUGH 205)~~

~~1. The existing emission limits for particulate matter have been revised from short term (a kraft cycle) to monthly averages. (See the definition of "production" in OAR 340-25-150(11) and "Particulate Matter" emission limits in OAR 340-25-165(2). In addition, the new concentration emission limits are also expressed in terms of monthly arithmetic averages. Emission limits with a monthly averaging time are not practicably enforceable nor are they adequate to protect the 24-hour average particulate matter standards and increments.~~

2. The emissions monitoring requirements for particulate matter (OAR 340-25-180(3)) have been relaxed by deleting the requirement for a regular sampling schedule and the requirement for continuous particulate monitoring of lime kiln emissions, and by revising the rules to allow continuous opacity monitoring to substitute for continuous particulate monitoring of recovery furnace emissions. These revisions weaken the enforcement of the particulate emission limits, and make enforcement of the proposed monthly average particulate emission limitations for the lime kilns and recovery furnaces almost impossible.

3. A provision for monitoring combined emission streams has been added which allows for monitoring of a single, combined emission stream rather than the emissions from individual emissions units. This provision will make it practicably impossible to determine whether individual emission units remain in compliance with the applicable emission limits.

4. The reporting requirements have been revised to require reporting of emissions over averaging times which are inconsistent with the emission limitations and/or ambient standards. For example, particulate matter emissions and pulp production are required to be reported as monthly averages which, although consistent with the averaging times of the revised particulate emission limitations, are inconsistent with the averaging time of the NAAQS and PSD increments. Sulfur dioxide emissions are required to be reported as monthly averages even though the emission limitations are in terms of daily averages. The averaging times for reporting emissions must be consistent with both that of emission limitations and the short term ambient air quality standards, and in no case can they be longer than 24-hour averages.

5. The provision which required that other established air quality limitations be met by pulp mills has been repealed. By repealing this provision, the opacity limitations for pulp mill sources have also been repealed. EPA regulations require there to be visible emission limitations (or other means of ensuring continuous compliance) for all sources of particulate matter. Since the rules for pulp mills do not, in and of themselves, contain visible emission standards or any other means of ensuring continuous compliance, the rescission of this provision is not approvable.

6. A new provision for chronic upset conditions has been added which exempts recurring upset conditions from DEQ's excess emissions (upset/breakdown) rules. This new provision does not meet EPA's requirements for an excess emission rule since it does not indicate that excess emissions from chronic upset conditions are violations of applicable emission standards.

7. There are many problems with the revisions relating to enforceability, including lack of compliance dates/schedules, test methods, and compliance procedures.

8. No technical justification was submitted in support of the relaxation of the particulate matter emission limits. Sources affected by the rule change were not identified, changes in actual and allowable emissions were not quantified, and no demonstration was made that the revision would provide for attainment and maintenance of ambient air quality standards and PSD increments, and protect visibility in mandatory federal Class I areas.

BASIS FOR EPA'S PROPOSED DISAPPROVAL OF AMENDMENTS TO OREGON'S RULES FOR BOARD PRODUCTS INDUSTRIES (OAR 340-25-305 THROUGH 325)

1. The opacity limitations for veneer dryers have been revised from the existing 20% (10% for new dryers) opacity limitation with the traditional 3-minutes per hour exemption, to one involving a 10% "design" opacity, a 10% "average operating" opacity, and a 20% "maximum" opacity. However, the terms "design," "average operating," and "maximum" have not been defined or explained. Furthermore, the revised rules contain no source test methods, averaging times, or compliance methodologies to provide for enforcement of the new opacity limitations.

2. The applicability provision for the two new particulate emission limits for wood fired veneer dryers is based upon the moisture content of the fuel (less than or equal to 20% versus greater than 20%). However, there is no enforceable methodology or averaging time specified for determining fuel moisture content.

3. A new provision has been added which adjusts the particulate emission limit for a wood fired veneer dryer based upon the amount of steam generated by the heat source. This provision also exempts the heat source of wood fired veneer dryers from the emission limits for wood fired boilers. This provision is not acceptable where a wood fired boiler produces steam for more than just the veneer dryer or diverts only part of the combustion gases to the veneer dryer. The existing emission limit for wood fired boilers must continue to apply to all combustion emissions except those actually used in the veneer dryer (especially those emitted between drying cycles).

4. The provisions which restricted open burning of wood residues and other refuse in conjunction with the operation of any veneer or plywood manufacturing mill, particleboard manufacturing plant, and hardboard manufacturing plant have been deleted. No equivalent provisions have been identified or provided to regulate these sources.

5. There are many problems with the revisions relating to enforceability, including lack of compliance dates/schedules, test methods, compliance procedures and monitoring and reporting requirements.

6. No technical justification was submitted in support of the relaxation of the opacity limitations and the new particulate matter emission limits. Sources affected by the rule change were not identified, changes in actual and allowable emissions were not quantified, and no demonstration was made that the revision would provide for attainment and maintenance of ambient air quality standards and PSD increments, and protect visibility in mandatory federal Class I areas.

EPA REVIEW OF PROPOSED REVISIONS
TO THE RULES FOR BOARD PRODUCTS INDUSTRIES
IN THE OREGON STATE IMPLEMENTATION PLAN

SUMMARY OF AMENDMENTS TO OREGON'S RULES FOR BOARD PRODUCTS
INDUSTRIES OAR 340-25-305 THROUGH 325

Definitions (340-25-305)

- (1) "Department" - no changes
- (2) "Emission" - no changes
- (3) "Hardboard" - no changes
- (4) "Operations" - no changes
- (5) "Particleboard" - no changes
- (6) "Person" - new citation to the ORS
- (7) "Plywood" - no changes
- (8) "Tempering oven" - no changes
- (9) "Veneer" - no changes
- (10) "Opacity" - new definition. However, the citation to OAR 340-21-005(4) is erroneous because OAR 340-21-005 has been revised and renumbered since 1979 when this section was updated.
- (11) "Visual opacity determination" - new definition
- (12) "Opacity readings" - new definition
- (13) "Fugitive emissions" - new definition
- (14) "Special problem area" - new definition
- (15) "Wood fired veneer dryer" - new definition

General Provisions (OAR 340-25-310)

- Subsection (2), which indicates that the emission limitations established in this rule are in addition to all other rules has been revised to reference a new exception provision in OAR 340-25-315.
- No other changes to this section

Veneer and Plywood Manufacturing Operations (OAR 340-25-315)

Subsection (1) Veneer Dryers:

- This subsection has been revised to replace the current 20% (for existing dryers) and 10% (for new dryers) opacity limitations with provisions which require (A) a design opacity of 10%; (B) an average operating opacity of 10%; and (C) a maximum opacity of 20%. However, there are no averaging times or compliance methodologies specified to provide for enforcement of these new opacity limitations.
- New particulate emission limitations for wood fired veneer dryers have been added to this subsection. However, the emission limits differ for units using fuel which has a moisture content by weight of 20% or less and for units using fuel which has a moisture content by weight of greater than 20%. However, there is no enforceable methodology or averaging time specified for determining fuel moisture content.
- These two emission limits are further adjusted by the addition of a factor based on the amount of steam generated by the heat source, and the heat source itself is exempted from the emission limits for wood fired boilers in OAR 340-21-030. This new provision is not acceptable where a wood fired boiler provides steam for multiple uses and only part is used as the heat source for the veneer dryers.
- This subsection has been further revised to include new requirements for operation and maintenance, new requirements for control of fugitive emissions, and new provisions which allow the DEQ to require more restrictive emission limitations in certain circumstances.

Subsection (2) Other Emission Sources

- The citation in paragraph (b) of this subsection has been revised to reflect the new numbering of this section.

Subsection (3) Monitoring and Reporting

- This new subsection has been added to require the monitoring and reporting of visible air contaminant emissions from each veneer dryer emission point.
- The previous provisions of this subsection (OAR 340-25-315(3) "Open Burning" have been deleted.
- No other changes to this section

Particleboard Manufacturing Operations (OAR 340-25-320)

- The citations in paragraphs (1)(c) and (2)(b) have been revised to reflect the new numbering of this section.
- Subsection (4) "Open Burning" has been deleted.
- No other changes to this section

Hardboard Manufacturing Operations (OAR 340-25-325)

- The citations in paragraphs (1)(c) and (2)(b) have been revised to reflect the new numbering of this section.
- Subsection (5) "Open Burning" has been deleted.
- No other changes to this section



December 14, 1990

Reply To
Attn Of: AT-082

MEMORANDUM

SUBJECT: Review of Final Medford-Ashland and Grants Pa

FROM: David C. Bray, Environmental Scientist
Air Programs Development Section *DCB*

TO: George Lauderdale, Environmental Protection Specialist
Air Programs Development Section

In accordance with your request, I have reviewed the final PM₁₀ industrial rules for Medford-Ashland and Grants Pass (Oregon Administrative Rules, Chapter 340, Division 30, Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area and the Grants Pass Urban Growth Area) which were adopted by the Oregon Environmental Quality Commission on September 7, 1989. These final rules are substantially different than the proposed rules upon which we commented. Although changes were made to address our comments, not all are satisfactory. More importantly, numerous other changes were made to the rules which do not meet EPA requirements. The following are my comments on these final rules:

OAR 340-30-010 Definitions

1. The definition of "Modified Source" (OAR 340-30-010(23)) is based on increases in potential emissions rather than actual emissions as required by EPA regulations and the Clean Air Act. It also conflicts with ODEQ's current New Source Review Rules and Air Contaminant Discharge Permit Rules which correctly base modifications on actual emissions increases.
2. The definition of "Offset" (OAR 340-30-010(25)) allows increases in emissions of one pollutant to be offset by decreases in emissions of a different pollutant, contrary to the requirements of EPA regulations and the Clean Air Act.
3. The definition of "Fugitive Emissions" (OAR 340-30-010(16)) is less stringent than EPA's requirement in that it is based on criteria such as measurement and treatment by conventional methods, rather than simply the ability to pass the emissions through a vent, duct, or other equivalent opening.

4. The definition of "Averaging Operating Opacity" (OAR 340-30-010(2)) has several problems. First, EPA Method 9 is not appropriate as it is a 6-minute average and as such, contains data reduction requirements which are inconsistent with a three-day average. Second, it is not clear whether all opacity readings on the three days are combined to determine the average, or whether an average is determined for each of the three days. Third, it is not clear whether the three days must be consecutive or whether they can occur over any time period (one year, ten years). Finally, visual observation is not a practicable source test method for a multi-day standard and as such, fails to meet EPA's enforceability requirements.

5. The definition of "Design Opacity" (OAR 340-30-010(8)) is so vague that it will be unenforceable in practice. No averaging time or test method is specified.

6. There are several problems with the definitions of "Fuel Moisture Content by Weight Greater than 20 Percent" (OAR 340-30-101(14)) and "Fuel Moisture Content by Weight Less than 20 Percent" (OAR 340-30-101(15)). First, it is not clear whether certain fuels are automatically included under each definition regardless of moisture content (e.g., bark and hogged wood waste under (14); pulverized ply trim and sander dust under (15)). Second, the procedures for averaging are not specified with respect to time periods and number of samples. Finally, the provisions regarding measurement during compliance source testing are inconsistent with average moisture contents during normal operation. Overall, these definitions are so vague that they will be unenforceable in practice.

OAR 340-30-015 Wood Waste Boilers

1. The particulate matter emission limitations in OAR 340-30-015(1) and (3)(c) lack averaging times as required by EPA.

2. Exception provisions have been added to the opacity limits in OAR 340-30-015(2) and (3)(b) which allow ODEQ to change the opacity limits without EPA approval as required by the Clean Air Act.

3. The relationship between the new paragraph (3) and the existing paragraphs (1) and (2) is unclear as paragraph (3) establishes tighter limits for the same sources as paragraphs (1) and (2). The new paragraph (3), as originally proposed, applied to rebuilt boilers.

OAR 340-30-021 Veneer Dryer Emission Limitations

1. As discussed above, the new "design opacity" limitation (OAR 340-30-021(a)) is unenforceable as there is no averaging time or test method.

2. The new "maximum opacity" limitation (OAR 340-30-021(c)) includes both an exception provision which allows the limit to be changed without EPA approval and a provision which will exempt sources with wet plumes from any opacity limit. Although the effect of water vapor in the plume can be discounted, the particulate portion of the plume must still be required to comply with the opacity limit.
3. The new particulate emission limitations in OAR 340-30-021(d), (e), (f), (g), and (h) all lack averaging times as required by EPA.
4. The new paragraph (6) indicates that compliance with the visible emission limits in (1) is to be determined in accordance with ODEQ Method 9. However, the definitions of "average operating opacity" and "maximum opacity" indicate that compliance is determined in accordance with EPA Method 9. Whereas EPA Method 9 is appropriate for determining the "maximum opacity", ODEQ Method 9 is not. Furthermore, neither EPA Method 9 or ODEQ Method 9 are appropriate for determining "average operating opacity".

OAR 340-30-025 Air Conveying Systems

1. This section needs to indicate whether the 10 tons per year applicability criteria is based on actual or potential emissions.

OAR 340-30-040 Charcoal Producing Plants

1. The particulate emission limitation lacks an averaging time as required by EPA.

If you have any questions on my comments, please don't hesitate to ask.

cc: David Kircher, APDS
Laurie Kral (Docket)
Rindy Ramos, APDS



SEP 22 1999

Reply To
Attn Of: AT-082

Nick Nikkila
Administrator, Air Quality Division
Oregon Department of Environmental Quality
811 Southwest Sixth Avenue
Portland, Oregon 97204

Dear Mr. Nikkila:

We have completed our review of the Oregon Department of Environmental Quality's (DEQ) final rule changes to implement the new national ambient air quality standards for PM₁₀, specifically revisions to OAR 340-20-220 through 260, 340-27-005 through 055, 340-31-005 through 055, and 340-31-100 through 130.

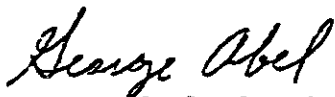
These revisions to the Oregon state implementation plan (SIP) were submitted for EPA approval on May 20, 1988. Prior to this final submittal, we had reviewed the draft regulations and forwarded our written comments to DEQ in a letter dated March 16, 1988. Shortly thereafter, we held conference calls with your staff to discuss our concerns. Revisions to the original submittal or additions subsequent to our review were not received by EPA until the day of the Environmental Quality Commission's adoption hearing on April 29, 1988. Many of our concerns were not addressed in your revised submittal. Additionally, OAR 340-20-225(17) and 340-20-245(c) were not part of your original rules package and OAR 340-20-245(3) had been revised substantially. Because the rules had already been adopted, there seemed to be little chance of effecting revisions needed to address our concerns in the short term. We deferred comment on the final package until now on the assumption that corrections we mutually agree are needed can be made as part of your process of adopting final Group I PM₁₀ SIPs.

As we discussed with John Kowalczyk of your staff, many provisions of the new rules are approvable. However, we cannot recommend total approval of the submittal. This finding results primarily from the changes made in the prevention of significant deterioration (PSD) and nonattainment area new source review (NSR) rules which make them less stringent than EPA's requirements. The rule changes which we feel are substantially in conflict with the Clean Air Act and EPA regulations are explained in Attachment 1. Other concerns are discussed in Attachment 2. DEQ may be able to provide sufficient explanations for some of the items discussed in Attachment 2 for EPA to approve them with conditions or understandings.

My staff is available to assist you in revising your regulations so that they are consistent with the applicable regulatory requirements. Your timely attention to this matter is requested. Because of new SIP processing requirements, we may need to proceed to propose disapproval of some portions of the submittal unless we can resolve the issues expeditiously. You may also want to consider withdrawing the current submittal until you are ready to adopt revised rules.

I suggest we arrange to discuss these comments in the near future. In the interim, if I can answer any questions, please feel free to contact me at (206) 442-4166 or Dave Kircher, of my staff, at (206) 442-4198.

Sincerely,



George Abel, Chief
Air Programs Branch

Enclosures

cc: Ken Brooks, OOO
John Kowalczyk, DEQ

9/22/89

ATTACHMENT 1

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
RULE CHANGES (MAJOR ISSUES)

1. OAR 340-20-225(17) - The proposed change to the definition of "Nonattainment Area" conflicts with EPA's regulations. By removing the requirement that nonattainment area designations must be approved by EPA, DEQ has changed the applicability provisions of its nonattainment area new source review rules. The NSR rules must apply to all areas designated as nonattainment by EPA in 40 CFR Part 81. These include areas designated by the Oregon Environmental Quality Commission (EQC), but only after EPA approval. 40 CFR Part 81 could also contain areas which were designated solely by EPA, such as could occur under the Mitchell-Conte Amendment. Under the revised definition, the EQC could revise the boundaries of the current nonattainment areas or even redesignate such areas as attainment and revoke all of the SIP's Part D provisions without EPA approval. If DEQ intends to include a definition of "nonattainment area" in the PM₁₀ rules, the definition must not conflict with the federal rules. If EPA disapproves the definition of "nonattainment area", we would also be disapproving the DEQ Part D NSR provisions. Under Section 110(a)(2)(I) of the Clean Air Act, the Oregon SIP would no longer meet the requirements of Part D. This would automatically trigger a moratorium on construction of major stationary sources in designated nonattainment areas (CO and ozone).

2. OAR 340-20-245(3) - The changes to the "Exemption for Sources Not Significantly Impacting or Contributing to Designated Nonattainment Areas" conflict with our rules. This exemption, as written, applies to certain major sources which emit more than 100 tons per year but less than 250 tons per year. The requirements of Section 110(a)(2)(D) of the Clean Air Act and 40 CFR 51.165(b) of EPA regulations indicate that the major source permitting regulations must apply to all sources which emit or have the potential to emit more than 100 tons per year. The "significant air quality impact" levels cannot be applied to impacts on PSD increments violations, since the levels were intended only for use with the NAAQS. These levels represent a large fraction of the increments (in some cases 100%) and although impacts which are less than these levels would be insignificant with respect to the NAAQS, they are not insignificant with respect to the increments. Finally, the exemption is too broad, in that it exempts major sources in attainment or unclassified areas from all of the requirements of the NSR regulations (OAR 340-20-220 to 270) instead of just the requirements in question, specifically OAR 340-20-245. This section must stipulate review of all major sources as required by the Act and EPA regulations.

3. OAR 340-20-245(c) - The new exemption for PM₁₀ does not meet the section 40 CFR 51.166(i)(8)(i) requirements. The exemption cites 40 CFR 52.21 which is not applicable to Oregon and uses the July 31, 1987, PM₁₀ effective date which is not relevant to the Oregon SIP. The sections of 40 CFR 52.21 cited in this new DEQ exemption, specifically 40 CFR 52.21(1)(4)(ix) and (x), require determinations by the EPA Administrator regarding the applicability of 40 CFR 52.21 with respect to particulate matter before July 31, 1987. The provisions of 40 CFR 52.21 are only applicable to SIPs which have been disapproved with respect to PSD. DEQ has had an approved PSD program since 1983. DEQ does have the option of including a transition provision similar to EPA's [40 CFR 51.166 (i)(10)]. A provision which references the DEQ rules and the effective date of Oregon's PM₁₀ provisions could then be adopted. This exemption however, must be located in a section of general applicability, rather than in the section for sources in attainment or unclassifiable areas, if it is to exempt sources from all of the NSR requirements for PM₁₀ before the effective date of the Oregon PM₁₀ provisions.

4. OAR-340-31-015, -020, -025, -030, -040, and -055 - The changes to the ambient standards for PM₁₀, sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, and lead, which make them applicable only at monitoring sites are not approvable because they make the standards less stringent than the NAAQS. The NAAQS are applicable everywhere in the ambient air, not just at locations which meet the monitoring probe siting criteria. The monitoring probe siting criteria in 40 CFR Part 58 represent a balancing between the need for representative data and available monitoring resources. They do not, however, limit the applicability of the ambient standards to just those sites which satisfy the monitoring criteria.

5. OAR-340-27-005, -010, -015, Tables 1-3 - We cannot recommend approval of the emergency episode plans as currently submitted for two reasons. DEQ and local agencies in the state of Oregon lack the legal authority in accordance with Section 110(a)(2)(F)(v) of the Clean Air Act (i.e. no enforceable regulations or ordinances in place) to reduce impacts from residential wood heating during episodes. Furthermore, the plan does not include the procedures for its implementation and enforcement. The specific content requirements for these plans can be found in 40 CFR 50.152.

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: J
Division: Air Quality
Section: Planning and Development

SUBJECT:

Rule Adoption: Residential woodheating rule amendments.

PURPOSE:

Incorporate new residential woodheating emission control requirements from House Bill (HB) 2175 into the State Implementation Plan (SIP) to meet Clean Air Act requirements for PM₁₀ control strategies.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment A
 - Rulemaking Statements Attachment B
 - Land Use Consistency Statement Attachment G
 - Fiscal and Economic Impact Statement Attachment C
 - Public Notice Attachment D

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment



811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696



<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

The 1990 Clean Air Act amendments require states to revise their SIP to more thoroughly address PM₁₀ nonattainment areas. State PM₁₀ control strategies must now contain specific enforceable reasonably available control measures for, among other sources, residential woodheating. The Clean Air Act amendments also require that the PM₁₀ control strategies contain contingency measures.

Three new residential woodheating rules are proposed as necessary components of PM₁₀ control strategies, to meet control measure and contingency measure requirements of the Clean Air Act. These rules were authorized by HB 2175, and cover the following areas:

- 1) Prohibition on the sale of used uncertified woodstoves.
- 2) State backup enforcement of residential woodheating curtailment in PM₁₀ nonattainment areas where local governments or regional authorities have failed to adopt or adequately implement a residential woodheating curtailment program. If adopted, these rules would likely be enforced in the city of Central Point, located within the Medford-Ashland PM₁₀ nonattainment area, until the city readopts its own curtailment ordinance.
- 3) Requirement for the removal and destruction of used uncertified woodstoves upon sale of a home in a PM₁₀ nonattainment area that does not attain compliance with the standard by December 31, 1994.

A new Division in OAR Chapter 340 has been created under which all rules pertaining to residential woodheating are being consolidated. New Division 34 will contain all new rules regarding residential woodheating, and will also contain the current woodstove certification rules.

The Woodstove Certification Program rules currently in Division 21 have been renumbered and incorporated into Division 34. In the interest of structure and clarity some minor changes have been made to the organization and text of the Woodstove

Meeting Date: November 8, 1991
Agenda Item: J
Page 3

Certification rules; however, no substantive changes have been made.

AUTHORITY/NEED FOR ACTION:

- | | |
|--|---------------------|
| <input checked="" type="checkbox"/> Required by Statute: <u>HB2175, Sections 10-11</u> | Attachment <u>E</u> |
| Effective Date: <u>September 29, 1991</u> | |
| <input type="checkbox"/> Statutory Authority: _____ | Attachment _____ |
| <input type="checkbox"/> Pursuant to Rule: _____ | Attachment _____ |
| <input checked="" type="checkbox"/> Pursuant to Federal Law/Rule: <u>Clean Air Act</u> | Attachment _____ |
| <input type="checkbox"/> Other: | Attachment _____ |
| <input checked="" type="checkbox"/> Time Constraints: | |

The Clean Air Act requires that revisions to the SIP regarding PM₁₀ be submitted to Environmental Protection Agency by November 15, 1991.

DEVELOPMENTAL BACKGROUND:

- | | |
|--|---------------------|
| <input type="checkbox"/> Advisory Committee Report/Recommendation | Attachment _____ |
| <input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations | Attachment <u>H</u> |
| <input type="checkbox"/> Response to Testimony/Comments | Attachment _____ |
| <input checked="" type="checkbox"/> Prior EQC Agenda Items: (list) | |
| Agenda Item G, August 22, 1991 meeting | |
| Hearing Authorization | Attachment _____ |
| <input type="checkbox"/> Other Related Reports/Rules/Statutes: | |
| | Attachment _____ |
| <input type="checkbox"/> Supplemental Background Information | Attachment _____ |

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Public hearings to collect testimony concerning the proposed amendments to the Department's woodstove regulations were held in conjunction with public hearings for area control strategies under the SIP. The hearings were held in Klamath Falls on September 26, Grants Pass on September 27, Medford on September 30, and La Grande and Portland on October 1, 1991.

The majority of the testimony, both written and oral, received during the public comment period addressed the area-wide control strategies and not the specific woodheating rules. Most of the comments recognized the contribution of woodheating to the problem and supported the way the control strategies addressed woodheating issues. The woodheating industry objected to language in previously adopted control strategies that is now obsolete because of the enactment of

HB 2175. Appropriate changes have been proposed in the control strategy documents.

Two comments did directly relate to the Department's woodheating regulations. One comment was received during the Grants Pass hearing that the statewide ban on the sale of uncertified used woodstoves was overkill and should have only been limited to problem areas. While recognizing that the ban was legislatively mandated, the commentor suggested that variances to the law be allowed. The second comment was received during the Klamath Falls hearing also objecting to ban on the sale and installation of uncertified used woodstoves because replacement with an alternative heating source or a new certified woodstove is too expensive.

For testimony on general issues related to woodheating, and the Department's responses, see the hearings officer reports and response to comment attachments to the staff reports for the control strategies.

PROGRAM CONSIDERATIONS:

Because only two of the comments received directly related to the Department's woodheating regulations, the comments are addressed below rather than in a separate attachment to this report.

In response to the comment on the statewide ban on the sale and installation of uncertified used woodstoves, the Department recognizes that woodstoves do not pose the same problems statewide. However, HB2175 mandates a statewide ban. The legislation does not authorize a procedure for a variance from this requirement. The Department believes this is good policy as the eventual phasing out of the use of uncertified woodstoves should contribute to better air quality statewide.

In response to the comment concerned with the ban on the sale and installation of uncertified used woodstoves being unfair because the replacement costs are so high, the Department would like to clarify the purpose and effect of the ban. The purpose of the used stove sales ban is to reduce the adverse health costs to the public caused by the high PM₁₀ emissions from uncertified stoves. The rule bans the resale of uncertified stoves which have been removed from a home. This ban does not affect existing installed woodstoves that are currently in use. It also does not affect the sale of a home containing an uncertified woodstove at this time. These woodstoves may remain in use until the need arises for

replacement.

In terms of the cost of replacing uncertified woodstoves, HB2175 authorized the Department to develop a financial assistance program for woodstove change out. Before the Department can implement this program, however, it needs to identify funding sources. Klamath County, Jackson County and the City of La Grande currently administer local woodstove change out programs for low income households.

As no other relevant public comments were received concerning the proposed rules, the program considerations remain the same as those addressed in Attachment F (Prior Agenda Item).

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1: Prohibition on the sale of used, non-certified woodstoves.

None considered. The prohibition on the sale of used, non-certified woodstoves is required under HB 2175, and is a necessary control strategy element for PM₁₀ nonattainment areas.

2: State enforcement of residential woodheating curtailment.

a) Delay adopting a state rule, and encourage Central Point to readopt an adequate curtailment plan. However, without an enforceable local or state curtailment program in every portion of the entire Medford nonattainment area, the EPA will be unable to approve the Medford SIP. If a state fails to fulfill its responsibilities, EPA is required to impose sanctions and ultimately prepare a Federal Implementation Plan (FIP) to address the PM₁₀ problems.

b) Adopt state curtailment program for the city of Central Point alone, and only go to the EQC for rulemaking if and when they have defaulted in their responsibility to adopt or implement a local curtailment program.

c) Adopt a generic state backup curtailment program to meet Clean Air Act requirements.

3: Requirement for the removal and destruction of used, non-certified woodstoves upon sale of a home in a PM₁₀ nonattainment area after January 1, 1995.

None considered. The removal and destruction of used, uncertified stoves upon home sale is required in HB 2175. Additionally, EPA requires that contingency measures for the reduction of emissions

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from residential woodheating be adopted and approvable as part of the State Implementation Plan by November 15, 1991. The stove removal and destruction rule is the only residential woodheating contingency measure the Department currently has authority to propose for adoption.

ISSUE FOR THE COMMISSION:

In light of the necessity to meet the requirements of the Clean Air Act, HB 2175 states that if a local government or regional air pollution authority has not adopted or is not adequately implementing a woodheating curtailment program the EQC may adopt by rule and the Department may operate and enforce a program to curtail residential woodheating during periods of air stagnation.

The time delay due to the schedule of administrative requirements for an EQC adoption of each individual curtailment program could, on occasion, inhibit the timely prevention of local air pollution episodes if a local government has failed in its responsibilities to curtail woodheating. The Department has consulted with the Department of Justice regarding the language of HB 2175, and has received confirmation that the EQC may, if desired, delegate the authority to trigger a state curtailment program to the Department.

The Department proposes that the EQC adopt a generic state curtailment program, and delegate authority to the Department to initiate a state curtailment program in any area of the State where the Department has determined that the program is required, and that state intervention is justified.

This alternative would allow the Department to respond quickly if a local government or regional authority chose not to adopt or enforce a local curtailment program just before a curtailment deadline. With the future funding status of local and regional air pollution programs subject to anticipated cutbacks, the Department should be in a position to act as quickly and efficiently as possible to maintain the integrity of PM₁₀ control strategies in an area. The delegation of authority to the Department to initiate a state curtailment program would also allow the Department to quickly implement wood heating curtailment provisions for the Departments Emergency Action Plan.

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DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission adopt the proposed Division 34 (Attachment A) on residential woodheating as a revision to the SIP. These rules are key components to the overall emission reduction strategies for PM₁₀ nonattainment areas, and are required for the Department to submit fully approvable PM₁₀ Control Strategies to the Environmental Protection Agency within the time frame required by the Clean Air Act. Adoption of these rules at this time will allow the Department to enforce provisions of HB 2175 in a timely manner.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed residential woodheating rules are consistent with legislative and agency policy to restore and maintain acceptable air quality statewide.

ISSUES FOR COMMISSION TO RESOLVE:

Should the Commission delegate its authority to initiate a state residential woodburning curtailment program to the Department.

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INTENDED FOLLOW UP ACTIONS:

1. Submit the State Implementation Plan revisions (adoption of Division 34) to EPA for approval.
2. Implement and enforce rules.

Approved:

Section:

Division:

Director:

John F. Kowalczyk
W. D. [Signature]
Jul Hansen

Report Prepared By: Yone C. McNally

Phone: 229-5143

Date Prepared: October 25, 1991

YCM:a
RPT\AH20054
(10/25/91)

DIVISION 34

RESIDENTIAL WOODHEATING

Purpose

340-34-001

The Clean Air Act amendments of 1990 require that specific measures be undertaken in a nonattainment area to attain the national primary ambient air quality standard by the applicable attainment date. The purpose of these rules is to establish control strategy and contingency measures for residential woodheating in PM₁₀ nonattainment areas, and to address residential woodburning curtailment under the statewide emergency action plan.

Definitions

340-34-005 ~~{340-21-100}~~

Unless otherwise required by context, as used in this Division:

- (1) "Accredited" means a woodstove testing laboratory holds a valid certificate of accreditation issued by the Department.
- (2) "Administrator" means the administrator of the Environmental Protection Agency or the administrator's authorized representative.
- (3) "Antique Woodstove" means a woodstove built before 1940 that has an ornate construction and a current market value substantially higher than a common woodstove manufactured in the same time period.
- (4) [~~{3}~~] "Audit test" means a test conducted by the Department to verify a laboratory's certification test results.
- (5) "Commission" means the Environmental Quality Commission.
- (6) [~~{4}~~] "Consumer" means any person who buys a woodstove for personal use.
- (7) "Cookstove" means an indoor woodburning appliance the design and primary purpose of which is to cook food.
- (8) "Curtailment" means a period during which woodburning is prohibited due to the existence of an air stagnation condition.

- (9) ~~(5)~~ "Dealer" means any person engaged in selling woodstoves to retailers or other dealers for resale. A dealer which is also an Oregon retailer shall be considered to be only a retailer for purposes of these rules.
- (10) "Destroy" means to demolish to a such an extent that restoration is impossible.
- (11) ~~(6)~~ "Department" means the Oregon Department of Environmental Quality.
- (12) "Director" means the Director of the Department or the Director's authorized delegates.
- (13) ~~(7)~~ "EPA" means the United States Environmental Protection Agency.
- (14) ~~(8)~~ "Federal Regulations" means Volume 40 CFR Part 60, Subpart AAA, Sections 60.530 through 60.539b, dated July 1, 1990.
- (15) "Fireplace" means a framed opening made in a chimney to hold an open fire.
- (16) ~~(9)~~ "Heat output" means the heat output (Btu/hour) of a woodstove during one test run, measured under test conditions prescribed by OAR 340-21-120.
- (17) ~~(10)~~ "Manufacturer" means any person who imports a woodstove, constructs a woodstove or parts for woodstoves.
- (18) ~~(11)~~ "New Woodstove" means any woodstove that has not been sold, bargained, exchanged, given away or has not had its ownership transferred from the person who first acquired the woodstove from the manufacturer's dealer or agency, and has not been so used to have become what is commonly known as "second hand" within the ordinary meaning of that term.
- (19) ~~(12)~~ "Overall efficiency (%) over the range of heat outputs tested" means the weighted average combustion efficiency (%) multiplied by the weighted average heat transfer efficiency (%) measured under test conditions (range of heat outputs) and calculated according to specific procedures prescribed by OAR 340-21-120(1). This definition is applicable to the Stack Loss Methodology. For the Calorimeter Room Method, the weighted average overall efficiency means the useful heat output released to the room, divided by the total heat potential of the fuel consumed.

- (20) "Pelletstove" means a woodburning heating appliance which uses wood pellets as its primary source of fuel.
- (21) ~~(13)~~ "Retailer" means any person engaged in the sale of woodstoves directly to consumers.
- (22) "Used Woodstove" means any woodstove that has been sold bargained, exchanged, given away, or has had its ownership transferred from a retailer, manufacturer's dealer or agent to a consumer.
- (23) ~~(14)~~ "Weighted average" means the weighted average of the test results to the distribution of home heating needs as prescribed in the Federal regulations, 40 CFR Part 40, Subpart AAA.
- (24) ~~(15)~~ "Woodstove"/"Woodheater" means an enclosed, woodburning appliance capable of and intended for space heating and domestic water heating that meets all of the following criteria:
- (a) An air-to-fuel ratio in the combustion chamber averaging less than 35-to-1 as determined by the test procedure prescribed in federal regulations 40 CFR part 60, subpart AAA, §60.534 performed at an accredited laboratory;
 - (b) A usable firebox volume of less than 20 cubic feet,
 - (c) A minimum burn rate less than 5 kg/hr as determined by the test procedure prescribed in federal regulations 40 CFR part 60, subpart AAA, §60.534 performed at an accredited laboratory; and
 - (d) A maximum weight of 800 kg. In determining the weight of an appliance for these purposes, fixtures and devices that are normally sold separately, such as flue pipe, chimney, and masonry components that are not an integral part of the appliance or heat distribution ducting, shall not be included.

Requirements for Sale of ~~{New}~~ Woodstoves ~~{in Oregon}~~

~~340-34-010~~ ~~{340-21-105}~~

(1). Requirements applicable to the sale of new woodstoves

~~{1}~~(a) On and after July 1, 1990 a person shall not advertise to sell, offer to sell, or sell a new woodstove in Oregon unless:

~~{a}~~(A) The woodstove has been tested, certified and labeled for emission performance in accordance with criteria, emission standards, and procedures specified in the federal regulations, 40 CFR Part 60, Subpart AAA; and

~~{b}~~(B) The woodstove has been tested for heating efficiency and certified by the Department in accordance with criteria and procedures in ~~{OAR 340-21-120}~~ OAR 340-34-055; and

~~{c}~~(C) The woodstove is labelled for emission performance and heating efficiency as specified in ~~{OAR-340-21-135}~~ OAR 340-34-070; provided, however, that section (1) of this rule shall not apply to any sale from any manufacturer or dealer; to any Oregon manufacturer or dealer; or to any out-of-state manufacturer, dealer or retailer; or to any offer or advertisement for such sale directed only to such a manufacturer, dealer or out-of-state retailer.

~~{2}~~(b) No manufacturer, dealer, ~~{or}~~ retailer or individual shall alter the permanent certification label in any way from the label approved by the Administrator pursuant to Federal Regulations, 40 CFR part 60, subpart AAA, § 60.538(i).

~~{3}~~(c) No manufacturer, dealer or retailer shall alter the removable label in any way from the label approved by the Department pursuant to ~~{OAR-340-21-155}~~ OAR 340-34-080.

(2). Requirements applicable for the sale of used woodstoves. ~~{On or after November 27, 1991}~~ A person shall not advertise to sell, offer to sell, or sell a used woodstove unless:

(a) The woodstove was certified by the Department on or after July 1, 1986, in accordance with emission performance and heating efficiency criteria applicable at the time of certification;

(b) The woodstove has permanently attached an emission performance label authorized by the Department or the EPA.

(3) Section (2) of this rule concerning used woodstoves that have not been certified shall not apply to the following:

(a) the selling by a consumer of an used woodstove that has not been certified by the Department to a person in the business of reusing, reclaiming or recycling scrap metal to be destroyed or used as scrap metal;

(b) the remittance of an used woodstove that has not been certified by the Department by a consumer to a retailer of certified woodstoves for the purpose of receiving a reduction in price on a new certified woodstove.

~~[(4) Violators of any of the above rules may be subject to civil penalties pursuant to OAR Chapter 340, Divisions 11 and 12 or other remedies prescribed by rule or statute.]~~

Exemptions

340-34-015 ~~{340-21-110}~~

(1) A pelletstove is exempt from the following requirements:

- (a) ~~{To be considered eligible for exemption from the requirements and standards of these rules, pellet burning appliances must be tested for air to fuel ratio in strict conformance}~~ OAR 340-34-050 through 340-34-110, woodstove certification and OAR 340-34-010(1), requirements applicable to the sale of new woodstoves provided the manufacturer holds a valid letter of exemption from the Department which verifies that the pelletstove exceeds an air to fuel ratio in the combustion chamber of greater than 35-to-1 as determined in accordance with criteria and procedures of EPA Method 28A as set forth in the federal regulations, 40 CFR Part 60, Subpart AAA; ~~{to determine that the unit qualifies, as exempt, from the definition of a woodstove.}~~
- (b) OAR 340-34-010(2), requirements applicable to the sale of used woodstoves;
- (c) OAR 340-34-150 through 340-34-175, woodburning curtailment; and
- (d) OAR 340-34-200 through 340-34-215, woodstove requirements applicable after December 31, 1994.

(2) An antique stove is exempt from the requirements of:

- (a) OAR 340-34-010(2), requirements applicable to the sale of used woodstoves; and
- (b) OAR 340-34-200 through 340-34-215, woodstove requirements applicable after December 31, 1994.

(3) A cookstove is exempt from the requirements of Chapter 340, Division 34, except for OAR 340-34-150 through 340-34-175, woodburning curtailment.

(4) A woodburning fireplace, woodstove or appliance operated within a household classified to be at less than or equal to 125 percent of the federal poverty level is exempt from the requirement of OAR 340-34-150 through 340-34-175, woodburning curtailment. The federal poverty level is published in the Federal Register, Volume 56, Number 34, February 20, 1990, page 6859, Department of Health and Human Services.

(5) A woodstove operated in a residence that is equipped solely with woodheat is exempt from the requirements of OAR 340-34-150 through 340-34-175, woodburning curtailment.

Civil Penalties

340-34-020

Violations of Chapter 340, Division 34 are subject to Chapter 340, Division 12, Enforcement Procedures and Civil Penalties.

Woodstove Certification Program

Emissions Performance Standards and Certification 340-34-050 ~~{340-21-115}~~

- (1) Unless exempted or not regulated as an affected facility under § 60.530 of the federal regulation, 40 CFR part 60, subpart AAA, new woodstoves advertised for sale, offered for sale or sold in Oregon between July 1, 1990 and June 30, 1992 shall be certified by the Administrator pursuant to federal regulation as complying with the particulate matter emission limits specified in the federal regulations, 40 CFR Part 60, Subpart AAA, § 60.532(a).
- (2) Unless exempted or not regulated as an affected facility under §60.530 of the Federal Regulation, 40 CFR Part 60, Subpart AAA, new woodstoves advertised for sale, offered for sale, or sold in Oregon on or after July 1, 1992 shall be certified by the Administrator pursuant to federal regulation as complying with the particulate matter emission limits specified in the federal regulations, 40 CFR Part 40, Subpart AAA, § 60.532(b).

Efficiency Testing Criteria and Procedures 340-34-055 ~~{340-21-120}~~

- (1) To be considered eligible for certification, a woodstove must be tested for efficiency in strict conformance with criteria and procedures contained in the document Standard Method for Measuring the Emissions and Efficiencies of Residential Woodstoves dated June 8, 1984, and incorporated herein by reference and on file at the Department, or in strict conformance with criteria and procedures in Federal Regulations 40 CFR 60 Appendix J, if found to be equivalent by the Department.
- (2) All testing for certification purposes, using the Standard Method for Measuring the Emissions and Efficiencies of Residential Woodstoves, shall be conducted by a stove testing laboratory accredited in accordance with procedures specified in ~~{OAR-340-21-160.}~~ OAR 340-34-085
- (3) The Department may permit minor changes in the testing criteria and procedures specified in ~~{OAR-340-21-120(2)}~~ OAR 340-34-055 which the Department believes does not affect its accuracy providing such changes are approved in writing by the Department prior to the actual conducting of such tests.
- (4) All testing for certification purposes using the federal regulation 40 CFR 60 Appendix J, if found to be equivalent by the Department, shall be conducted by an accredited laboratory.

General Certification Procedures

340-34-060 ~~{340-21-125}~~

- (1) Any woodstove manufacturer or dealer wishing to obtain certification of a woodstove shall file an application with the Department.
- (2) An application for certification must include:
 - (a) One complete copy of the EPA application and attachments as specified in the federal regulations, 40 CFR Part 60, Subpart AAA, §60.533(a,b,c,d);
 - (b) A copy of the valid Certificate of Compliance issued by the Administrator, pursuant to federal regulation 40 CFR Part 60, Subpart AAA, §60.533;
 - (c) All test data and support documentation showing that the woodstove has been tested for efficiency in accordance with ~~{OAR-340-21-120}~~ OAR 340-34-055;
 - (d) A non-refundable certification fee, payable to the Department at the time the application is submitted to the Department, is required for each stove model seeking certification. The fee is \$500 for each model submitted by the manufacturer.
- (3) The Department will promptly review an application for certification and:
 - (a) Notify the applicant in writing within 30 days of receipt of the applications, of any deficiencies in the applications that cause the application to be incomplete;
 - (b) Notify the applicant within 60 days of receipt of a completed application whether certification is granted or denied pursuant to sections (4) and (7) of this rule.
- (4) When all preceding requirements have been met, the Department will issue or deny a certification document to the manufacturer or dealer for the specified woodstove.
- (5) If the Department grants certification, the certification status shall be effective for no longer than five years unless extended or terminated by rule or order.
- (6) An application for a new document of certification shall be made by submitting a completed application including retests and fees at least 60 days prior to expiration of certification. The Department may waive the retest and fees if the applicant demonstrates the previous evidence used to

certify the woodstove has not changed and remains reliable and applicable.

- (7) If the Department denies certification of a woodstove, the Department will notify the manufacturer or dealer in writing of the opportunity for hearing pursuant to OAR Chapter 340, Division 11.

Changes in Woodstove Design
340-34-065 ~~{340-21-130}~~

Certification of woodstoves shall be valid for only the specific model, design, plans and specifications which were originally submitted, tested and approved for certification. Any modification to the model, design, plans or specifications shall cause the certification to be ineffective and any so modified woodstoves to be uncertified, unless prior to making such modification the certification holder submits the proposed modification to the Administrator for approval, and the Administrator approves it.

Labelling Requirements
340-34-070 ~~{340-21-135}~~

Woodstoves which must be labelled pursuant to ~~{OAR-340-21-105}~~ OAR 340-34-010 shall have affixed to them:

- (1) A permanent label, in accordance with Federal Regulations 40 CFR 60, Subpart AAA, §60.536.
- (2) A point-of-sale removable label;
 - (a) If the woodstove was tested for efficiency in conformance with criteria and procedures contained in the document Standard Method for Measuring the Emissions and Efficiencies of Residential Woodstoves, the label must be approved by the Department, verify certification and show the heating efficiency ~~{and heat output range}~~ of the appliance. The label shall be affixed to the appliance at the point-of-sale near the front and top of the stove and remain affixed until sold and delivered to the consumer.
 - (b) If the woodstove was tested for efficiency in conformance with criteria and procedures in Federal Regulations 40 CFR 60, Appendix J, the point-of-sale label shall show the measured efficiency in accordance with the requirements in Federal Regulations 40 CFR 60, Subpart AAA, §60.536.

Removable Label

340-34-075 [~~340-21-150~~]

- (1) For a woodstove with a heating efficiency measured in accordance with [~~OAR-340-21-120(1)~~] OAR 340-34-055, an additional point-of-sale removable label shall be affixed and shall contain the following information:
 - (a) "Oregon Tested Efficiency (Ave.) _____%", weighted average of tested values;
 - ~~(b) Heat-output-range,-tested-values~~.
 - (b) [~~(c)~~] Manufacturer of appliance;
 - (c) [~~(d)~~] Model of appliance;
 - (d) [~~(e)~~] Design number of model;
 - (e) [~~(f)~~] A statement acknowledging EPA emission certification meets Oregon emission requirements;
 - (f) [~~(g)~~] The statement "Performance may vary from test values depending on actual home operating conditions".
- (2) The label shall be visibly located on the appliance when the appliance is available for inspection by consumers.
- (3) This label may not be combined with any other label or with other information.
- (4) The label shall be attached to the appliance in such a way that it can be easily removed by the consumer upon purchase. For instance, the label may be attached by adhesive, wire, or string.

Label Approval

340-34-080 [~~340-21-155~~]

- (1) Removable label:
 - (a) For a woodstove with a heating efficiency measured in accordance with OAR 340-34-055 [~~OAR-340-21-120(1)~~], the Department will provide the manufacturer or dealer, at the time of certification with:
 - (A) A copy of the standardized printed removable label, with all printing specifications; and
 - (B) The specific information that shall be printed in the spaces on the label by the manufacturer.

- (b) The manufacturer or dealer shall submit to the Department for review:
 - (A) A proof copy of the proposed label with the required information printed on the labels;
 - (B) The method of attaching the removable label to the woodstove;
 - (C) The name, telephone number, and address of the label printer.
 - (c) Within 14 days of receipt of all the information required in subsection (b) of this section, the Department will approve or deny use of the proposed label.
- (2) The manufacturer shall submit to the Department three final printed permanent, and three final printed removable labels within one month of receiving the labels from the printer.

Laboratory Accreditation Requirements

340-34-085 [~~340-21-160~~]

A laboratory submitting test data pursuant to requirements in this rule shall have a valid certificate of accreditation issued by the Department. A laboratory may initiate application for an accreditation certificate by submitting written documentation to the Department that accreditation criteria contained in OAR 340-34-090 [~~OAR-340-21-165~~] are met. In addition, the laboratory must demonstrate stove testing proficiency pursuant to OAR 340-34-095, [~~OAR-340-21-170~~] in order to qualify for accreditation.

Accreditation Criteria

340-34-090 [~~340-21-165~~]

- (1) All laboratories shall meet the following criteria and standards at the time of application and shall continue to meet these criteria as a condition of maintaining accreditation:
 - (a) Hold a valid certificate of accreditation for emission testing issued by the Administrator.
 - (b) Shall hold a valid certificate of efficiency accreditation issued by the Department. To be eligible for efficiency accreditation the laboratory must demonstrate to the Department:
 - (A) Conformance with the criteria and procedures contained in the document Standard Method for Measuring the Emission and Efficiency of Residential Woodstoves and maintain an efficiency

computer program that produces results comparable to the Department's using a standard data set provided by the Department, or;

- (B) Conformance and proficiency with the criteria and procedures in Federal Regulation 40 CFR 60, Appendix J, if found to be equivalent by the Department.
- (c) Shall meet all of the requirements as prescribed by federal regulation, 40 CFR Part 60, Subpart AAA, Section 60.535;
- (d) Neither the laboratory owners or business affiliates shall discriminate in management or business practices against any person or business because of race, creed, color, religion, sex, age, or national origin. In addition, neither the laboratory nor its owners or operators shall be certified by any association or members of any association that discriminates in management or business practices against any person or business because of race, creed, color, religion, sex, age, or national origin.

Application for Laboratory Efficiency Accreditation

340-34-095 [~~340-21-170~~]

- (1) A laboratory applying for efficiency accreditation shall state in writing and demonstrate by providing documentation, that they comply with the criteria and standards in OAR 340-34-090 [~~OAR-340-21-165~~] at the time of application, and how they will continue to meet the criteria and standards on an on-going basis.
- (2) The laboratory shall notify the Department in writing within 30 calendar days should it become unable to conform to any of the criteria and standards in OAR 340-34-090 [~~OAR-340-21-165~~].
- (3) Deficiency in the application will be identified by the Department in writing, and must be resolved by the laboratory before further processing occurs.
- (4) The application will not be considered complete for further processing until the laboratory certifies in writing that the deficiencies have been resolved. The application will be considered withdrawn if the applicant fails to certify resolution within 90 days of postmark of notification by the Department.
- (5) When the application is approvable, the Department will inform the laboratory in writing and schedule an on-site laboratory inspection.

On-Site Laboratory Inspection and Stove Testing Proficiency Demonstration

340-34-100 [~~340-21-175~~]

- (1) An on-site inspection may be conducted by a Department representative after all laboratory information required by OAR 340-34-090 [~~OAR-340-21-165~~], has been provided by the laboratory, and reviewed and approved by the Department. The on-site visit may be conducted when a laboratory initially applies for accreditation or when the laboratory reapplies for a new certificate of accreditation.
- (2) During the on-site inspection, the Department representative will:
 - (a) Observe the Stove Testing Proficiency Demonstration specified in OAR 340-34-095; [~~OAR-340-21-170(3)~~]
 - (b) Meet with management and supervisory personnel responsible for the testing activities for which the laboratory is seeking accreditation;
 - (c) Review representative samples of laboratory records. To facilitate examination of personnel competency records, the laboratory should prepare a list of names of staff members who perform the tests;
 - (d) Observe test demonstrations and talk with laboratory personnel to assure their understanding of the test procedures. Refer to OAR 340-34-055 [~~OAR-340-21-120~~] and OAR 340-34-095; [~~340-21-170(3)~~]
 - (e) Physically examine selected equipment and apparatus;
 - (f) At the conclusion of the on-site visit, the Department may discuss observations with responsible members of the laboratory management pointing out any deficiencies uncovered.
- (3) In order to be accredited and as a part of each on-site laboratory inspection, each laboratory may be required to demonstrate to the Department's representative its ability to successfully and proficiently conduct and report a woodstove emission and efficiency test. Each laboratory may:
 - (a) Be required to test one woodstove provided by the Department. Costs for all stove shipping, catalytic combustors, or other necessary parts will be paid by the laboratory;
 - (b) Be required to test the stove in accordance with testing criteria and procedures specified in OAR 340-34-055; [~~OAR-340-21-120~~]

- (c) conduct the actual efficiency testing in the presence of a Department observer;
- (d) Submit all test data, observations and test results to the Department for technical evaluations.

Accreditation Application Deficiency, Notification and Resolution
340-34-105 [~~340-21-180~~]

- (1) Any deficiencies noted during the on-site inspection and/or in the test data and test results submitted from the stove testing proficiency demonstration will be specifically identified in writing and mailed to the laboratory within 30 days of the on-site visit.
- (2) The laboratory must respond in writing within 30 days of the date of postmark of the notification by the Department and provide documentation that the specified deficiencies have been corrected. All deficiencies must be corrected prior to accreditation being granted.
- (3) Deficiencies noted for corrective action will be subject to thorough review and verification during subsequent on-site visits and technical evaluations.
- (4) Any deficiencies in the test data and/or results may result in subsequent proficiency tests being required at the laboratory with a Department representative present.

Final Department Administrative Review and Certificate of Accreditation

340-34-110 [~~340-21-185~~]

- (1) When all application material has been received, including the on-site inspection and the stove testing proficiency evaluation, and there has been time for all deficiencies to be resolved, the Department will grant or deny accreditation.
- (2) Accreditation can be denied for failure to comply with or fulfill any of the criteria in OAR 340-34-090 [~~OAR-340-21-165~~], -095 [~~170~~], and -100 [~~175~~].
- (3) When accreditation is approved, a certificate of accreditation will be issued to the laboratory. Accreditation will be granted for a period of five years (60 months) subject to rule change or revocation for cause, pursuant to OAR 340, Division 11.
- (4) A certificate of accreditation is not renewable. A holder may obtain a new certificate of accreditation by completing the application procedure in OAR Chapter 340-34-095 [~~340-21-~~

~~170~~, and demonstrating compliance with OAR 340-34-090 [~~OAR 340-21-165~~] and OAR 340-34-100 [~~340-21-175~~].

- (5) The Department may select and audit test one stove tested by the laboratory during the accreditation period to verify certification test results. Any discrepancies noted will be communicated to the laboratory by certified or registered mail. The laboratory must respond in writing within 30 days of postmark of notification and provide documentation or certification by an authorized member of the laboratory management that the specified discrepancies have been corrected or the laboratory may be subject to civil penalties or revocation of accreditation.
- (6) A laboratory may voluntarily terminate its accreditation by written request at any time. The certificate of accreditation must be returned with the request.

Revocation, and Appeals

340-34-115 [~~340-21-190~~]

- (1) Violation of ~~[any of these rules]~~ OAR 340-34-050 through OAR 340-34-110 shall constitute cause to revoke the manufacturer's ~~[or dealer's]~~ woodstove certification or laboratory's certificate of laboratory accreditation. ~~[and also may be subject to civil penalties and other remedies pursuant to rule or statute.]~~
- (2) Certification of a woodstove may be revoked if the woodstove was tested at a laboratory that was found to be in violation of accreditation criteria and rules at the time the woodstove was tested for certification.
- (3) When certification or accreditation has been revoked, the holder shall return the certification or accreditation document to the Department and cease to use mention of Department certification or accreditation of the stove model or laboratory on any of its test reports, correspondence or advertising.
- (4) Stove certification and lab accreditation revocation shall be handled as contested cases pursuant to OAR Chapter 340, Division 11.

WOODBURNING CURTAILMENT

Applicability

340-34-150

OAR 340-34-150 through 340-34-175 shall apply to any portion of the state:

- (1) Where the Department has determined that, under the requirements of the Clean Air Act, an enforceable woodburning curtailment program is required as an emission reduction control strategy for a PM₁₀ nonattainment area and the Department has determined that the local government or regional authority has failed to adopt or adequately implement the required woodburning curtailment program. In determining whether a local government or regional authority has failed to adequately adopt or implement a curtailment program, the Department shall determine if a local government or regional authority:

 - (a) has adopted an ordinance that requires the curtailment of residential wood burning at forecasted air pollution levels which are consistent with the curtailment conditions and requirements specified in OAR 340-34-155(1) and 340-34-160(1) and (2);
 - (b) is issuing on a daily basis curtailment advisories to the public consistent with OAR 340-34-165; and
 - (c) is conducting surveillance for compliance and is taking adequate enforcement actions consistent with OAR 340-34-170.
- (2) Where the Department has determined that, under the requirements of the Clean Air Act, an enforceable woodburning curtailment program is required as an emission abatement strategy to respond to an air pollution emergency.
- (3) That is classified as a nonattainment area for PM₁₀ that does not achieve attainment by December 31, 1994, and which does not have an enforceable curtailment program that satisfies the criteria in sections (1)(a), (b) and (c) above.

Determination of Air Stagnation Conditions

340-34-155

The Department shall utilize appropriate data and technology to develop methodology criteria for a curtailment program that:

- (1) For use as an emission reduction control strategy or contingency plan for PM₁₀ nonattainment areas:
 - (a) Calls a Stage I advisory when the PM₁₀ standard is being approached; and
 - (b) Calls a Stage II advisory, when an exceedance of the PM₁₀ standard is forecasted to be imminent.
- (2) For use as an emission abatement strategy in order to respond to an air pollution emergency
 - (a) Calls an Alert when PM₁₀ alert levels have been reached and are forecasted to continued; and
 - (b) Calls a Warning when PM₁₀ warning levels have been reached and are forecasted to continue.
 - (c) Alert and Warning levels are specified in OAR Chapter 340, Division 27.

Prohibition on Woodburning During Periods of Air Stagnation.
340-34-160

- (1) During any designated Stage I Advisory, the operation of any uncertified woodstove, fireplace, or woodburning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.
- (2) During any designated Stage II Advisory, the operation of any woodstove, fireplace, or woodburning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.
- (3) During any designated PM₁₀ Alert, the operation of any uncertified woodstove, fireplace, or wood burning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.
- (4) During any designated PM₁₀ Warning, the operation of any woodstove, fireplace, or woodburning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.

Public Information Program
340-34-165

The Department or its designated representative shall implement a public information program to disseminate the daily air pollution advisory to the local community. The public information program shall include but may not be limited to the utilization of applicable local media including television, radio, and newspapers.

Enforcement

340-34-170

- (1) The Department or its designated representative shall monitor the level of compliance with curtailment requirements during designated periods of air stagnation.
- (2) A rebuttable presumption of a violation shall arise if smoke is being emitted through a flue or chimney during a curtailment period unless the household from which smoke is being emitted has provided the Department or designated representative with information indicating that the household or its woodburning appliance is exempt from curtailment requirements in accordance with OAR 340-34-015.
- (3) Any person claiming an exemption to OAR 340-34-150 through 340-34-175 in accordance with OAR 340-34-015 in response to a Notice of Noncompliance shall provide the Department with documentation which establishes eligibility for the exemption. The Department shall review the documentation and make a determination regarding the exemption status of the household, or woodheating appliance.

The following documentation shall be submitted to the Department for review in order to establish exemption status under the criteria of OAR 340-34-015:

- (a) For households desiring low income exemption status a copy of the previous year tax returns. The tax return should reflect the total combined household income for the past year;
- (b) A signed affidavit attesting to the sole source status of a home (see note);
- (c) A signed affidavit attesting to the certification status of the home heating appliance (see note).

Note: Affidavits for certified stove, low income, and sole source exemptions are available from the Woodheating Program, Air Quality Division, Department of Environmental Quality; 811 SW Sixth Avenue, Portland, Oregon 97204.

Suspension of Department Program

340-34-175

- (1) The Department shall suspend the operation and enforcement of OAR 340-34-150 through 340-34-170 in any area upon determination by the Department that the local government or

regional air quality authority has adopted and is adequately implementing a woodburning curtailment program that is at least as stringent as the program outlined in OAR 340-34-150 through 340-34-170.

(2) In making a determination concerning the adequacy of a local or regional woodburning curtailment program, the Department shall consider whether or not the local government or regional authority:

(a) Has adopted an ordinance that requires the curtailment of residential woodheating at forecasted air pollution levels which are consistent with curtailment conditions specified in OAR 340-34-155;

(b) Is issuing curtailment advisories to the public on a daily basis;

(c) Is conducting surveillance for compliance and is taking adequate enforcement actions;

(d) Any other information the Department determines is necessary to determine the adequacy of the curtailment program.

Woodstove Removal Contingency Program for PM₁₀ Nonattainment Areas

Applicability

340-34-200

OAR 340-34-205 through 340-34-215 shall apply to any area classified as a nonattainment area for PM₁₀ that does not achieve attainment by December 31, 1994.

Removal and Destruction of Uncertified Stove Upon Sale of Home.

340-34-205

Except as provided for by OAR 340-34-015, any uncertified woodstove shall be removed and destroyed by the seller upon the sale of a home.

Home Seller's Responsibility to Verify Stove Destruction

340-34-210

Any person selling a home which contains an uncertified woodstove shall provide to the Department prior to the sale of the home, a copy of a receipt from a scrap metal dealer verifying that the stove has been destroyed.

Home Seller's Responsibility to Disclose

340-34-215

Any person selling a home in which an uncertified woodstove is present shall disclose to any potential buyer, buyer's agent or buyer's representative that the woodstove is uncertified, and must be removed and destroyed upon sale of the home.

DLC:YM
RPT\AH20055
(10/25/91)

**RULEMAKING STATEMENT FOR PROPOSED NEW RESIDENTIAL WOODHEATING
RULES AND CONTINGENCY MEASURES**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to adopt new rules.

(1) Legal Authority

This proposal adds new Division 34, Residential Woodheating, to Oregon Administrative Rules (OAR) Chapter 340. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

The federal Clean Air Act Amendments of 1990 require that States adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ health and welfare standards are brought into attainment with those standards within prescribed time frames. The revisions must be submitted to the United States Environmental Protection Agency (EPA) by November 15, 1991 or the state will face serious federal sanctions. The SIP must be based on a foundation of rules that implement all requirements of the Clean Air Act and are approved by EPA as federally enforceable. The new and revised rules in this proposal are required to ensure that the PM₁₀ SIP revisions are approvable by EPA.

These rules establish control measures and contingency control requirements for residential woodheating in PM₁₀ nonattainment areas, and under certain circumstances for any area of the state. The Clean Air Act requires that the SIP revisions include reasonably available control measures and contingency measures which go into effect without further action by the state if an area fails to meet the attainment date.

(3) Principal Documents Relied Upon

Federal Clean Air Act Amendments of 1990, PL 101-549, November 15, 1990.

HB2175 Sections 10 through 11.

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

FISCAL AND ECONOMIC IMPACT STATEMENT

Division 34 has been created and organized to list all rules pertaining to residential woodburning. Below are the anticipated fiscal and economic impacts of the new rules added under Division 34, with the exception of the pre-existing woodstove certification rules. These new rules and their provisions have been explicitly authorized by HB2175 passed by the 1991 Oregon legislature.

1. PROHIBITION ON THE SALE OF USED, NONCERTIFIED WOODSTOVES

The fiscal and economic impact of the used woodstove ban will effect woodstove retailers as well as individual woodstove owners. The prohibition on the sale of used, noncertified woodstoves within the State of Oregon is anticipated to produce the following fiscal and economic impacts:

I. General Public

Owners of used, noncertified woodstoves may be adversely affected by the loss in resale value of their used, noncertified stoves. If an owner attempts to sell their stove before it wears out the loss in value would typically fall within a range of \$50-\$200. An owner may be able to realize some minor value, approximately \$5 to \$10 by selling it to a scrap metal dealer; however, the cost of transportation could negate any value as scrap. Although under this rule the sale of used, noncertified stoves is prohibited in Oregon, advertizement and sale is possible out of state.

II. Small Business

The prohibition on the sale of used, noncertified stoves will be an economic benefit to the woodstove retail industry in Oregon. Woodstove retailers would still be allowed to offer full trade-in value for a used, noncertified stove. Retailers could also benefit by stock piling used stoves and then shipping them out of state for resale. With used, noncertified stove sales prohibited, retailers should also see an increase in the sale of new certified stoves which range in cost from approximately \$700 to \$1,700.

Small businesses that refurbish used stoves for resale would see a significant loss in business due to this rule. Dealers that specialize in antique woodstoves are exempt and would not be impacted.

IV. Large Business

A survey of local woodstove retailers shows no identifiable fiscal or economic impact on large business. No large chain stores were identified as selling used, noncertified stoves.

V. Local Governments

The prohibition on the sale of used, noncertified stoves is not anticipated to have any fiscal or economic impact on local government.

VI. State Agencies

Surveillance and enforcement of the used stove ban will be integrated into the Department's existing woodstove certification program, and will be implemented using existing staff resources.

2. STATE ENFORCEMENT OF RESIDENTIAL WOODHEATING CURTAILMENT

The fiscal and economic impact of a state mandatory curtailment program will vary for each area of the state depending upon several specific local parameters. Variations in local conditions such as meteorology, terrain, and woodstove population directly affect the number of curtailment days required. For example Grants Pass has historically required 3-5 days of curtailment per heating season, Medford 20 days, while Klamath Falls may have up to 47 days.

The annual cost to an individual home owner, as well as to the community of cooperating with a curtailment program must take into account the extra cost to operate an alternative heat source per curtailment day, and the number of curtailment days per year.

I. General Public

The economic impact of a state mandatory curtailment program on the general woodstove user will also vary depending on the type of alternate heat source available, weatherization and the size of each home. Curtailing woodstove burning and substituting with natural gas, oil, or a heat pump during curtailment days could cost a homeowner on average \$1.30 extra per day of curtailment.

Electric heating is the most expensive means of back up heat. The cost to supplant woodstove burning with electric heat could average about \$3.90 per day of curtailment. The actual cost per day to comply with a curtailment program may fluctuate with any future changes in local or regional utility rates. Sole source and certified woodstove exemptions are available to qualifying households, as well as an exemption for pelletstoves.

Below is an estimation of daily and seasonal costs for a homeowner to comply with curtailment by substituting an alternative heating source for woodheat during curtailment days. This estimate is based on the average level of home weatherization, and typical home heat demand found in Oregon. It also assumes a moderate case of 20 days of curtailment during the heating season:

	<u>Cost/day</u>	<u>Extra \$ /day</u>	<u>Seasonal Cost To Curtail</u>
Woodheat	\$2.35	NA	NA
Gas/Oil/HP.	\$3.65	\$1.30	\$26.00/season/home
Elec.	\$6.25	\$3.90	\$78.00/season/home

Enforcement of the State curtailment program may result in an adverse economic impact to homeowners who violate the restrictions. While typically first time violators are given warning citations, subsequent violations can carry civil penalties of up to \$250 or more.

II. Small Business

Influenced by the demands of a woodburning curtailment program, some woodstove users may choose to upgrade their woodheating systems to either a non-wood alternative, or a woodburning appliance that is exempt from the curtailment requirements. Under this scenario woodstove retailers, and retailers for gas, oil, or electric heating systems could see an increase in sales.

III. Large Business

Electric utilities, natural gas and oil suppliers would see an increase in sales demand during curtailment days as woodburning households switch to non-wood alternatives.

IV. Local Governments

The State woodheating curtailment rule makes provision for the State to relinquish its program to local government provided that government has adopted and is adequately implementing a program that it is at least as stringent as that implemented by the State. If a local government or regional authority were to adopt and solely implement a local woodheating curtailment program the economic impact could be significant.

In operating a curtailment program a local government or regional air pollution authority would need to commit staff resources, and other funding to conduct the daily pollution advisory, as well as conduct monitoring and compliance surveys, public relations activities, develop educational materials, and effectively enforce the program.

The cost to develop and implement an adequate program may include expenses in the areas of personal services, supplies, capitol outlay, and indirect costs. Historically the cost to local government of implementing a woodburning curtailment program has ranged from approximately \$12,000 to over \$175,000.

Special funding is sought from the Environmental Protection Agency to cover some of the program costs. EPA funding is usually

channeled through the Department to the local government to provide the appropriate assistance.

V. State Agencies

If a local government fails to adopt or adequately implement the required local ordinance the Department estimates that one Environmental Specialist 3 at .5 FTE per biennium would be needed to implement the state curtailment program. EPA funding assistance would be requested to provide the additional resources needed by the Department.

3. REQUIREMENT FOR THE REMOVAL AND DESTRUCTION OF USED, NONCERTIFIED WOODSTOVES UPON SALE OF A HOME IN A PM₁₀ NONATTAINMENT AREA AFTER DECEMBER 31, 1994.

If a PM₁₀ nonattainment area fails to attain compliance with the standard by December 31, 1994 this contingency strategy will require that all used, noncertified woodstoves, unless exempted, be removed and destroyed upon sale of a home.

I. General Public

An adverse economic impact to a home seller will be reflected by a loss in the value of the stove due to the prohibition on the resale of used, noncertified stoves. This loss in value will typically range between \$50 to \$200. Stove removal costs and the cost of home repairs after stove removal will also impact the seller.

The cost to repair a home after stove removal may range from less than \$100 to over several hundred dollars depending upon the level of restoration needed. If the stove is removed and replaced with a new certified stove the cost to reinstall should be minimal, but with the cost of a new certified stove ranging from approximately \$700 to \$1,700, and pelletstoves typically ranging from \$1,200 to \$2,200.

Since woodstoves are typically considered a fixture there may be a minor decrease in the value of the home when the stove is removed. If the home owner replaces the used stove with a new certified stove the value of the home should be improved. If the used stove was the sole source of heat for the home the owner would then have to install a new heating system, costing at a minimum several hundred dollars and potentially several thousand dollars.

4. AVERAGE COST OF COMPLIANCE

I. General Public

Considering the variety of options available to the homeowner regarding choice of heating system replacement, installation and repair costs there may be no typical cost of compliance with this

rule. However, taking into account the average costs of replacing an old stove with a new certified stove and upgrading the installation to code the average cost of compliance with this rule would be approximately \$1,150.

II. Small Business

Woodstove retailers may benefit due to the potential increased sales of new certified woodstoves. Retailers of alternative heating systems may also benefit due to increased sales. Stove installers, and residential contractors may benefit when a stove is removed and replaced with a new stove, or the old installation is repaired.

III. Large Business

Utility companies would see an economic benefit as some woodburning households replace their woodstove with a non-wood alternative heating system.

IV. Local Governments

The economic impact of local government should be negligible.

V. State Agencies

Between now and December 1994, the Department would pursue the development of an advisory committee with the goal to outline the most efficient means to ensure that the stove removal and destruction requirement is carried out with the least expenditure of Department resources, but the highest compliance level. The Department's existing woodheating program staff should be able to handle the enforcement work for this measure. If necessary, EPA funding will be requested to provide additional staffing.

DLC:YM
RPT\AH15033
(8/14/91)

NOTICE OF PUBLIC HEARING

Hearing Dates: September 26,
27, 30 & October
1, 1991

Comments Due: October 2, 1991

WHO IS AFFECTED:

Individuals, especially those with woodstoves, and board product industries statewide, local governments, agricultural operations and industries in or near the Medford-Ashland, Klamath Falls, Grants Pass and La Grande PM₁₀ Nonattainment Areas.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the State of Oregon Clean Air Act Implementation Plan to:

- o Revise fine particulate (PM₁₀) Pollution Control Strategies for the Medford, Grants Pass and Klamath Falls areas;
- o Add a new PM₁₀ Control Strategy for the La Grande area;
- o Add new regulations for woodstoves, OAR Chapter 340, Division 34;
- o Add new contingency industrial particulate emission standards for PM₁₀ nonattainment areas, OAR Chapter 340, Division 21;
- o Revise the Medford/Grants Pass Particulate Standard Rules, OAR Chapter 340, Division 30;
- o Revise Board Products Particulate Emission Standard Rules, OAR Chapter 340, Division 25;
- o Revise Ambient Air Standard Rules, OAR Chapter 340, Division 31;
- o Revise Rogue Basin Open Burning Control Area rules, OAR Chapter 340, Division 23.

WHAT ARE THE HIGHLIGHTS:

The federal Clean Air Act requires states to submit PM₁₀ attainment Control Strategies for PM₁₀ Nonattainment Areas to the U.S. Environmental Protection Agency (EPA) by November 15, 1991. The Control Strategies specify how federal PM₁₀ air quality standards will be attained by the Act's deadline of December 31, 1994. They primarily rely on controlling PM₁₀ emissions from residential woodheating, industry and open burning.

The proposed rules which would implement PM₁₀ Control Strategies will:

- o Regulate residential woodheating according to new legislative authority including:

- > Banning the sale of used, uncertified woodstoves statewide;
- > allowing DEQ to prohibit woodheating on poor air quality days if local governments fail to adopt or implement such programs where needed;
- > Requiring the destruction of uncertified woodstoves upon the sale of a home as a contingency measure if an area fails to attain compliance with the PM₁₀ standard by December 31, 1994.
- o Require industries in PM₁₀ nonattainment areas to meet Reasonably Available and Best Available Control Technology requirements of the Clean Air Act as a contingency measure if areas fail to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Require tighter meteorological criteria for allowing open burning in the Rogue Basin Open Burning Control Area, and ban open burning from November through February in this area as a contingency if it fails to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Address housekeeping/enforceability issues raised by EPA with respect to existing state regulations covering the Board Products Industry, Medford/Grants Pass Industrial Particulate Emission and Ambient Air Standards.

HOW TO COMMENT:

Copies of the complete proposed rule packages may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact:

Merlyn Hough at (503) 229-6446 (Medford-Ashland)
 John Core at (503) 229-5380 (Klamath Falls)
 Howard Harris at (503) 229-6086 (Grants Pass)
 Brian Finneran at (503) 229-6278 (La Grande)
 Andy Ginsburg at (503) 229-5581 (Industry)
 David Collier at (503) 229-5177 (Woodstoves)

Public hearings will be held before a hearings officer at:

7:00 pm
 September 26, 1991
 Commission Hearing Room
 Courthouse Annex
 Klamath Falls, Oregon

7:00 pm
 September 30, 1991
 Smullin Center Auditorium
 Rogue Valley Medical Ctr.
 Medford, Oregon

7:00 pm
September 27, 1991
City Council Chambers
101 NW "A" Street
Grants Pass, Oregon

7:00 pm
October 1, 1991
Zabel Hall, Rm. 110
Eastern Oregon State College
La Grande, Oregon

3:00 pm
October 1, 1991
DEQ Offices
811 SW Sixth Avenue
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received no later than 5 pm, October 2, 1991.

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments and Control Strategies identical to the proposed amendments, adopt modified rule amendments and Control Strategies on the same subject matter, or decline to act. The adopted rules and Control Strategies will be submitted to the EPA as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on November 7, 1991, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

C.Eng. HB 2179

1 ~~of Environmental Quality on emission fee for each cord supplied on and after July 1, 1990, for~~
 2 ~~emission resulting from the burning of the cordwood. The emission fee required by this section shall~~
 3 ~~be \$1 per cord supplied and shall be remitted to the department in accordance with a payment~~
 4 ~~schedule established by the Environmental Quality Commission.~~

5 (2) The fee required under subsection (1) of this section shall not apply to cordwood supplied:

6 (a) From private land for the personal use of the landowner;

7 (b) From private land where permits, registrations, charges or other administrative procedures
 8 are not required for a person other than the landowner to remove the cordwood;

9 (c) For export from the state; and

10 (d) To persons who present certificates of exemption issued under subsection (4) of this section.

11 (3) A federal land manager that provides cordwood shall administer a program to collect the
 12 cordwood fee imposed under subsection (1) of this section from persons who remove cordwood from
 13 federal land and, upon approval of such program by the department, shall be exempt from the fee
 14 required under subsection (1) of this section. Any person who removes cordwood from federal land
 15 subject to a program approved under this subsection shall pay to the administering federal land
 16 manager the emission fee imposed under subsection (1) of this section. The administering federal
 17 land manager shall forward the fees received to the department in accordance with the terms of the
 18 program approved under this subsection. The program may provide for the reimbursement of rea-
 19 sonable fee collection costs, but such reimbursement shall not exceed the amount allowed under
 20 section 10 of this 1991 Act.

21 (4) Any person who destroys or has destroyed a woodstove that was not certified under ORS
 22 468.635 for sale as new on or after July 1, 1986, shall receive a certificate to exempt four cords of
 23 wood from the fee imposed under this section. A cordwood supplier shall accept such certificate and
 24 credit the certificate holder.

25 (5) The commission shall adopt rules to implement this section. The rules shall include but need
 26 not be limited to fee payment due dates, requirements for fee collection programs established under
 27 subsection (3) of this section and requirements for exemptions provided under subsections (2) and (4)
 28 of this section.

29 (6) All fees collected under this section shall be deposited in the State Treasury to the credit
 30 of the Residential Wood Heating Air Quality Improvement Fund created under section 10 of this
 31 1991 Act.

32 (7) As used in this section, "cordwood" means any split or unsplit logs or branches of any
 33 length, other than artificially compressed logs or pelletized fuel, that are to be used, sold or resold
 34 ~~as fuel for residential space heating.~~

37a "NOTE: Section 9 was deleted by amendment. Subsequent sections were
 37b not renumbered."

37c Delete lines 37 and 38 and insert:

37d "(2) All moneys appropriated or received as gifts or grants for the pur-
 37e poses of this section shall be credited to the Residential Wood Heating Air
 37f Quality Improvement Fund."

35 SECTION 10. (1) There is created within the State Treasury a fund known as the Residential
 36 Wood Heating Air Quality Improvement Fund, separate and distinct from the General Fund.

37 (2) All moneys received as fees under section 9 of this 1991 Act shall be credited to the Resi-
 38 dential Wood Heating Air Quality Improvement Fund.

39 (3) The State Treasurer may invest and reinvest the moneys in the fund as provided in ORS
 40 293.701 to 293.776. Interest from the moneys deposited in the fund and earnings from investment of
 41 the moneys in the fund shall accrue to the fund.

42 (4) All moneys in the Residential Wood Heating Air Quality Improvement Fund are continuously
 43 appropriated to the Department of Environmental Quality to:

44 ~~(a) Pay all costs incurred by the Department of Environmental Quality and other entities to~~

1 ~~collect the emission fee imposed under section 9 of this 1991 Act~~

2 (a) ~~Pay~~ Pay all costs incurred by the department in maintaining residential wood heating emissions
3 inventories, analyzing projects and programs proposed for funding in accordance with this section.
4 administering projects and programs selected for funding in accordance with this section and im-
5 plementing the requirements of ORS 468.650 (2) and 468.653 (1)(g).

6 (b) ~~Pay~~ Pay all reasonable costs as determined by the Environmental Quality Commission for local
7 government and regional authority public education, emission inventory maintenance, curtailment
8 and opacity programs to reduce residential wood heating emission in an area that exceeds the PM10
9 standard or an area that is at risk of becoming an area that exceeds the PM10 standard. *and (b)*

10 (c) ~~To~~ To the extent moneys remain in the fund after paying the costs under paragraphs (a) ~~to (c)~~
11 of this subsection, to fund programs established under subsections (5) and (6) of this section in a
12 manner designed to achieve cost-beneficial reductions in emission of air contaminants from
13 woodstoves, attain federal ambient air quality standards before deadlines specified in the Clean Air
14 Act and maintain compliance with such standards after the deadlines established in the Clean Air
15 Act.

16 (d) ~~Not more than 15 percent of the total amount of moneys received as fees under section 9 of~~
17 ~~this Act~~ shall be expended for costs under paragraphs (a) ~~to (c)~~ of this subsection. *under this section*

18 (b) A portion of the moneys available under subsection (4) of this section shall be used by the
19 Environmental Quality Commission to fund a low or no interest loan program for wood heated
20 households located in the western interior valleys or in any other county containing an area that
21 exceeds the PM10 standard to replace woodstoves that were not certified under ORS 468.655 for sale
22 as new on or after July 1, 1986. The program shall include the following elements:

23 (a) All forms of new high-efficiency, low air contaminant-emitting heating systems are allowed;

24 (b) Any removed woodstove must be destroyed;

25 (c) Any replacement woodstoves selected under the program must be installed in conformance
26 with building code requirements and the manufacturer's specifications including but not limited to
27 chimney specifications; and

28 (d) To be eligible, program participants shall participate in any home energy audit program
29 provided at no charge to the homeowner and shall obtain all information available regarding subsi-
30 dies for cost-effective weatherization. The department shall make the information required in this
31 subsection readily available to program participants.

32 (6) A portion of the moneys available under subsection (4) of this section shall be used by the
33 commission to fund local government or regional authority programs to provide subsidies for re-
34 placement of woodstoves that were not certified under ORS 468.655 for sale as new on or after July
35 1, 1986, to low income persons in wood heated households in an area that exceeds the PM10 stand-
36 ard. The local government or regional authority programs must include the following elements to
37 be eligible for funding:

38 (a) All forms of new high-efficiency low emitting heating systems are allowed.

39 (b) All woodstoves removed are destroyed.

40 (c) The local government or regional authority adopts and enforces an ordinance that limits
41 emissions from woodstoves to no visible smoke, except for steam and heat waves, during periods of
42 air stagnation and to an average of 20 percent opacity at all other times except during start up and
43 refueling as determined by the commission. This requirement shall not be in lieu of any final stage
44 of woodstove curtailment required during air stagnation if the final stage of curtailment is necessary

1 to prevent exceeding air quality standards established under ORS 468.295 by the latest date allowed
2 under the Clean Air Act to reach attainment of such standards.

3 (d) In an airshed requiring more than a 50 percent reduction in woodheating emissions as
4 specified in the State Implementation Plan control strategy for PM10 emissions, program partic-
5 ipants shall have a backup heat source if a certified woodstove is selected.

6 (e) Any replacement woodstove selected under the program must be installed in conformance
7 with building code requirements and the manufacturer's specifications including but not limited to
8 chimney specifications.

9 (f) To be eligible, program participants shall participate in any home energy audit program
10 provided at no charge to the homeowner and shall obtain all information available regarding subsi-
11 dies for cost-effective weatherization. The local government or regional air quality authority shall
12 make the information required in this subsection readily available to program participants.

13 **SECTION 10a.** On and after the effective date of this 1991 Act, the state building code under
14 ORS 455.010 shall prohibit installations of used woodstoves that were not certified for sale as new
15 on or after July 1, 1986, under ORS 468.655 (1).

16 **SECTION 10b.** On and after the effective date of this 1991 Act, no person shall advertise for
17 sale, offer to sell or sell, within this state, a used woodstove that was not certified under ORS
18 468.655 (1) for sale as new on or after July 1, 1986.

19 **SECTION 10c.** After December 31, 1994, all woodstoves, other than cookstoves, not certified for
20 sale as new on or after July 1, 1986, under ORS 468.655 (1) shall be removed and destroyed upon
21 sale of a home in any PM10 nonattainment area in the state that does not attain compliance with
22 the PM10 standard established by the commission under ORS 468.295 by December 31, 1994.

23 **SECTION 10d.** Sections 10a to 10c of this 1991 Act shall not apply to antique woodstoves. As
24 used in this section, "antique woodstove" means a woodstove built before 1940 that has an ornate
25 construction and a current market value substantially higher than a common woodstove manufac-
26 tured in the same time period.

27 **SECTION 11.** (1) Any programs adopted by the commission to curtail residential wood heating
28 during periods of air stagnation shall provide for two stages of curtailment based on the severity
29 of projected air quality conditions. Except as provided in subsection (2) of this section, the programs
30 shall apply to all woodburning fireplaces, woodstoves and appliances. The programs shall provide
31 that woodstoves that were certified for sale as new on or after July 1, 1986, under ORS 468.655 (1)
32 shall be curtailed only at the second stage to insure attainment of air quality standards.

33 (2) Programs adopted by the commission to curtail residential wood heating shall not apply to:

34 (a) A person who is classified at less than or equal to 125 percent of poverty level pursuant to
35 federal poverty income guidelines adopted under the Omnibus Budget Reconciliation Act of 1981
36 (P.L. 97:35);

37 (b) A person whose residence is equipped only with wood heating until such time as funding
38 becomes available for replacement or woodstoves that were not certified under ORS 468.655 for sale
39 as new on or after July 1, 1986, and for the period of time between application for such funds and
40 completion of the replacement; and

41 (c) Wood burning pellet stoves.

42 (3) If a local government or regional authority has not adopted or is not adequately implement-
43 ing the required curtailment program, the Environmental Quality Commission may adopt by rule and
44 the Department of Environmental Quality may operate and enforce a program to curtail residential

1 wood heating during periods of air stagnation as specified in subsection (1) of this section in any
2 area of the state where such a program is required under the Clean Air Act. The department shall
3 suspend operation and enforcement of a program adopted under this subsection upon a determi-
4 nation by the department that the local government or regional air quality authority has adopted
5 and is adequately implementing the required curtailment program.

6 (4) Except as provided in this section, after the effective date of this 1991 Act, the commission
7 shall not adopt or make more stringent any additional regulatory programs affecting residential
8 wood heating unless the air quality standard for PM10 established by the commission under ORS
9 468.295 has not been attained in the state by the latest date, considering extensions, allowed under
10 the Clean Air Act. Nothing in this section shall be construed to affect regulatory programs in effect
11 on the effective date of this 1991 Act.

12 **SECTION 12.** (1) Because of the extraordinary effect that the federal operating permit program
13 may have on small business, there is hereby established within the department a Small Business
14 Stationary Source Technical and Environmental Compliance Assistance Program in accordance with
15 section 507 of the Clean Air Act. This program shall include each element specified in section 507(a)
16 of the Clean Air Act.

17 (2) A Compliance Advisory Panel is established to:

18 (a) Advise the department on the effectiveness of the Small Business Stationary Source Techni-
19 cal and Environmental Compliance Assistance Program;

20 (b) Report to the administrator as required by federal law;

21 (c) Review the information to be issued by the program for small businesses to assure the in-
22 formation is understandable by a layperson; and

23 (d) Perform any other function required by the Clean Air Act.

24 (3) The Compliance Advisory Panel shall consist of not less than seven members:

25 (a) Two members appointed by the Governor, who are not owners, or representatives of owners,
26 of small business stationary sources, to represent the general public;

27 (b) Four members who are owners, or who represent owners, of small business stationary
28 sources as follows:

29 (A) One member appointed by the President of the Senate;

30 (B) One member appointed by the Speaker of the House;

31 (C) One member appointed by the Senate Minority Leader; and

32 (D) One member appointed by the House Minority Leader; and

33 (c) One member appointed by the director of the department.

34 (4)(a) Onsite technical assistance for the development and implementation of the Small Business
35 Stationary Source Technical and Environmental Compliance Assistance Program shall not result in
36 inspections or enforcement actions, except that the department may initiate compliance and
37 enforcement actions immediately if, during on-site technical assistance, there is reasonable cause to
38 believe a clear and immediate danger to the public health and safety or to the environment exists.

39 (b) As used in this subsection:

40 (A) "Clear" means plain, evident, free from doubt.

41 (B) "Immediate danger" means a situation in which there is substantial likelihood that serious
42 harm may be experienced within the time frame necessary for the department to pursue an
43 enforcement action.

44 **SECTION 13.** The Legislative Assembly finds that extending additional statewide controls and

GENERAL ADMINISTRATION

468.005 Definitions. As used in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter, unless the context requires otherwise:

(1) "Commission" means the Environmental Quality Commission.

(2) "Department" means the Department of Environmental Quality.

(3) "Director" means the Director of the Department of Environmental Quality.

(4) "Order" has the same meaning as given in ORS 183.310.

(5) "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the Federal Government and any agencies thereof.

(6) "Rule" has the same meaning as given in ORS 183.310.

(7) "Standard" or "standards" means such measure of quality or purity for air or for any waters in relation to their reasonable or necessary use as may be established by the commission pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter. [Formerly 449.001]

468.010 Environmental Quality Commission; appointment; confirmation; term; compensation and expenses. (1) There is created an Environmental Quality Commission. The commission shall consist of five members, appointed by the Governor, subject to confirmation by the Senate as provided in ORS 171.562 and 171.565.

(2) The term of office of a member shall be four years, but the members of the commission may be removed by the Governor. Before the expiration of the term of a member, the Governor shall appoint a successor to assume the duties of the member on July 1 next following. A member shall be eligible for reappointment, but no member shall serve more than two consecutive terms. In case of a vacancy for any cause, the Governor shall make an appointment to become immediately effective for the unexpired term.

(3) A member of the commission is entitled to compensation and expenses as provided in ORS 292.195. [Formerly 449.016]

468.015 Functions of commission. It is the function of the commission to establish the policies for the operation of the department in a manner consistent with the policies and purposes of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this

chapter. In addition, the commission shall perform any other duty vested in it by law. [1973 c.335 §4]

468.020 Rules and standards. (1) In accordance with the applicable provisions of ORS 183.310 to 183.550, the commission shall adopt such rules and standards as it considers necessary and proper in performing the functions vested by law in the commission.

(2) Except as provided in ORS 183.335 (5), the commission shall cause a public hearing to be held on any proposed rule or standard prior to its adoption. The hearing may be before the commission, any designated member thereof or any person designated by and acting for the commission. [Formerly 449.173; 1977 c.335 §11]

468.030 Department of Environmental Quality. There is hereby established in the executive-administrative branch of the government of the state under the Environmental Quality Commission a department to be known as the Department of Environmental Quality. The department shall consist of the director of the department and all personnel employed in the department. [Formerly 449.032]

468.035 Functions of department. (1) Subject to policy direction by the commission, the department:

(a) Shall encourage voluntary cooperation by the people, municipalities, counties, industries, agriculture, and other pursuits, in restoring and preserving the quality and purity of the air and the waters of the state in accordance with rules and standards established by the commission.

(b) May conduct and prepare, independently or in cooperation with others, studies, investigations, research and programs pertaining to the quality and purity of the air or the waters of the state and to the treatment and disposal of wastes.

(c) Shall advise, consult, and cooperate with other agencies of the state, political subdivisions, other states or the Federal Government, in respect to any proceedings and all matters pertaining to control of air or water pollution or for the formation and submission to the legislature of interstate pollution control compacts or agreements.

(d) May employ personnel, including specialists, consultants and hearing officers, purchase materials and supplies, and enter into contracts necessary to carry out the purposes set forth in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter.

(e) Shall conduct and supervise programs of air and water pollution control education, including the preparation and distribution of

(2) in determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(l) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.785]

468.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.825]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.782]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register

DEQ LAND USE EVALUATION STATEMENT FOR RULEMAKING

PROPOSED NEW INDUSTRIAL PM₁₀
EMISSION STANDARD RULES AND OTHER HOUSE-KEEPING MEASURES(1) Explain the purpose of the proposed rules.

The purpose of the proposed rules is to adopt new industrial emission standards and implement house-keeping changes to existing rules required by the U.S. Environmental Protection Agency (EPA) to approve PM₁₀ control strategies. Included are proposed contingency control requirements for industrial sources in PM₁₀ nonattainment areas as required by the federal Clean Air Act Amendments of 1990. Also included are revisions in rules for industrial PM₁₀ sources and the applicability of ambient air quality standards needed to address EPA objections.

(2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes No (a) If yes, identify existing program/rule/activity:

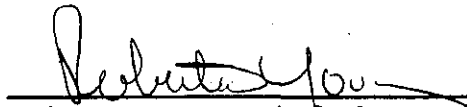
The rules affect a land use program identified as "Issuance of Air Contaminant Discharge Permits (ACDP)".

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes No

If no, explain: Not Applicable.

(c) If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination. Not Applicable.(3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility. Not Applicable.


Division


Intergovernmental Coord.

10-21-91
Date

ADG:a
MISC\AH19054
(9/9/91)

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMORANDUM

DATE: October 24, 1991

TO: Environmental Quality Commission
FROM: Linda Wishart, Hearings Officer *LW*
SUBJECT: Hearings Report for Residential Woodheating Rules

Five hearings were held to accept testimony on four PM₁₀ Control Strategies and three packages of supporting rules required to meet the Clean Air Act November 15, 1991 deadline for PM₁₀ State Implementation Plan revisions. These hearings were authorized by the Environmental Quality Commission at an August 22, 1991, telephone conference.

On September 26, 1991 a public hearing, held in the Commission Hearing Room of the Courthouse Annex, Klamath Falls, Oregon, was attended by 24 persons; 15 gave oral comments and 7 submitted written comments.

On September 27, 1991, a public hearing was held at the City Council Chambers, 101 NW "A" Street, Grants Pass, Oregon. There were nine persons in attendance, one gave oral testimony and two submitted written comments.

On September 30, 1991, a public hearing was held at the Smullin Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 34 persons present, 15 gave oral testimony and 13 submitted written comments.

On October 1, 1991, a public hearing, held in Zabel Hall, room 110, Eastern Oregon State College, La Grande, Oregon, was attended by 21 persons; five gave oral comments, four submitted written comments.

On October 1, 1991, a public hearing was held at the conference room of the Oregon Operations office of the U.S. Environmental Protection Agency (EPA), 811 SW Sixth Avenue, Portland, Oregon. Four people attended. Three gave oral testimony. No written testimony was received.

Additional testimony was received prior to the October 2, 1991 deadline. Copies of written comments have been provided to the Environmental Quality Commission. The following is a summary of all comments received, both oral and written.

Residential Woodheating Rules

No.	Testimony Summary/Issues	Whose Comment
1.	A variance is needed on the woodstove sale ban. The ban is an overkill; all of state affected when only a few involved. Regulations imposed on life style is not appreciated. Replacement of stoves is costly.	G1
2	Imposing restrictions on woodstove replacement is unreasonable because other forms of heat are too expensive.	K7
3.	EPA supports the proposed curtailment rules.	P4

Testimony References

Public Testimony Given in La Grande

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
L1.	A	Grant Darrow, Chimney Sweep
L2.	B	Francis Mohr, Acting Air Resource Manager Wallowa-Whitman National Forest
L3.	B	R.M. Richmond, Forest Supervisor, Wallowa-Whitman National Forest
L4.	C	Jeff Blackwood, Forest Supervisor, Umatilla National Forest
L5.	D	Larry Dalrymple, City Manager, La Grande
L6.	no	Jim Brown, Air Quality Committee, Citizens
L7.	no	Roberta Bates, Resident, La Grande

Public Testimony Given in Klamath Falls

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
K1.	no	Doss Decker, Resident, Klamath Falls
K2.	no	Nancy Roeder, Resident, Klamath Falls
K3.	no	Harry Fredricks, County Commissioner
K4.	E	Stan Meyers, Vice President Engineering, JELD-WEN, INC.
K5.	F	Joseph Riker, Community Development Director, City of Klamath Falls
K6.	G	John D. Monfore, Land Use Manager, Weyerhaeuser

K7.	no	Leo Dunn, Resident, Klamath Falls
K8.	H	Drew Honzel, Columbia Plywood Corp.
K9.	I	Ron Loveness, Resident, Klamath Falls
K10.	no	Del Parks, State Representative, Klamath County
K11.	J	James Keller, City Manager, Klamath Falls
K12.	K	Kurt Schmidt, Employee, Modoc Lumber Co.
K13.	no	Roy Ford, Resident, Klamath Falls
K14.	L	Steve Kandra, President Klamath County Chamber of Commerce
K15.	no	Bob Flowers, Farmer, Klamath Falls
K16.	M	Nina Pence, President, League of Women Voters, Klamath County
K17.	N	Carol Yarbrough, President, Citizens for Quality Living

Public Testimony Given in Grants Pass

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
G1.	no	Paul Brandon, Resident, Grants Pass
G2.	O	Dennis Spencer, Regional General Manager, Stone Forest Industries
G3.	P	Candace Bartow, Mayor, Grants Pass
G4	Q	Josephine County Board of Commissioners

Public Testimony Given in Medford

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
M1.	R	Wallace Skyrman, Resident, Central Point
M2.	S	Anna Hirst, League of Women Voters
M3.	T	Frank Hirst, Audubon Society
M4.	U	Robert Palzer, PhD., Coalition to Improve AQ
M5.	no	James Dodson, Resident, Medford
M6.	no	Gary Stevens, Environmental Health Department, Jackson County
M7.	V	Vera Morrell, Chairperson, Coalition to Improve Air Quality
M8.	W	Paul Wyntergreen Regional Director, Oregon Environmental Council
M9.	X	Neil Robbins, Resident, Medford
M10.	Y	Patricia Kuhn, Resident, Medford
M11.	no	Ronald Meyer, Farmer, Talent
M12.	no	Myra Erwin, Chairperson, Rogue Group Sierra Club
M13.	Z	William Barbour, Farmer, Medford
M14.	Z	Victoria Montgomery, Resident, Medford
M15.	AA	Jan Young, Pulmonary Rehabilitation Coordinator, Medford
M16.	BB	Greg Miller, Executive Vice President, Southern Oregon Timber Association

M17. BB Bob Morris,
Environmental Affairs Committee Chair,
Southern Oregon Timber Association

M18. CC Kathleen Muir, Resident, Ashland

M19. DD Phyllis Hughes,
Rogue Group Sierra Club

M20. EE Garl Grigsby, Double Dee Lumber Company

M21. FF Anne & Bob Gottschalk,
Residents, Talent

M22. GG Robert Owens, Co-Executive Council
American Indian Cultural Center

M23. HH C. Herschel King, MD
Retired Anesthesiologist, Ashland

Public Testimony Given in Portland and Misc. Letters Submitted

<u>NO.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
P1.	no	Joe Weller, Lung Association
P2.	no	Jim Britton, Executive Director, Asphalt Paving Association
P3.	no	Harry Fredricks, Klamath County Commissioner
P4.	II	David Kircher, Chief Air Programs Development Section
P5.	JJ	David Kircher, Chief Air Programs Development Section
P6.	KK	Bob Palzer, Air Quality Coordinator, Sierra Club
P7.	LL	James Whitty, Legislative Counsel, Associated Oregon Industries
P8.	MM	Tim Nissen, President, Wood Energy Institute
P9.	NN	John Crouch, Emissions Specialist, Wood Heating Alliance

LLW:a
RPT\AH20057
(10/24/91)

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: K
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption: Open Burning Rule Amendments for the Rogue Basin
Open Burning Control Area.

PURPOSE:

To improve consistency between local and state open burning requirements and provide an open burning contingency measure in the PM₁₀ control strategies for the Medford-Ashland and Grants Pass PM₁₀ nonattainment areas.

ACTION REQUESTED:

<input type="checkbox"/>	Authorize Rulemaking Hearing	
<input checked="" type="checkbox"/>	Adopt Rules	
	Proposed Rules	Attachment <u>A</u>
	Rulemaking Statements	Attachment <u>B</u>
	Land Use Compatibility Statement	Attachment <u>F</u>
	Fiscal and Economic Impact Statement	Attachment <u>C</u>
	Public Notice	Attachment <u>D</u>

DESCRIPTION OF REQUESTED ACTION:

This proposal requests the Environmental Quality Commission (EQC, Commission) to adopt proposed rule changes to OAR 340-23-043 that would require more restrictive ventilation criteria for the Rogue Basin Open Burning Control Area consistent with local ordinances. The proposed rule



811 SW Sixth Avenue
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(503) 229-5696



Meeting Date: November 8, 1991
Agenda Item: K
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changes to OAR 340-23-090 would also impose a ban on open burning in the entire Open Burning Control Area during November, December, January, and February as part of the PM₁₀ contingency plans if the Medford-Ashland or Grants Pass area fails to meet PM₁₀ standards by December 31, 1994.

AUTHORITY/NEED FOR ACTION:

- Statutory Authority: ORS 468.290, 468.355 Attachment E
 Pursuant to Rule: _____ Attachment _____
 Pursuant to Federal Law/Rule:
Federal Clean Air Act Amendments of 1990. Attachment _____
 Time Constraints:

The 1990 Clean Air Act requires states to submit approvable PM₁₀ control strategies, including specific rules necessary to implement the strategies and contingency plans, by November 15, 1991.

DEVELOPMENTAL BACKGROUND:

- Advisory Committee Report/Recommendation Attachment G
 Hearing Officer's Report/Recommendations Attachment H

Public hearings were held in Medford, Grants Pass, Klamath Falls, La Grande, and Portland during September 26 to October 1, 1991, on the proposed PM₁₀ control strategies and supporting rules. Several people commented on the Rogue Basin open burning rules at the Medford hearing.

- Response to Testimony/Comments Attachment I

Responses to testimony regarding open burning issues are included in the attachment.

- Prior EQC Agenda Items:

Agenda Item K, August 28, 1981 Statewide Open Burning Rules
Agenda Item F, August 22, 1991* Rogue Basin Open Burning Rules
(* hearing authorization for this proposal)

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The Department's rules require a ventilation index of 200 or more before open burning can be allowed in the Rogue Basin. Several local governments within the Rogue Basin - including

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Jackson County, Ashland, Central Point, and Jacksonville - have adopted a more stringent ventilation index of 400 in response to PM₁₀ concerns. Other local governments in the Basin have adopted a ventilation index of 200 or are relying on the Department's index of 200.

The number of burn days under the different ventilation criteria (fire safety concerns can further reduce the number of burn days during some months) averaged as follows during 1983-90:

<u>Month</u>	<u>Using 200 Index</u>	<u>Using 400 Index</u>
January	15	7
February	20	11
March	29	23
April	29	24
May	31	28
June	30	27
July	30	24
August	30	23
September	27	18
October	20	12
November	18	11
<u>December</u>	<u>12</u>	<u>8</u>
Annual	291	216
"No Burn" Days	74	149

In summary, an area with a 400 index averages 149 "no burn" days per year and an area with a 200 index averages 74 "no burn" days per year.

The Jackson County ordinance applies only to unincorporated areas within the Medford-Ashland AQMA. The state rules apply to both incorporated and unincorporated areas within the entire Rogue Basin Open Burning Control Area, which includes the Medford-Ashland AQMA, the Grants Pass Urban Growth Boundary, and other surrounding portions of Jackson and Josephine Counties.

The Rogue Valley Fire Chiefs' Association and local governments support the change in state rules to a 400 index for uniformity with the recently adopted local ordinances. Environmental groups support the 400 index and seasonal ban on open burning.

Orchardists in the Medford-Ashland area are opposed to the current Jackson County open burning restrictions (400 index

and November-to-February seasonal ban) on which the DEQ 400-index proposal is based. An open burning advisory committee formed by the Jackson County Commissioners was unable to arrive at a consensus recommendation, but resulted in majority and minority reports. The arguments for both reports were presented in the public hearing on the Department's proposed revisions to the open burning rules.

The majority report recommended that:

1. DEQ increase the ventilation index to 400 throughout the Rogue Basin;
2. Open burning of orchard prunings be allowed during February 1992 and February 1993 on days when the ventilation index is 200 and the Rogue Valley woodburning advisory is green;
3. An agricultural exemption for disease and pest control be continued in the Jackson County ordinance and included in the DEQ rules; and
4. The four-month November-February open burning ban be included as a contingency measure in the DEQ proposal.

The minority report prepared by the orchardists recommended:

1. Open burning of agricultural wastes be allowed during the ten-month February-November period on days when the ventilation index is 200 and during the two-month December-January period when the ventilation index is 400; and
2. An agricultural exemption for disease and pest control be continued in the Jackson County ordinance and included in the DEQ rules.

The Jackson County Commissioners recently decided in favor of the majority report and are revising the county ordinance accordingly to give February 1992 and February 1993 flexibility to orchardists for burning prunings. As shown in the above table, this would provide about 20 burn days per month with a February 200 index compared to about 11 burn days per month with a February 400 index or zero burn days per month with a February ban.

Both reports recommended an annual evaluation of progress to develop alternatives to open burning of agricultural debris. Rogue Disposal Service and the Biomass One Cogeneration

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Facility are working with the orchardists on prototype projects to chip the prunings and removed trees for use as fuel or raw materials.

PROGRAM CONSIDERATIONS:

The adoption of more restrictive open burning requirements (400 index) in the state rules may result in additional enforcement actions by the Department, especially the Southwest Regional Office in Medford. Currently, Jackson County has more restrictive ventilation criteria (400 index) than the Department (200 index); this results in more responsibility on county staff for field enforcement.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. The Medford-Ashland and Grants Pass PM₁₀ control strategies could rely solely on the non-uniform existing state and local rules for control of open burning emissions. For example, Medford and Grants Pass have year-round bans on open burning; some other cities and part of the unincorporated portion of Jackson County have seasonal bans or more restrictive ventilation criteria than the state rule.
2. The Commission could consider rule revisions for the Rogue Basin Open Burning Control Area that would provide more restrictive and uniform open burning requirements. This would reduce confusion and reduce the impact of open burning on air quality. Without consistent state and local open burning regulations, some local governments may be inclined over time to loosen their ventilation criteria which would be less protective of air quality.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the second alternative, specifically that the Commission adopt the proposed amendments to Division 23, Rules for Open Burning, as a revision to the State Implementation Plan. The amendments (Attachment A) are a supporting component of the overall emission reduction strategies for the Medford-Ashland and Grants pass PM₁₀ Nonattainment Areas, and strengthen the Department's submittal of fully approvable PM₁₀ control strategies to the Environmental Protection Agency within the time frame required by the Clean Air Act.

The Department recommends this tightening of open burning requirements in the Rogue Basin in order to provide uniformity (400 index) and potentially more stringent control (November-to-February seasonal ban) if attainment is not reached by the Clean Air Act deadline. This action is proposed, even though open burning is a relatively small contributor to PM₁₀ levels, to ensure all sources of PM₁₀ are being addressed in a comprehensive and equitable manner in a very fragile airshed of the state, and to prevent backsliding on this element of the PM₁₀ control strategy. Even with aggressive industrial and residential woodburning control programs, the Medford-Ashland attainment analysis indicates a narrow margin of safety.

The Department is sensitive to the concerns by orchardists that are reflected in the recommendations of the Jackson County Open Burning Task Force and the revised Jackson County open burning ordinance. Based on these concerns, the Department has revised Attachment A (from the proposed amendments taken to public hearing) to allow the burning of orchard prunings during February 1992 and February 1993 and to allow agricultural burning for disease and pest control in accordance with the less restrictive criteria discussed above (i.e., 200 index and green advisory) consistent with the recent revisions to the Jackson County ordinance. The additional February flexibility for orchardists is not expected to have any significant adverse effect on air quality during the next 24-month period while alternatives are developed.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The Department is not aware of any conflicts with the strategic plan, agency policy, or legislative policy. The proposed rules are consistent with the Oregon Benchmarks goal of increasing the percentage of Oregonians living in areas which meet ambient air quality standards.

ISSUES FOR COMMISSION TO RESOLVE:

1. Does the EQC support more restrictive and uniform open burning requirements even though open burning is a significantly smaller contributor to PM₁₀ than other sources such as woodstoves and industry?

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Page 7

2. Does the Commission concur with the Department's additional proposed revisions that would provide some flexibility for agricultural burning in February 1992 and February 1993 consistent with the Jackson County ordinance?

INTENDED FOLLOWUP ACTIONS:

1. Incorporate the revised open burning requirements in the PM₁₀ attainment plans and contingency plans for the Medford-Ashland and Grants Pass areas.
2. Notify the State Fire Marshal and local fire departments in the Rogue Basin of the open burning rule revisions.

Approved:

Section:

Division:

Director:

John F. Kawalazyk
[Signature]
Jill Ham

Report Prepared By: Merlyn Hough (229-6446)
Date Prepared: October 25, 1991

MLH:e
RPT\AH20059
(10/25/91)

RULES FOR OPEN BURNING

Open Burning Schedule

340-23-043 Pursuant to ORS 468.450, 476.380, 477.520 and 478.960 the following open burning schedule shall be administered by the Department:

(1) Mandatory Prohibition Based on Adverse Air Quality Conditions:

(a) The Department shall notify the State Fire Marshal that all open burning shall be prohibited in all or a specified part of the state for the times and locations which the Department has declared:

(A) A particulate or sulfur dioxide alert pursuant to OAR 340-27-010(2);

(B) A particulate or sulfur dioxide warning pursuant to OAR 340-27-010(3);

(C) An emergency for any air contaminant pursuant to OAR 340-27-010(4).

(b) All open burning shall be prohibited until the Department notifies the State Fire Marshal that the episode and prohibition have been declared to have terminated.

(2) Discretionary Prohibition of Limitation Based on Meteorological Conditions:

(a) The Department may notify the State Fire Marshal that all or specified types of open burning shall be prohibited or limited in all or any specified parts of the state based on any one or more of the following criteria affecting that part of the state:

(A) An air Stagnation Advisory issued by the National Weather Service;

(B) The daily maximum ventilation index calculated by the Department for the Willamette Valley Open Burning Control Area or Umpqua Basin Open Burning Control Area is less than 200;

(C) the daily maximum ventilation index calculated by the Department for the Rogue Basin ~~for Umpqua Basin~~ Open Burning Control Area is less than ~~200~~;

(i) 200 for burning of orchard prunings during February 1992 and February 1993 on days with a green woodburning advisory;

(ii) 200 for agricultural burning for disease or pest control on days with a green woodburning advisory;

(iii) 400 for all other open burning;

(D) The daily maximum ventilation index calculated by the Department for any area outside the Willamette Valley, Rogue Basin and Umpqua Basin open burning control areas is less than 150; or

(E) For regulation of burning of yard debris in urban areas, consideration of the amount of precipitation, expected during the day; or

(F) Any other relevant factor.

(b) All open burning so prohibited or limited shall be prohibited or limited until the Department notifies the State Fire Marshal that the prohibition or limitation has been terminated.

(c) In making the determination of whether or not to prohibit or limit open burning pursuant to this section the Department shall consider:

(A) The policy of the state set forth in ORS 468.280;

(B) The relevant criteria set forth in ORS 468.295(2);

(C) The extent and types of materials available to be open burned;

(D) In the case of Agricultural open burning, the recommendations received from any local agricultural smoke management organization; and

(E) Any other relevant factor.

(d) In making the determination of whether or not to prohibit or limit any open burning pursuant to this section the Department shall give first priority to the burning of perennial grass seed crop used for grass seed production, second priority for annual grass seed crop used for grass seed production, third priority to grain crop burning and fourth priority to all other burning.

(3) Unless and until prohibited or limited pursuant to sections (1) and (2) of this rule, open burning shall be allowed during a day, so long as it is not prohibited by, and is conducted consistent with the other rules in this Division 23 and the requirements and prohibitions of local jurisdiction and the State Fire Marshal.

Stat. Auth.: ORS Ch. 468 & 477

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984,
f. 5-29-84, ef. 6-16-84

Coos, Douglas, Jackson and Josephine Counties

340-23-090 Open burning prohibitions for Coos, Douglas, Jackson and Josephine Counties:

(1) Open burning control areas:

(a) The Coos Bay open burning control area as generally described in OAR 340-23-115 and depicted in Figure 3 is located in Coos County.

(b) The Umpqua Basin open burning control area as generally described in OAR 340-23-115, and depicted in Figure 5, is located in Douglas County.

(c) The Rogue Basin open burning control area as generally described in OAR 340-23-115 and depicted in Figure 4, is located in Jackson and Josephine Counties.

(2) Industrial open burning is prohibited unless authorized pursuant to OAR 340-23-100.

(3) Agricultural open burning is allowed subject to OAR 340-23-040, ~~and~~ 340-23-042, 340-23-090(7), and the requirements and

prohibitions of local jurisdictions and the State Fire Marshal.

(4) Commercial open burning is prohibited within the Coos Bay, Umpqua Basin and Rogue Basin open burning control areas and in or within three (3) miles of the corporate city limits of Coquille and Reedsport unless authorized pursuant to OAR 340-23-100. Commercial open burning is allowed in all other areas of these counties subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Construction and Demolition open burning is prohibited within the Coos Bay, Umpqua Basin and Rogue Basin open burning control areas unless authorized pursuant to OAR 340-23-100. Construction and Demolition open burning is allowed in other areas of these counties subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(6) Domestic open burning is allowed subject to OAR 340-23-040, ~~and~~ 340-23-042, 340-23-090(7), and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(7) Upon publication by EPA of notice in the Federal Register that the Medford-Ashland Air Quality Maintenance Area or the Grants Pass Urban Growth Area has failed to attain the national ambient air quality for PM₁₀ by the attainment date required in the Clean Air Act, all open burning is prohibited within the Rogue Basin open burning control area during November, December, January, and February unless authorized pursuant to 340-23-100.

Stat. Auth.: ORS Ch. 468 & 477

Hist.: DEQ 27-1981, f. & ef. 9-8-81

MLH:
RPT\AH20060
(10/16/91)

**RULEMAKING STATEMENTS FOR PROPOSED AMENDMENTS TO
OPEN BURNING RULES AS A REVISION TO THE
STATE OF OREGON CLEAN AIR ACT IMPLEMENTATION PLAN**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-23-043 and -090. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

This proposal requests the Environmental Quality Commission (EQC, Commission) to authorize a public hearing on proposed rule changes to OAR 340-23-043 that would require more restrictive ventilation criteria for the Rogue Basin Open Burning Control Area consistent with recently adopted local ordinances. The proposed rule changes to OAR 340-23-090 would also impose a ban on open burning in the entire Open Burning Control Area during November, December, January, and February as part of the PM₁₀ contingency plans if the Medford-Ashland or Grants Pass area fails to meet PM₁₀ standards by December 31, 1994.

The federal Clean Air Act requires that states develop and adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ standards are brought into attainment with those standards within prescribed time frames. A contingency plan is also required to be developed and automatically implemented if the area fails to meet the deadline.

The principal means of achieving the necessary air quality improvements is through PM₁₀ emission reductions from woodstoves and fireplaces, the wood products industries, open burning of debris, slash burning, and road dust.

The open burning rule amendments are proposed to improve consistency between local and state open burning requirements in the Rogue Basin and prevent backsliding of PM₁₀ control strategies in the Medford-Ashland and Grants Pass PM₁₀ nonattainment areas.

(3) Principal Documents Relied Upon

The Clean Air Act Amendments of 1990, Title I. 42 U.S.C. 7401 et seq., as amended. November 15, 1990.

Previous staff reports to the Environmental Quality Commission (EQC):

Agenda Item D, January 22, 1988, EQC Meeting, Informational Report: New Federal Ambient Air Quality Standard for Particulate Matter (PM₁₀) and Its Effects on Oregon's Air Quality Program.

Agenda Item G, June 29, 1990, EQC Meeting, Request for Authorization to Conduct Public Hearing on PM₁₀ Air Pollution Control Strategy for the Medford-Ashland AQMA (Amendments to OAR 340-20-047).

Agenda Item D, January 31, 1991, EQC Meeting, PM₁₀ Air Pollution Control Strategy for the Medford-Ashland AQMA: Adoption of SIP Revisions That Were Taken to Public Hearings in August and September 1990.

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

MLH:
RPT\AH20061
(10/14/91)

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED AMENDMENTS TO OPEN BURNING RULES
AS A REVISION TO THE STATE IMPLEMENTATION PLAN**

PROPOSAL SUMMARY

This proposal requests the Environmental Quality Commission (EQC, Commission) to authorize a public hearing on proposed rule changes to OAR 340-23-043 that would require more restrictive ventilation criteria (from a 200 index to the more restrictive 400 index) for the Rogue Basin Open Burning Control Area consistent with recently adopted local ordinances. Based on 1983-90 ventilation index data, this will increase the number of "no burn" days, due to marginal ventilation conditions, from 73 to 149 on an annual basis and from 54 to 83 on a November-February (four-month) seasonal basis.

The proposed rule changes to OAR 340-23-090 would also impose a ban on open burning in the entire Open Burning Control Area during November, December, January, and February as part of the PM₁₀ contingency plans if the Medford-Ashland or Grants Pass area fails to meet PM₁₀ standards by December 31, 1994.

COSTS/CONCERNS TO AFFECTED PARTIES

The tightening of open burning requirements will not necessarily reduce the total annual amount of open burning, but will reduce the amount of open burning on poor ventilation days and, if the contingency plan is implemented, in poor ventilation months. The more restrictive ventilation criteria have been adopted previously by Jackson County and some of the cities in the Medford-Ashland Air Quality Maintenance Area (AQMA). The cities of Medford and Grants Pass have banned open burning year-round.

Environmental groups support the more restrictive ventilation criteria and the seasonal ban on open burning.

Orchardists in the Medford-Ashland area are opposed to the current Jackson County open burning restrictions on which the DEQ proposal is based. An open burning advisory committee formed by the Jackson County Commissioners has been unable to arrive at a consensus recommendation. The Department of Environmental Quality (DEQ, Department) intends to reconcile the proposed state rule proposal with

the decision of the Jackson County Commissioners during the EQC public hearing process.

Some of the affected orchardists are small business.

Costs to affected orchardists can be of two types: (1) Land cost to store debris for delayed burning, estimated at \$1,000 per acre-year; and (2) Cost of hauling and chipping debris that is in excess of the value of the resulting chips, estimated at zero (break-even) to \$5 per green ton.

There are about 14,000 acres of orchards in the Rogue Basin, generating about 7,000 green tons of orchard prunings each year that could potentially be burned. In addition, orchards are removed and replaced every 40-80 years, generating an average of about 5,000 tons per year of debris that could potentially be burned. The estimated cost of delivering chipped debris is estimated at \$10-18 per green ton (about \$20-36 per bone dry ton) compared to a value of about \$13 per green ton (about \$26-27 per bone dry ton). The net cost could be as high as \$5 per green ton for a total cost of \$60,000 per year for the Rogue Basin.

The land cost of storage for delayed (rather than eliminated, as in the case of chipping) burning would be considerably higher, making it the less desirable alternative from both an economic and environmental perspective.

COSTS TO STATE AND LOCAL GOVERNMENT AGENCIES

The proposal is intended to improve consistency between local and state open burning requirements.

The Rogue Valley Fire Chiefs' Association and local governments support the change in state rules for uniformity with recently adopted local ordinances.

The more restrictive open burning requirements may result in additional enforcement action by the Department, especially the Southwest Regional Office in Medford.

MLH:
RPT\AH15011
(8/14/91)

NOTICE OF PUBLIC HEARING

Hearing Dates: September 26,
27, 30 & October
1, 1991

Comments Due: October 2, 1991

WHO IS AFFECTED:

Individuals, especially those with woodstoves, and board product industries statewide, local governments, agricultural operations and industries in or near the Medford-Ashland, Klamath Falls, Grants Pass and La Grande PM₁₀ Nonattainment Areas.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the State of Oregon Clean Air Act Implementation Plan to:

- o Revise fine particulate (PM₁₀) Pollution Control Strategies for the Medford, Grants Pass and Klamath Falls areas;
- o Add a new PM₁₀ Control Strategy for the La Grande area;
- o Add new regulations for woodstoves, OAR Chapter 340, Division 34;
- o Add new contingency industrial particulate emission standards for PM₁₀ nonattainment areas, OAR Chapter 340, Division 21;
- o Revise the Medford/Grants Pass Particulate Standard Rules, OAR Chapter 340, Division 30;
- o Revise Board Products Particulate Emission Standard Rules, OAR Chapter 340, Division 25;
- o Revise Ambient Air Standard Rules, OAR Chapter 340, Division 31;
- o Revise Rogue Basin Open Burning Control Area rules, OAR Chapter 340, Division 23.

WHAT ARE THE HIGHLIGHTS:

The federal Clean Air Act requires states to submit PM₁₀ attainment Control Strategies for PM₁₀ Nonattainment Areas to the U.S. Environmental Protection Agency (EPA) by November 15, 1991. The Control Strategies specify how federal PM₁₀ air quality standards will be attained by the Act's deadline of December 31, 1994. They primarily rely on controlling PM₁₀ emissions from residential woodheating, industry and open burning.

ATTACHMENT D

The proposed rules which would implement PM₁₀ Control Strategies will:

- o Regulate residential woodheating according to new legislative authority including:
 - > Banning the sale of used, uncertified woodstoves statewide;
 - > allowing DEQ to prohibit woodheating on poor air quality days if local governments fail to adopt or implement such programs where needed;
 - > Requiring the destruction of uncertified woodstoves upon the sale of a home as a contingency measure if an area fails to attain compliance with the PM₁₀ standard by December 31, 1994.
- o Require industries in PM₁₀ nonattainment areas to meet Reasonably Available and Best Available Control Technology requirements of the Clean Air Act as a contingency measure if areas fail to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Require tighter meteorological criteria for allowing open burning in the Rogue Basin Open Burning Control Area, and ban open burning from November through February in this area as a contingency if it fails to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Address housekeeping/enforceability issues raised by EPA with respect to existing state regulations covering the Board Products Industry, Medford/Grants Pass Industrial Particulate Emission and Ambient Air Standards.

HOW TO COMMENT:

Copies of the complete proposed rule packages may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact:

Merlyn Hough at (503) 229-6446 (Medford-Ashland)
John Core at (503) 229-5380 (Klamath Falls)
Howard Harris at (503) 229-6086 (Grants Pass)
Brian Finneran at (503) 229-6278 (La Grande)
Andy Ginsburg at (503) 229-5581 (Industry)
David Collier at (503) 229-5177 (Woodstoves)

ATTACHMENT D

Public hearings will be held before a hearings officer at:

7:00 pm
September 26, 1991
Commission Hearing Room
Courthouse Annex
Klamath Falls, Oregon

7:00 pm
September 30, 1991
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
September 27, 1991
City Council Chambers
101 NW "A" Street
Grants Pass, Oregon

7:00 pm
October 1, 1991
City Hall
1000 Adams Avenue
La Grande, Oregon

3:00 pm
October 1, 1991
DEQ Offices
811 SW Sixth Avenue
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received no later than 5 pm, October 2, 1991.

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments and Control Strategies identical to the proposed amendments, adopt modified rule amendments and Control Strategies on the same subject matter, or decline to act. The adopted rules and Control Strategies will be submitted to the EPA as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on November 7, 1991, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

YM:a
RPT\AH15041
(8/14/91)

POLLUTION CONTROL

468.295

more air contaminants which contribute to a condition of air pollution.

(4) "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.

(5) "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.

(6) "Area of the state" means any city or county or portion thereof or other geographical area of the state as may be designated by the commission.

(7) "Woodstove" means a wood fired appliance with a closed fire chamber which maintains an air-to-fuel ratio of less than 30 during the burning of 90 percent or more of the fuel mass consumed in the low firing cycle. The low firing cycle means less than or equal to 25 percent of the maximum burn rate achieved with doors closed or the minimum burn achievable. [Formerly 449.760; 1983 c.333 §1]

468.280 Policy. (1) In the interest of the public health and welfare of the people, it is declared to be the public policy of the State of Oregon:

(a) To restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state.

(b) To provide for a coordinated state-wide program of air quality control and to allocate between the state and the units of local government responsibility for such control.

(c) To facilitate cooperation among units of local government in establishing and supporting air quality control programs.

(2) The program for the control of air pollution in this state shall be undertaken in a progressive manner, and each of its successive objectives shall be sought to be accomplished by cooperation and conciliation among all the parties concerned. [Formerly 449.765]

468.285 Purpose. It is the purpose of the air pollution laws contained in ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter to safeguard the air resources of the state by controlling, abating and preventing air pollution under a program which shall be consistent with the declaration of policy in this section and with ORS 468.280. [Formerly 449.770]

468.290 Application of air pollution laws. Except as provided in this section and in ORS 468.450, 476.380 and 478.960, the air pollution laws contained in this chapter do not apply to:

(1) Agricultural operations and the growing or harvesting of crops and the raising of fowls or animals, except field burning which shall be subject to regulation pursuant to ORS 468.140, 468.150, 468.455 to 468.480 and this section;

(2) Use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals, except field burning which shall be subject to regulation pursuant to ORS 468.140, 468.150, 468.455 to 468.480 and this section;

(3) Barbecue equipment used in connection with any residence;

(4) Agricultural land clearing operations or land grading;

(5) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families, except woodstoves which shall be subject to regulation under this section and ORS 468.630 to 468.655;

(6) Fires set or permitted by any public agency when such fire is set or permitted in the performance of its official duty for the purpose of weed abatement, prevention or elimination of a fire hazard, or instruction of employees in the methods of fire fighting, which in the opinion of the agency is necessary;

(7) Fires set pursuant to permit for the purpose of instruction of employees of private industrial concerns in methods of fire fighting, or for civil defense instruction; or

(8) The propagation and raising of nursery stock, except boilers used in connection with the propagation and raising of nursery stock. [Formerly 449.775; 1975 c.559 §3; 1983 c.333 §2; 1983 c.730 §3]

468.295 Air purity standards; air quality standards. (1) By rule the commission may establish areas of the state and prescribe the degree of air pollution or air contamination that may be permitted therein, as air purity standards for such areas.

curate determination of the nature, extent, quantity and degree of air contaminants which are emitted as the result of operation of the source.

(3) All sampling and testing shall be conducted in accordance with methods used by the department or equivalent methods of measurement acceptable to the department.

(4) All sampling and testing performed under this section shall be conducted in accordance with applicable safety rules and procedures established by law. [Formerly 449.702]

468.345 Variances from air contamination rules and standards; delegation to local governments; notices. (1) The commission may grant specific variances which may be limited in time from the particular requirements of any rule or standard to such specific persons or class of persons or such specific air contamination source, upon such conditions as it may consider necessary to protect the public health and welfare. The commission shall grant such specific variance only if it finds that strict compliance with the rule or standard is inappropriate because:

(a) Conditions exist that are beyond the control of the persons granted such variance; or

(b) Special circumstances render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause; or

(c) Strict compliance would result in substantial curtailment or closing down of a business, plant or operation; or

(d) No other alternative facility or method of handling is yet available.

(2) The commission may delegate the power to grant variances to legislative bodies of local units of government or regional air quality control authorities in any area of the state on such general conditions as it may find appropriate. However, if the commission delegates authority to grant variances to a regional authority, the commission shall not grant similar authority to any city or county within the territory of the regional authority.

(3) A copy of each variance granted, renewed or extended by a local governmental body or regional authority shall be filed with the commission within 15 days after it is granted. The commission shall review the variance and the reasons therefor within 60 days of receipt of the copy and may approve, deny or modify the variance terms. Failure of the commission to act on the variance within the 60-day period shall be considered a determination that the variance granted by

the local governmental body or regional authority is approved by the commission.

(4) In determining whether or not a variance shall be granted, the commission or the local governmental body or regional authority shall consider the equities involved and the advantages and disadvantages to residents and to the person conducting the activity for which the variance is sought.

(5) A variance may be revoked or modified by the grantor thereof after a public hearing held upon not less than 10 days' notice. Such notice shall be served upon all persons who the grantor knows will be subjected to greater restrictions if such variance is revoked or modified, or are likely to be affected or who have filed with such grantor a written request for such notification. [Formerly 449.810]

468.350 Air and water pollution control permit for geothermal well drilling and operation; enforcement authority of director. (1) Upon issuance of a permit pursuant to ORS 522.115, the director shall accept applications for such appropriate permits under air and water pollution control laws as are necessary for the drilling of a geothermal well for which the permit has been issued and shall, within 30 days, act upon such application.

(2) The director shall continue to exercise enforcement authority over a permit issued pursuant to this section; and shall have primary responsibility in carrying out the policy set forth in ORS 468.280, 468.710 and rules adopted pursuant to ORS 468.725, for air and water pollution control at geothermal wells which have been unlawfully abandoned, unlawfully suspended, or completed. [1975 c.532 §34]

468.355 Open burning of vegetative debris; local government authority. (1) The Environmental Quality Commission shall establish by rule periods during which open burning of vegetative debris from residential yard cleanup shall be allowed or disallowed based on daily air quality and meteorological conditions as determined by the department.

(2) After June 30, 1982, the commission may prohibit residential open burning in areas of the state if the commission finds:

(a) Such prohibition is necessary in the area affected to meet air quality standards; and

(b) Alternate disposal methods are reasonably available to a substantial majority of the population in the affected area.

(3)(a) Nothing in this section prevents a local government from taking any of the following actions if that governmental entity otherwise has the power to do so:

(A) Prohibiting residential open burning;

(B) Allowing residential open burning on fewer days than the number of days on which residential open burning is authorized by the commission; or

(C) Taking other action that is more restrictive of residential open burning than a rule adopted by the commission under this section.

(b) Nothing in this section affects any local government ordinance, rule, regulation or provision that:

(A) Is more restrictive of residential open burning than a rule adopted by the commission under this section; and

(B) Is in effect on August 21, 1981.

(c) As used in this subsection, "local government" means a city, county, other local governmental subdivision or a regional air quality control authority established under ORS 468.505. [1981 c.765 §2]

ACCREDITATION OF CERTAIN INDOOR AIR POLLUTION SERVICES

468.357 Indoor air quality sampling; accreditation and certification programs.

(1) The Environmental Quality Commission shall establish a voluntary accreditation program for those providing indoor air quality sampling services or ventilation system evaluations for public areas, office workplaces or private residences. Provisions shall be made to accept accreditation of other state programs if they are comparable with the accreditation program established under this section.

(2) The Environmental Quality Commission shall establish a voluntary contractor certification program for contractors providing remedial action for residential indoor air pollution. Provisions shall be made to accept accreditation of other state programs if they are comparable with the accreditation program established under this section. [1989 c.1070 §9]

Note: 468.357 to 468.359 were enacted into law by the Legislative Assembly but were 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.

468.358 Fees; accreditation and certification programs. The Environmental Quality Commission shall establish by rule a schedule of annual fees, not to exceed \$500 per participating contractor, to pay the Department of Environmental Quality's costs in operating the:

(1) Voluntary accreditation program under ORS 468.357 (1); and

(2) Voluntary contractor certification program under ORS 468.357 (2). [1989 c.1070 §12]

Note: See note under 468.357.

468.359 Pilot programs. (1) Upon the advice of the Indoor Air Pollution Task Force, the Environmental Quality Commission may establish a pilot program for any product designed for household or office use that is not adequately regulated by federal law that may be a threat to human health by contaminating indoor air.

(2) The Environmental Quality Commission may establish a voluntary product-labeling pilot program to identify products with a low potential for causing indoor air pollution. [1989 c.1070 §11]

Note: See note under 468.357.

MOTOR VEHICLE POLLUTION CONTROL

468.360 Definitions for ORS 468.360 to 468.405. As used in ORS 468.360 to 468.405:

(1) "Certified system" means a motor vehicle pollution control system for which a certificate of approval has been issued under ORS 468.375 (3).

(2) "Factory-installed system" means a motor vehicle pollution control system installed by the manufacturer which meets criteria for emission of pollutants in effect under federal laws and regulations applicable on September 9, 1971, or which meets criteria adopted pursuant to ORS 468.375 (1), whichever criteria are stricter.

(3) "Motor vehicle" includes any self-propelled vehicle used for transporting persons or commodities on public roads and highways, but does not include a vehicle of special interest as that term is defined in ORS 801.605, if the vehicle is maintained as a collector's item and used for exhibitions, parades, club activities and similar uses but not used primarily for the transportation of persons or property.

(4) "Motor vehicle pollution control system" means equipment designed for installation on a motor vehicle for the purpose of reducing the pollutants emitted from the vehicle, or a system or engine adjustment or modification which causes a reduction of pollutants emitted from the vehicle. [Formerly 449.949; 1975 c.670 §4; 1983 c.338 §932]

468.365 Legislative findings. For purposes of ORS 468.360 to 468.405, the Legislative Assembly finds:

(1) That the emission of pollutants from motor vehicles is a significant cause of air pollution in many portions of this state.

(2) That the control and elimination of such pollutants are of prime importance for the protection and preservation of the public health, safety and well-being and for the prevention of irritation to the senses, inter-

DEQ LAND USE EVALUATION STATEMENT FOR RULEMAKING

PROPOSED ROGUE BASIN OPEN BURNING RULE AMENDMENTS

(1) Explain the purpose of the proposed rules.

The purpose of the proposed rule amendments is to improve consistency between local and state open burning requirements and to provide an open burning contingency measure in the PM₁₀ control strategies in the Medford-Ashland and Grants Pass PM₁₀ nonattainment areas.

(2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes ___ No X

(a) If yes, identify existing program/rule/activity: Not Applicable.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes ___ No ___
If no, explain:

Not Applicable.

(c) If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

The proposed rules do not affect programs which are:

- (1) Specifically referenced in the statewide planning goals; or
- (2) Reasonably expected to have significant effects on:
 - (a) resources, objectives or areas identified in the statewide planning goals, or
 - (b) present or future land uses identified in acknowledged comprehensive plans.

(3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility. Not Applicable.

[Signature]
Division

[Signature]
Intergovernmental Coord.

10-21-91
Date

INTEROFFICE MEMORANDUM - JACKSON COUNTY

To: Burke Raymond, County Administrator
From: Gary K. Stevens, Program Manager, Environmental Health Services
Date: September 16, 1991
Subject: Open Burn Task Force Recommendations

Attached is a background and summary of recommendations by the Open Burn Task Force. The Task Force has met since January to try to resolve the issue of agricultural burning during the wood heating season. After many discussions, the Task Force was unable to reach consensus. Therefore, I am submitting a majority/minority report. I feel comfortable that the Open Burn Task Force thoroughly reviewed the issues and the potential alternatives. They believe the orchardists are committed to looking at alternatives but feel these alternatives are either not cost effective or not available to them at this time.

The Department of Environmental Quality is awaiting recommendations by the Board of Commissioners and the Task Force before finalizing rules for open burning in this area.

Please call if I can provide you with additional information.

/jh
4010
cc: Hank Collins

Open Burn Task Force Recommendations

Background

Jackson County is presently in violation of the EPA Health Standard for PM 10 (smoke). The Clean Air Act, with amendments, requires that we meet the PM 10 Health Standard before 1994. EPA also requires the DEQ to draft and have in force a State Implementation Plan, which contain elements and programs which will bring this area into compliance prior to that date.

In response to our violations of the health standard, the Jackson County Board of Commissioners passed an open burning curtailment ordinance in 1989 (83-13) and a Wood Smoke Curtailment Ordinance in May of 1990. The open burning ordinance prohibits open burning within the AQMA between the months of November and February. It also prohibits open burning anytime during the year when the projected ventilation index is less than 400. There are certain materials that cannot be burned at any time: garbage, plastic, wire installation, asphalt, petroleum treated materials, rubber products, animal remains, etc.. Exemptions in the ordinance allow agricultural burning necessary for disease and pest control. In addition to the Jackson County ordinance, the Department of Environmental Quality has had open burn control rules for some time. They prohibit commercial burning such as industrial wastes, site demolition wastes, etc., and also prohibit open burning anytime the ventilation index is less than 200. The DEQ rules supercede Jackson County's ordinance where they are more strict such as some agricultural burning. As an example, agricultural burning for pest control will still require a ventilation index of at least 200. The agricultural community, primarily the orchardists, became concerned because non-diseased/pest control burning practices were prohibited under the ordinance unless the ventilation index was over 400. They felt that they had inadequate warning or time to find alternatives to their present practices. They were also concerned because there were very few days that they were allowed to burn between the end of the fire season and the beginning of the wood heating season and banning of open burning. Another concern was the general public's concern over inequities. If the orchardists were allowed to burn these materials during the wood heating season or when the ventilation index was less than 400, and the general public was not allowed to burn their woodstoves or to do any open burning some would be frustrated.

Due to the concern of the agricultural community and the unavailability of cost effective alternatives, the Jackson County Board of Commissioners issued a Board Order 27-91, which allowed the orchardists to burn pruning debris for the month of February 1991, as long as the ventilation index was over 200 (as per DEQ requirements) and as long as it was a green wood burning day. A copy of this order is attached.

An Open Burning Task Force was established by the Board of Commissioners and the Health and Human Services Department to review alternatives. The charge of the task force was to make recommendations to the Board of Commissioners and to the Department of Environmental Quality on open burning rules,

especially those specific to the orchardists' needs. The Task Force has met since January 1991 and have discussed these issues in detail. Alternatives such as chipping on site, clean up and removal to Bio Mass, or collection and storage and removal by Rogue Disposal have been discussed. At this time, the orchardists' contend that none of these options are cost effective and propose that the exemption by the Board of Commissioners be extended indefinitely. In addition, they propose further relaxing of the ordinance and rules. A listing of the membership of the Open Burn Task Force is attached.

After much discussion, the Task Force reviewed a number of alternatives to help solve the problem and meet the needs of all involved. One of the issues the orchardists had was the lack of the ability to burn during the fire season which would reduce the window available to them to accomplish their burning during good ventilation days. An arrangement has been made with the Fire Chief's Association that would allow burning under permit during the fire season (September and October) which would increase the time period for burning.

After much discussion, there was an attempt to reach consensus on recommendations. The Task Force was unable to reach consensus, therefore they adopted a majority and a minority report. The minority report reflects the agriculturists' and orchardists' recommendation. The recommendations below deal with the issue of the orchardists burning as well as a proposal to the DEQ to raise the ventilation index requirements throughout the open burn control area and the contingency plans in the SIP.

Majority Report

A. Increase in Ventilation Index

Recommend that the Department of Environmental Quality raise the ventilation index to 400 throughout the open burn control area. Recommend to the Department of Environmental Quality that they maintain an agricultural exemption for disease and pest control.

B. Non Diseased/Pest Control Agricultural Burning

Recommend allowing the orchardist to utilize February for open burning of crop residue, prunings, etc., as long as the ventilation index is over 200 and it is a green day. This exemption would end after February 1993. An annual evaluation of available alternatives should be done.

C. Contingency Plan - Contingency under the proposed State Implantation Plan

Recommend supporting the total ban of open burning during the wood heating season (November through February) if PM 10 health standards are not met by 1994. (This is the present contingency plan recommended by the Department of Environmental Quality).

Minority Report

A. Ventilation Index

Recommend keeping the minimum ventilation index at 200. Recommend a disease/pest control exemption to allow this burning anytime it is necessary.

B. Non Disease/Pest Control Agricultural Burning

Recommend allowing agricultural burning from February through November anytime the ventilation index is over 200. Allow open burning during December and January anytime the ventilation index is over 400. Provide for an annual review of progress and available technology.

It should be noted that the Department of Environmental Quality is waiting for the Open Burn Task Force recommendations. Action by the Board of Commissioners may be instrumental in the adoption of new open burning rules by the Department of Environmental Quality. These proposed rules are attached.

/jh
4009

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMORANDUM

DATE: October 24, 1991

TO: Environmental Quality Commission
FROM: Linda Wishart, Hearings Officer *LW*
SUBJECT: Hearings Report for Open Burning Rules

Five hearings were held to accept testimony on four PM₁₀ Control Strategies and three packages of supporting rules required to meet the Clean Air Act November 15, 1991 deadline for PM₁₀ State Implementation Plan revisions. These hearings were authorized by the Environmental Quality Commission at an August 22, 1991, telephone conference.

On September 26, 1991 a public hearing, held in the Commission Hearing Room of the Courthouse Annex, Klamath Falls, Oregon, was attended by 24 persons; 15 gave oral comments and 7 submitted written comments.

On September 27, 1991, a public hearing was held at the City Council Chambers, 101 NW "A" Street, Grants Pass, Oregon. There were nine persons in attendance, one gave oral testimony and two submitted written comments.

On September 30, 1991, a public hearing was held at the Smullin Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 34 persons present, 15 gave oral testimony and 13 submitted written comments.

On October 1, 1991, a public hearing, held in Zabel Hall, room 110, Eastern Oregon State College, La Grande, Oregon, was attended by 21 persons; five gave oral comments, four submitted written comments.

On October 1, 1991, a public hearing was held at the conference room of the Oregon Operations office of the U.S. Environmental Protection Agency (EPA), 811 SW Sixth Avenue, Portland, Oregon. Four people attended. Three gave oral testimony. No written testimony was received.

Additional testimony was received prior to the October 2, 1991 deadline. The following is a summary of all comments received, both oral and written. Copies of written comments have been provided to the Environmental Quality Commission.

Open Burning Rules

No.	Testimony Summary/Issues	Whose Comment
1.	<p>Several people indicated the current air quality situation in the Medford-Ashland Air Quality Maintenance Area (AQMA) is unacceptable. They also expressed concern that the proposed plan will not be adequate to fully meet health standards.</p>	
	<p>a. Citizen support and cooperation has resulted in a reduction of PM10 levels, but a more aggressive plan is needed for attainment.</p>	M6, M10
	<p>b. SIPs have been weakened by negotiations and when finally adopted are ignored and unenforced.</p>	M10
	<p>c. Health risks associated with PM10 were documented in a March 1991 study on school children in Klamath Falls. The number of asthma patients is increasing in this area.</p>	M10, M15
	<p>d. Consideration of costs to health have been preceded by consideration to control costs for industry. <u>Forced</u> restrictions on industry will result in progressive, innovative technology and better health. To this end, BACT will direct the cost back to industry.</p>	M3, M5, M6, M10, M13, M14, M15

2. Several people stressed the need for a comprehensive control strategy and the importance of reducing all sources of PM₁₀, not just the residential woodheating and industrial sources. Other sources such as open burning, slash burning, fugitive dust, and car and truck exhaust also need to be controlled.

a. Contingency Plan is not equitable. DEQ is proposing to ease restrictions on industry while planning phase 2 of the wood stove curtailment program in 1994. Concentrate on annual average, rather than worst day readings. Focus on all sources of PM₁₀. Curtailment on yellow and red days should be applied to all sources.

M1, M5,
M7, M9,
M13,
M14,
M16,
M17

b. DEQ says PM₁₀ is generated by woodstoves. How do they determine source of particulates? Natural fuels are better than fossil fuel which contribute to greenhouse effect.

M5

c. Has I-5 traffic been considered as a source?

M2, M3

d. Most recently, with temperatures in the 90s and 100s, pollution has been heavy as evidenced by dust on windows and cars and by an influx of asthma patients to their doctors. Woodstoves were not in operation but industry was. SIP does not adequately address the real problem.

M8, M9

3. Testimony on the proposed tightening of open burning requirements was mixed. Several people supported the more restrictive 400 ventilation index for the Rogue Basin and the contingency plan provision for a seasonal November-to-February open burning ban if PM₁₀ standards are not met by 1994. One person urged more flexibility for agricultural burning related to orchards, including the less restrictive 200 ventilation index during February-to-November.

a. Open burning should be minimized to allow for disease control only and no open burning during winter months in the Rogue Basin when Ventilation Index is 400 or less. No open burning should be allowed in the Rogue Valley after 1994.

M3, M6,
M7, M8,
M9,
M12,
M19

b. Agricultural burning is needed for: 1) disposal of tree pruning, 2) disease control, and 3) removal of old orchards. Alternative methods are too expensive. Agricultural burning is a minor polluter but a major contributor to air quality. DEQ is urged to allow a 200 index from February to November and a 400 index during December and January.

M11

4. EPA supports the proposed rules.

P4

Testimony References

Public Testimony Given in La Grande

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
L1.	A	Grant Darrow, Chimney Sweep
L2.	B	Francis Mohr, Acting Air Resource Manager Wallowa-Whitman National Forest
L3.	B	R.M. Richmond, Forest Supervisor, Wallowa-Whitman National Forest
L4.	C	Jeff Blackwood, Forest Supervisor, Umatilla National Forest
L5.	D	Larry Dalrymple, City Manager, La Grande
L6.	no	Jim Brown, Air Quality Committee, Citizens
L7.	no	Roberta Bates, Resident, La Grande

Public Testimony Given in Klamath Falls

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
K1.	no	Doss Decker, Resident, Klamath Falls
K2.	no	Nancy Roeder, Resident, Klamath Falls
K3.	no	Harry Fredricks, County Commissioner
K4.	E	Stan Meyers, Vice President Engineering, JELD-WEN, INC.
K5.	F	Joseph Riker, Community Development Director, City of Klamath Falls
K6.	G	John D. Monfore, Land Use Manager, Weyerhaeuser

K7.	no	Leo Dunn, Resident, Klamath Falls
K8.	H	Drew Honzel, Columbia Plywood Corp.
K9.	I	Ron Loveness, Resident, Klamath Falls
K10.	no	Del Parks, State Representative, Klamath County
K11.	J	James Keller, City Manager, Klamath Falls
K12.	K	Kurt Schmidt, Employee, Modoc Lumber Co.
K13.	no	Roy Ford, Resident, Klamath Falls
K14.	L	Steve Kandra, President Klamath County Chamber of Commerce
K15.	no	Bob Flowers, Farmer, Klamath Falls
K16.	M	Nina Pence, President, League of Women Voters, Klamath County
K17.	N	Carol Yarbrough, President, Citizens for Quality Living

Public Testimony Given in Grants Pass

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
G1.	no	Paul Brandon, Resident, Grants Pass
G2.	O	Dennis Spencer, Regional General Manager, Stone Forest Industries
G3.	P	Candace Bartow, Mayor, Grants Pass
G4	Q	Josephine County Board of Commissioners

Public Testimony Given in Medford

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
M1.	R	Wallace Skyrman, Resident, Central Point
M2.	S	Anna Hirst, League of Women Voters
M3.	T	Frank Hirst, Audubon Society
M4.	U	Robert Palzer, PhD., Coalition to Improve AQ
M5.	no	James Dodson, Resident, Medford
M6.	no	Gary Stevens, Environmental Health Department, Jackson County
M7.	V	Vera Morrell, Chairperson, Coalition to Improve Air Quality
M8.	W	Paul Wyntergreen Regional Director, Oregon Environmental Council
M9.	X	Neil Robbins, Resident, Medford
M10.	Y	Patricia Kuhn, Resident, Medford
M11.	no	Ronald Meyer, Farmer, Talent
M12.	no	Myra Erwin, Chairperson, Rogue Group Sierra Club
M13.	Z	William Barbour, Farmer, Medford
M14.	Z	Victoria Montgomery, Resident, Medford
M15.	AA	Jan Young, Pulmonary Rehabilitation Coordinator, Medford
M16.	BB	Greg Miller, Executive Vice President, Southern Oregon Timber Association

M17. BB Bob Morris,
Environmental Affairs Committee Chair,
Southern Oregon Timber Association

M18. CC Kathleen Muir, Resident, Ashland

M19. DD Phyllis Hughes,
Rogue Group Sierra Club

M20. EE Garl Grigsby, Double Dee Lumber Company

M21. FF Anne & Bob Gottschalk,
Residents, Talent

M22. GG Robert Owens, Co-Executive Council
American Indian Cultural Center

M23. HH C. Herschel King, MD
Retired Anesthesiologist, Ashland

Public Testimony Given in Portland and Misc. Letters Submitted

<u>NO.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
P1.	no	Joe Weller, Lung Association
P2.	no	Jim Britton, Executive Director, Asphalt Paving Association
P3.	no	Harry Fredricks, Klamath County Commissioner
P4.	II	David Kircher, Chief Air Programs Development Section
P5.	JJ	David Kircher, Chief Air Programs Development Section
P6.	KK	Bob Palzer, Air Quality Coordinator, Sierra Club
P7.	LL	James Whitty, Legislative Counsel, Associated Oregon Industries
P8.	MM	Tim Nissen, President, Wood Energy Institute
P9.	NN	John Crouch, Emissions Specialist, Wood Heating Alliance

LLW:a
RPT\AH20063
(10/24/91)

**RESPONSE TO TESTIMONY RECEIVED AT THE PUBLIC HEARING
ON THE PROPOSED OPEN BURNING RULE REVISIONS
FOR THE ROGUE BASIN OPEN BURNING CONTROL AREA**

Issue No. 1: Several people indicated the current air quality situation in the Medford-Ashland Air Quality Maintenance Area (AQMA) is unacceptable. They also expressed concern that the proposed plan will not be adequate to fully meet health standards.

Response: The Department of Environmental Quality (DEQ, Department) concurs that the current air quality situation is unacceptable and of serious health concern. The PM_{10} concentrations measured in Medford violate both the annual and 24-hour PM_{10} ambient air quality standards.

However, PM_{10} concentrations have improved substantially since 1989 with the implementation of key elements of the control strategy. PM_{10} monitoring by the Department and woodburning curtailment compliance surveys by Jackson County from 1985 to present indicate that the strategy is on track to meet standards by 1992-94. Between 1985 and 1990, annual average and peak-day PM_{10} levels improved by over 30%. The successful completion of the remainder of the strategy elements (especially the additional industrial controls and the implementation of mandatory woodburning curtailment in Central Point) are critical to fully meet health standards by the Clean Air Act deadline. Implementation of these strategies is projected by airshed modeling to result in attainment of PM_{10} air quality standards.

Issue No. 2: Several people stressed the need for a comprehensive control strategy and the importance of reducing all sources of PM_{10} , not just the residential woodheating and industrial sources. Other sources such as open burning, slash burning, fugitive dust, and car and truck exhaust also need to be controlled.

Response: The Department agrees that the PM_{10} control strategies should be as broad-based as possible and the proposed Medford-Ashland strategies are as broad-based as any PM_{10} strategies (broader-based than most) in the U.S. Most of the PM_{10} nonattainment areas are in the western U.S. and have generally relied on fugitive dust or residential woodburning control strategies. The Medford-Ashland PM_{10} attainment strategy and the contingency plan address

Response to Comments

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industry, residential woodheating, fugitive dust, and open burning. New vehicle tailpipe standards, the Rogue Valley vehicle inspection/maintenance program, and cleaner fuel requirements will continue to reduce motor vehicle emissions. Further slash burning controls are proposed in a separate rule item.

Issue No. 3: Testimony on the proposed tightening of open burning requirements was mixed. Several people supported the more restrictive 400 ventilation index for the Rogue Basin and the contingency plan provision for a seasonal November-to-February open burning ban if PM_{10} standards are not met by 1994. One person urged more flexibility for agricultural burning related to orchards, including the less restrictive 200 ventilation index during February-to-November.

Response: The Department proposed the 400 index to be consistent with local open burning ordinances and to provide additional assurance that attainment will be reached since the safety margin in the proposed attainment plan is very small (e.g., $0.3 \mu\text{g}/\text{m}^3$ safety margin compared to $50 \mu\text{g}/\text{m}^3$ annual standard). Jackson County has proposed a revision to its ordinance that would allow more flexibility (200 index) for burning orchard prunings during February 1992 and February 1993. The Department is supportive of this temporary relaxation and has proposed additional revisions to the open burning rules to be consistent with the Jackson County ordinance.

EQC\RESPONSE.OB

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: L
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption: PM₁₀ Control Strategy for the La Grande Nonattainment Area.

PURPOSE:

To meet current Clean Air Act requirements.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules

- Proposed Rules
- Rulemaking Statements
- Fiscal and Economic Impact Statement
- Public Notice
- Rules affecting land use

- Attachment A
- Attachment B
- Attachment C
- Attachment D
- Attachment G

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order

Attachment



811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696



Meeting Date: November 8, 1990
Agenda Item: L
Page 2

<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

A control strategy for PM₁₀ (small particulate air pollution) is proposed for the La Grande Nonattainment Area to ensure attainment of federal ambient air quality standards. La Grande became a PM₁₀ nonattainment area on February 8, 1989. Subsequently, exceedances of the daily National Ambient Air Quality Standard (NAAQS) have averaged about twice a year. The control strategy for La Grande must be submitted to the U.S. Environmental Protection Agency (EPA) by November 15, 1991 under the new Clean Air Act requirements.

The proposed La Grande PM₁₀ control strategy includes specific Reasonably Available Control Measures (RACMs) and a contingency plan. La Grande must meet the same federal deadline of November 15, 1991 to submit PM₁₀ control strategies as the four other nonattainment areas in the State.

RACM provisions of the recently adopted La Grande Air Quality Improvement Ordinance have been incorporated into the control strategy and include a voluntary woodburning curtailment program, a public education program, and fugitive dust control measures. Additional reductions are expected from the phase in of certified woodstoves, a ban on the installation of used, uncertified stoves, and seasonal restrictions on open burning.

Reasonably Available Control Technology (RACT) requirements for industry were moved from the contingency plan to the attainment strategy, and road sanding control requirements were increased from 10% to 36% to address a shortfall in the attainment demonstration caused by correction of a calculating discrepancy in the original strategy proposed.

The proposed contingency plan would automatically go into effect if the area fails to attain the PM₁₀ NAAQS by the Act deadline of December 31, 1994. The plan includes implementation of a mandatory woodburning curtailment to be established under city ordinance or with state backup authority, and a state requirement for destruction of non-certified woodstoves upon sale of a home. A mandatory forestry smoke management program may be added as a

Meeting Date: November 8, 1990
Agenda Item: L
Page 3

contingency measure should slash burning be found to be a significant contributor to nonattainment.

A complete listing of the control strategy is presented in Attachment F.

AUTHORITY/NEED FOR ACTION:

___ Required by Statute: _____	Attachment ___
Enactment Date: _____	
<u>X</u> Statutory Authority: <u>ORS 468.305</u>	Attachment <u>E</u>
___ Pursuant to Rule: _____	Attachment ___
<u>X</u> Pursuant to Federal Law/Rule: _____	Attachment ___

Federal Clean Air Act Amendments of 1990.

___ Other: _____ Attachment ___

X Time Constraints:

The 1990 Clean Air Act requires states to:

- o Submit new and revised PM₁₀ control strategies (including contingency plans) by November 15, 1991;
- o Fully implement the attainment strategies by December 10, 1993;
- o Attain PM₁₀ standards by December 31, 1994; and
- o Implement contingency plan by July 1, 1995, if PM₁₀ standards are not met by December 31, 1994.

DEVELOPMENTAL BACKGROUND:

___ Advisory Committee Report/Recommendation:	Attachment ___
<u>X</u> Hearing Officer's Report/Recommendations:	Attachment <u>H</u>
<u>X</u> Response to Testimony/Comments:	Attachment <u>I</u>
___ Prior EQC Agenda Items:	Attachment ___
___ Other Related Reports/Rules/Statutes:	Attachment ___
<u>X</u> Supplemental Background Information:	Attachment <u>F</u>

Summary of Proposed PM₁₀ Control Strategies:

La Grande is a community of 11,500 population located in northeastern Oregon, at an elevation of 2,788 feet. On February 8, 1989, La Grande became Oregon's fifth PM₁₀ Nonattainment Area as a result of exceedances of the daily NAAQS of 150 µg/m³. Air quality measurements taken from 1987 to 1991 have indicated a total of 11 exceedances of the daily NAAQS, with the highest being 223 µg/m³ on December 20, 1989. PM₁₀ levels during this same period showed no

violations of annual NAAQS of $50 \mu\text{g}/\text{m}^3$, although annual levels during this period averaged $44 \mu\text{g}/\text{m}^3$. Subsequent emission inventories and chemical analysis of air samples have shown the primary source to be residential wood combustion during the winter months, and significant contributions of soil dust originating from wintertime road sanding, unpaved roads, and windblown soil from agricultural lands outside the nonattainment area.

Shortly after becoming a nonattainment area in 1989, the City of La Grande formed an air quality committee which, with the assistance of the Department, began work on developing local control measures to reduce emissions from residential woodstoves and fugitive dust. On August 7, 1991, the City adopted an ordinance establishing the La Grande Air Quality Improvement Program, which contains the necessary PM_{10} control measures to meet EPA's RACM/RACT requirements and create the emissions reductions needed to bring La Grande into attainment with the NAAQS by the December 31, 1994 deadline. In addition, House Bill (HB) 2175 was adopted by the Oregon Legislature which provides additional woodheating control strategies.

On August 22, 1991, the Commission authorized for a public hearing for the La Grande PM_{10} control strategy and, on October 1, 1991, a public hearing was held in La Grande. The major issues raised at this hearing are summarized as follows:

1. EPA provided written comments on the proposal. The most substantive issue raised concerned a discrepancy in the emission reduction calculations involving woodstove certification credit. Correcting this calculation significantly decreased the emissions reduction credit claimed for this control measure, resulting in an inability to demonstrate attainment of the PM_{10} standard with the originally proposed strategy.

The Department made the necessary corrections to the woodstove certification credit calculations, which resulted in a 1903 lb/day shortfall in the reduction needed to demonstrate attainment. In situations where attainment cannot be demonstrated without application of RACT on industry, RACT must be required in the attainment strategy. To compensate for this shortfall, industrial RACT requirements were moved from the contingency plan to the attainment strategy, as required by the Clean Air Act. Road Sanding controls had to be increased as well. A 30% emission reduction credit was achieved through Industrial RACT controls, and a 30% increase in credit from additional

Fugitive Dust (road sanding) controls was achieved. Further discussion of these revisions is contained under "Regulated/Affected Community Constraints/Considerations" following this section.

2. EPA also questioned whether the monitoring site data used to demonstrate attainment was truly representative of the highest impact point in the airshed. They indicated they did not have sufficient data to insure this was the case.

The Department informed EPA that is reasonably confident that the current monitoring site is representative of highest PM10 levels in the airshed based on previous multiple point sampling studies and the fact that the site is closest to the three major sources of PM10 in the airshed: 1) in a typical residential area having woodheating emissions; 2) near a highway having the highest traffic volume and associated road dust emissions in the area; and 3) near the only major industrial emission source in the airshed. The Department is supplying EPA with all pertinent monitoring data that exists for the La Grande area to document the representativeness of the current site. In addition the control strategy has been modified to commit to conducting further area-wide monitoring acceptable to EPA, and to revise the control strategy as necessary if a higher impact site is found.

3. Another major issue raised by EPA concerned the adequacy of voluntary woodstove curtailment program if the required 30% compliance rate was not achieved. EPA requested some indication of action that would be taken by the Department if compliance surveys indicated less than this rate.

The Department addressed this concern by adding to the control strategy a commitment to provide additional economic and technical assistance to the City of La Grande for increased public education efforts, should annual compliance surveys indicate less than a 30% compliance rate.

4. Two persons questioned the calculations on woodstove emissions, claiming they were based on an out-of-date woodheating survey from 1987-88, and if an updated survey were conducted it would show a significant increase in the rate of replacement of uncertified stoves with certified stoves, and non-woodburning heating sources.

The Department agrees that periodic updates of woodheating surveys are important, and intends to repeat this survey in

1992. However, the information obtained from the 1987-88 survey is appropriate for the purposes of this control strategy, in that EPA guidelines for SIP development specify establishing a 1986 base year for PM₁₀ emission control strategies.

5. Two persons testified that although field burning smoke is not a significant PM₁₀ contributor to nonattainment in La Grande during the year, the severity of the smoke impacts pose a health risk, despite being of short duration.

Since field burning is a summertime activity and the PM₁₀ exceedances of the daily NAAQS occur exclusively during winter months, field burning smoke is not a significant contributor to nonattainment in La Grande. Earlier this year the Department was involved in developing a mandatory field burning smoke management program, which was adopted as a Union county ordinance. This ordinance will help to minimize the likelihood of smoke intrusions into La Grande, and meets EPA's requirements for RACM for agricultural burning programs. The Department intends to annually review the effectiveness of this program and if necessary identify any improvements.

6. Two forest service representatives testified that the proposed mandatory controls on forestry burning in the contingency plan are unnecessary. They believe no additional restrictions on prescribed fire use should be imposed, especially since forestry burning has not been identified as a significant contributor to La Grande PM₁₀.

This proposed contingency measure for forestry burning is currently under discussion with the Oregon Department of Forestry. It would be conditional upon La Grande failing to achieve attainment with the NAAQS in 1994, and subsequent identification of forestry burning as a significant contributor to nonattainment through actual air monitoring data. EPA PM₁₀ guidelines indicate that any source found to be a significant contributor to nonattainment should be included in the control strategy.

Additional responses to public testimony are summarized in Attachment I.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

As stated above, the revisions to the woodstove certification credit calculations necessitated adding Industrial RACT

controls in order continue to show sufficient emission reductions to demonstrate attainment with the NAAQS. This revision was discussed with the one affected local industry (Boise Cascade), which agreed to this change based on present plans for future emission reductions expected from the replacement of wood-fired boilers with a natural gas boiler.

In response to public testimony on the Department's proposed Industrial Contingency Requirements for PM₁₀ Nonattainment Areas, the Department has revised this proposal to separate the RACT and BACT requirements. The proposed Industrial RACT controls for La Grande will be part of the attainment strategy. Best Available Control Technology (BACT) would be established as required by the Act within 18 months of the time the area fails to attain the standard. See the discussion in the Agenda Item I regarding the proposed industrial rule revisions.

The other emission reduction identified that would also provide the necessary emission reductions to demonstrate attainment involves increased fugitive dust control from road sanding. This additional credit will be accomplished by a commitment from the Department of Transportation to further reduce the application rate of sanding material, along with prompt cleanup of this material, and possibly other measures.

Implementation of the other elements of the PM₁₀ control strategy involves residents, local governments, state and federal agencies. The group anticipated to be most affected by the proposed PM₁₀ control strategy for the La Grande area are residents with woodstoves or fireplaces. In the event that a PM₁₀ control strategy for La Grande is not adopted as a revision to the State Implementation Plan, the Clean Air Act requires economic sanctions which include restricting federal highway funds, increased emission offset requirements for new or expanding industry, and ultimately a Federal Implementation Plan to be implemented by EPA.

In response to concerns expressed by the City of La Grande regarding the economic impact of the City implementing elements of the PM₁₀ control strategy, the Department contracted with the City to provide \$15,000 in federal grant funding support during the first year of implementation. Seasonal restrictions on open burning could impose additional staffing requirements upon local government that is already cutting back on staff. Significant cuts in the City of La Grande operating budget may jeopardize continued operation of the voluntary woodburning curtailment program. The

Department will continue to seek permanent funding for these activities.

PROGRAM CONSIDERATIONS:

Within the next year or two, the proposed control measures in the attainment plan are not expected to add to existing staff workload, as work related to the voluntary woodstove curtailment and public education programs in La Grande, and implementation of RACT for industry, can be incorporated into current staff workload.

The Department is concerned about long-term local and state government resources to implement critical residential woodheating elements of the PM₁₀ control strategy, particularly the operation of woodstove curtailment and public education programs, as well as financial incentives for replacement of existing woodstoves with cleaner burning units. The Department will continue to explore funding options and may propose new legislation to address this need.

The proposed contingency plan, if required due to failure to meet PM₁₀ standards by the December 1994 deadline, would require new Department work related to woodstove program activities, and implementation of a mandatory woodstove curtailment program under state backup authority.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Defer action to EPA. If a state fails to meet the Clean Air Act PM₁₀ requirements, EPA is required to impose sanctions and ultimately prepare a Federal Implementation Plan (FIP) to address the PM₁₀ problems.
2. Adopt the La Grande PM₁₀ control strategy, including changes made in response to public testimony.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The first alternative to the recommended action would likely result in continued adverse health impacts in La Grande and other negative impacts on the State economy. Therefore, the Department recommends that the Commission adopt the proposed PM₁₀ control strategy (Attachment A) as a revision to the State of Oregon Clean Air Act Implementation Plan. Adoption is required for the Department to submit a fully approvable PM₁₀ control strategy to EPA within the time frame required by the Clean Air Act.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed PM₁₀ control strategy for La Grande is consistent with the Goals 2,3,4 and 5 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy. The proposed strategy and supporting rules are consistent with the Oregonians Benchmarks goal of increasing the percentage of Oregonians living in areas which meet air quality health standards.

ISSUES FOR COMMISSION TO RESOLVE:

Does the EQC concur with the overall balance of the attainment and contingency measures ?

INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan containing the La Grande PM₁₀ Control Strategy to EPA for approval.
2. Implement the La Grande PM₁₀ air pollution control strategy (including woodheating, fugitive dust, and industrial control measures) in coordination with other local, state and federal agencies.
3. Monitor emission reductions and progress toward attainment of PM₁₀ air quality standards. If PM₁₀ standards are not met by the December 31, 1994, deadline:
 - a. Immediately implement the contingency plan; and
 - b. Revise the PM₁₀ control strategy within 18 months to include Best Available Control Technology (BACT) for any industrial source not already meeting BACT, and Best Available Control Measures (BACM) for any area sources (residential woodheating, slash burning, open burning, etc.) not already meeting BACM.
4. Seek long-term funding assistance for the local residential woodburning emission control programs.
5. Seek federal funding assistance for conducting further area-wide PM₁₀ monitoring surveys to verify that current monitoring site represents the highest PM₁₀ concentrations.

Meeting Date: November 8, 1990
Agenda Item: L
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6. Conduct another woodheating survey in 1992 to assess rate of replacement of uncertified stoves and overall woodstove use in La Grande.
7. Review the effectiveness of the Union County field burning smoke management program, and if necessary identify improvements.

Approved:

Section:

Division:

Director:

John F. Kovalyck
Dandy Dandy
Tell Haver

Report Prepared By: Brian Finneran

Phone: 229-6278

Date Prepared: October 25, 1991

BRF:a
RPT\AH20065
(10/25/91)

Attachment A

PM-10 Control Strategy for Particulate Matter

**La Grande, Oregon
Nonattainment Area**

**A Plan for Attaining and
Maintaining the National Ambient
Air Quality Standard for PM-10**

**State of Oregon
Department of Environmental Quality
Air Quality Division**

October 1991

Attachment A

State of Oregon
Department of Environmental Quality
Air Quality Division

State Implementation Plan For
PM₁₀ in La Grande, Oregon

A Plan for Attaining
Compliance with National
Ambient Air Quality Standards
For PM₁₀

October, 1991

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Executive Summary

The U.S. Environmental Protection Agency (EPA) adopted a new particulate National Ambient Air Quality Standard (NAAQS) for PM_{10} on July 1, 1987. PM_{10} particulate is less than 10 micrometers in aerodynamic diameter or about one-tenth of the diameter of a human hair. The NAAQS adopted by the US Environmental Protection Agency were established to protect public health and welfare. The Clean Air Act requires that states develop and adopt State Implementation Plan (SIP) revisions to assure that areas which exceed the PM_{10} NAAQS are brought into attainment within the time frames prescribed by the Clean Air Act (December 31, 1994). This document describes the State of Oregon's plan to attain the PM_{10} standard in La Grande.

High exposure to particulate matter is of concern because of human health effects such as changes in lung functions and increased respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alteration in the body's defense system against foreign materials, damage to lung tissue, increased risk of cancer and, in extreme cases, premature death. Most sensitive to the effects of particulate matter are people with chronic obstructive pulmonary cardiovascular disease and those with influenza, asthmatics, the elderly, children and mouth-breathers.

Air quality measurements taken in La Grande have indicated that the 24-hour PM_{10} health NAAQS was exceeded an average of 2 days per year, mostly during the winter months during the period of 1988 to 1989. The annual average concentration of PM_{10} during the years 1987-1990 of $47 \mu\text{g}/\text{m}^3$ does not exceed the annual average PM_{10} NAAQS of $50 \mu\text{g}/\text{m}^3$.

The 24-hour PM_{10} NAAQS is 150 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$), not to be exceeded more than three times averaged over three consecutive calendar years. Winter 24-hour concentrations of PM_{10} in La Grande have reached levels as high as $223 \mu\text{g}/\text{m}^3$ on Dec. 20, 1989.

An inventory of PM_{10} emissions developed for the La Grande Urban Growth Boundary indicates that the major sources of particulate emissions during 1986 winter periods of worst-case 24-hour PM_{10} concentrations are residential wood combustion (60%), industrial emissions (5%) and soil dust (31%). On an annual basis, these sources contribute 48%, 10% and 36%, respectively. Other miscellaneous sources account for the remaining 6%. Emission inventory information representative of worst-case 24-hour conditions has been verified through receptor modeling techniques which actually measure source contributions to ambient air quality on the basis of their chemical "fingerprints."

Extensive air monitoring surveys have been completed which clearly demonstrate that the Willow Street site in central La Grande has the highest winter PM₁₀ concentrations within the airshed. Based on these surveys, ambient air monitoring conducted at the Willow Street site have been shown to generally represent the highest PM₁₀ levels within the Urban Growth Boundary. Development of a SIP which assures attainment and maintenance of the NAAQS at the Willow Street site should therefore be adequate to demonstrate attainment of the NAAQS anywhere within the airshed.

PM₁₀ design values are those representative 24-hour worst case and annual average concentrations from which reductions must be made to achieve the NAAQS. Analysis of all of the available PM₁₀ air quality data over the period of December, 1987 to March, 1991 (the largest available database) indicates a 24-hour design value of 190 $\mu\text{g}/\text{m}^3$. No annual design value is needed since La Grande does not exceed the annual NAAQS. The 24-hour design value, adjusted for expected emission changes during the 1986-1994 period, is 219 $\mu\text{g}/\text{m}^3$. The increase from 190 $\mu\text{g}/\text{m}^3$ is due largely to emission increases from woodstoves, dust and industrial sources. Control strategies included in this plan have been designed to reduce projected 24-hour concentrations of PM₁₀ by at least 69 $\mu\text{g}/\text{m}^3$ (219 - 150 $\mu\text{g}/\text{m}^3$). To achieve these 24-hour average air quality improvements will require an 33% reduction in 24-hour worst case day emissions within the La Grande Urban Growth Boundary.

Control Strategy Elements

The control strategies needed to assure attainment of the PM₁₀ National Ambient Air Quality Standards (NAAQS) focus on control of residential wood combustion, fugitive dust and industrial emissions. Other strategies include progressive programs to further reduce fugitive dust and woodburning emissions.

Residential Wood Combustion Strategies

The principal means of achieving the needed reductions is through an effective voluntary woodburning curtailment and emission reduction programs. At least a 30% reduction in wood smoke emissions is needed on poor ventilation days to attain the 24-hour NAAQS. This reduction will have to come from most of La Grande's estimated 3,000 woodburning households which will have to forego use of their woodstoves and fireplaces during air stagnation episodes. Additional reductions throughout the heating season from the phase in of certified woodstoves and a ban on the installation of used, conventional stoves will help achieve attainment of the 24-hour NAAQS. A strong public education program is an essential element of the strategy. The City's woodstove replacement program funded through Community Block

Grant funds provides additional reductions.

The reduction strategy is implemented through the City of La Grande's Air Quality Program and the Department/EPA woodstove certification program. The principal contingency strategies are implementation of a mandatory woodburning curtailment ordinance adopted by the City of La Grande or, if local governments fail to act, the implementation of a mandatory woodburning curtailment program by the Department, as well as the state-required removal of uncertified stoves upon sale of a home.

Fugitive Dust Control Measures

A 30% reduction in winter worst case day dust emissions will be achieved through the Oregon Department of Transportation's application of less road sanding material and rapid cleanup of used road sanding aggregate. The sanding cleanup will achieve fugitive dust emissions reductions needed to assure attainment of the 24-hour NAAQS. The City has also adopted a series of dust control measures including a program to stabilize dust from unpaved gravel roads, the paving of gravel roads, reduction of dust emissions from commercial staging areas, the curbing of all newly paved streets and stabilization of bare ground through planting of vegetation or the use of chemical palliative.

Other Strategies

The City of La Grande has adopted a resolution to prohibit residential open burning and the use of burn barrels on "Red" and "Yellow" woodburning curtailment days. Open burning is prohibited at all times other than during the months of April-May, October and November, thereby eliminating burning during winter periods when air quality standard exceedances are likely.

In addition, forestry slash burning impacts in the nonattainment area will be minimized through voluntary agreements among forest land managers. This program will help assure that forestry open burning does not adversely affect La Grande air quality on winter woodheating curtailment days.

Agricultural burning conducted within the Grande Ronde Valley is managed under a new Union County ordinance which insures that smoke from the open field burning does not impact the City of La Grande. Since the burning occurs during the summer months when NAAQS violations have not occurred, regulation of field burning for purposes of PM₁₀ attainment is not a required element of the attainment strategy.

RACM\RACT Control Strategy Elements

The Clean Air Act requires that PM₁₀ control strategies include Reasonably Available Control Measures (RACM). EPA

guidance indicates listed RACM measures must be included in the attainment plan if needed to demonstrate attainment. Otherwise, RACM is to be included in the contingency plan for all significant source categories contributing to PM₁₀ violations. RACM for industrial point sources is referred to as Reasonably Available Control Technology (RACT) and is a required element of the control strategy if industrial emission reductions are needed to demonstrate attainment. Since industrial emission controls are an element of the strategy, RACT is included in the attainment plan.

For an area that fails to meet PM₁₀ standards by December 31, 1994, the Clean Air Act requires that the area be redesignated as a "serious" nonattainment area and that a revised PM₁₀ control strategy include additional control measures. EPA guidance indicates Best Available Control Measures (BACM) must be included for all significant source categories contributing to PM₁₀ violations. BACM for industrial point sources is referred to as Best Available Control Technology (BACT).

Implication of industrial RACT emission reductions is a necessary to attain the NAAQS and is therefore an element of the La Grande attainment strategy. Implication of RACT will result in a 65 ton per year (370 pound per day) reduction in industrial emissions. Numerous RACM measures for residential woodburning, urban fugitive dust sources and prescribed silvacultural and agricultural burning are also included in the strategy.

Contingency Measures

The Clean Air Act Amendments of 1990 require states to include a contingency plan in SIPs that can be automatically implemented in the event that the base attainment strategy fails to attain the NAAQS. By the Act attainment date, BACT/BACM is also required in such areas that do not meet the attainment date and are redesignated to serious nonattainment areas.

The La Grande PM₁₀ SIP includes the following contingency measures: (1) a mandatory woodburning curtailment program established under City of La Grande ordinance designed to achieve at least a 50% compliance rate (or implemented under the Department's authority should local government fail to act- this also meets RACM requirements); (2) a State requirement for removal of uncertified woodstoves upon sale of property, (3) emission reduction from the woodstove certification program and (4) at least a 10 ton per year reduction in industrial emissions through application of BACT control technology. A mandatory forestry smoke management program would also be required should slash burning be found to be a significant contributor to nonattainment.

Strategy Emission Reduction - 24-Hour Worst Case Day

Attainment of the 24-hour NAAQS in 1994 will require a 33% reduction in worst case day emissions equalling a reduction of 3,350 pounds per day. The needed reduction is achieved through the strategy elements listed below.

Because emission reductions are calculated on a declining balance basis, the product of percentage credits and total reduction (3,357 pounds/day) will not yield the individual element emission reductions shown. (See Appendix 8)

No credits have been taken for the City of La Grande's public education programs and the voluntary forestry smoke management program. Credits related to restrictions on open burning or many of the fugitive dust control measures, included in the City's Air Quality Program, are not included in the demonstration of attainment because the emissions from the sources cannot be inventoried.

Summary of 24-Hour Emission Reductions To Be Achieved by 1994

<u>Strategy Element</u>	<u>Credit</u>	<u>Emission Reduction</u>
Industrial Emission Reduction	30%	370 Pounds/Day
Winter Road Sanding Practices	30%	436 Pounds/Day
Woodburning Strategies:		
- Woodburning Curtailment	30%	1,679 Pounds/Day
- Certification of Woodstoves	24%	852 Pounds/Day
- Woodstove Replacement Program	2%	105 Pounds/Day
Woodstove Strategies, Total		<u>2,636 Pounds/Day</u>
Total reduction from all strategies....		3,442 Pounds/Day
Required emission reduction		3,350 Pounds/Day

Air Quality Standard Maintenance

During the six year period following attainment of the NAAQS, a net decrease in emissions is projected to occur as a result of attainment strategies and the replacement of older conventional stoves with certified cordwood and pellet stoves, offsetting increases in fugitive dust and transportation emissions. Both the 24-hour and annual NAAQS are projected to be maintained past the year 2000 at which time worst case day and the annual average PM_{10} air quality is projected to be 139 and 48 $\mu g/m^3$, respectively.

Enforceability

The Clean Air Act requires SIP control strategies to be enforceable. Based on EPA guidance, a voluntary woodstove curtailment program may be credited with up to a 30% emission reduction. Emission reductions achieved in other communities that have operated aggressive voluntary curtailment programs have been shown to obtain reduction that are substantially greater than 30%. The actual average compliance rate on days surveyed during the 1989-90 season under Klamath County's voluntary program, for example, was 45% as measured by infrared field surveys.

The road sanding strategy is implemented through a City of La Grande's Air Quality Program and Development Standards Section of the Zoning Ordinance as well as commitments from the Highway Division of the Oregon Department of Transportation. Industrial control measures are enforced through the Department. Union County is responsible for enforcement of the agricultural field burning smoke management program. The Oregon Department of Forestry is responsible for enforcing a mandatory forestry smoke management program, should it be required.

Public and Governmental Involvement

The PM₁₀ emission control programs implemented through this revision to the State Implementation Plan have been developed in close cooperation with the La Grande Air Quality Advisory Committee, the City of La Grande, the Oregon Department of Forestry, the Union County Seed Growers Association and others. Public comment on the SIP has been received through the written comment prior to and during public hearings on the SIP.

4.12.0 State Implementation Plan for La Grande

4.12.0.1 Introduction

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new federal ambient air quality standards for particles less than or equal to 10 micrometers in aerodynamic diameter (PM_{10}) to replace the Total Suspended Particulate (TSP) standard.¹ The standard became effective 30 days later on July 31, 1987. Because PM_{10} air monitoring has demonstrated that La Grande exceeds the 24-hour PM_{10} National Ambient Air Quality Standard (NAAQS), EPA has designated it as a moderate nonattainment area.

Section 110 of the Clean Air Act Amendments of 1990 requires states to adopt and submit plans (State Implementation Plans or SIPs) to EPA by not later than November 15, 1991. The Act allows EPA twelve months to approve or disapprove the plan. The plan must provide for attainment of the standard as expeditiously as practicable but no later than December 31, 1994.

The Air Quality Division of the Department of Environmental Quality has developed this plan in consultation with officials of the City of La Grande and Union County, the Oregon Department of Transportation and the US EPA. The plan was prepared in accordance with the regulations and requirements of the Federal Clean Air Act as amended in November, 1990 and the US Environmental Protection Agency. The Department believes that the PM_{10} plan can achieve attainment of the NAAQS within the time frame required by the Act.

4.12.0.2 SIP Overview

This revision to the State Implementation Plan (SIP) has six sections. The first (4.12.1) provides a description of PM_{10} ambient air quality in La Grande; Section 4.12.2 describes the PM_{10} air quality problem within the La Grande Nonattainment Area; Section 4.12.3 describes emission reductions needed to attain NAAQS; Section 4.12.4 describes implementation of the control strategies, Section 5 describes resource commitments and Section 6 discusses public involvement.

4.12.0.3 Area Description

La Grande is located in northeastern Oregon at an elevation of 2,788 feet. The area is typified by its semi-arid, high desert climate where annual rainfall (30 year average) is only 20

¹A micrometer (μm) 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.

inches. The population within the La Grande urban growth boundary (the nonattainment area) is about 12,300 (1980 census). About 4,500 households are located within the Urban Growth Boundary.

La Grande is located in the Grande Ronde Valley which is a relatively flat land area 25 miles from east to west that has been formed by the Grande Ronde River. Wallowa-Whitman National Forest lands extend for wide areas to the east and west of the Valley. The surrounding mountains reach nearly 10,000 feet, creating topographical barriers that often restrict air mass dispersion.

Figure 4.12.0-1 shows the boundaries of the La Grande Urban Growth Boundary which has been adopted as the nonattainment area boundary. The criteria for selection of the UGB as the nonattainment area are as follows:

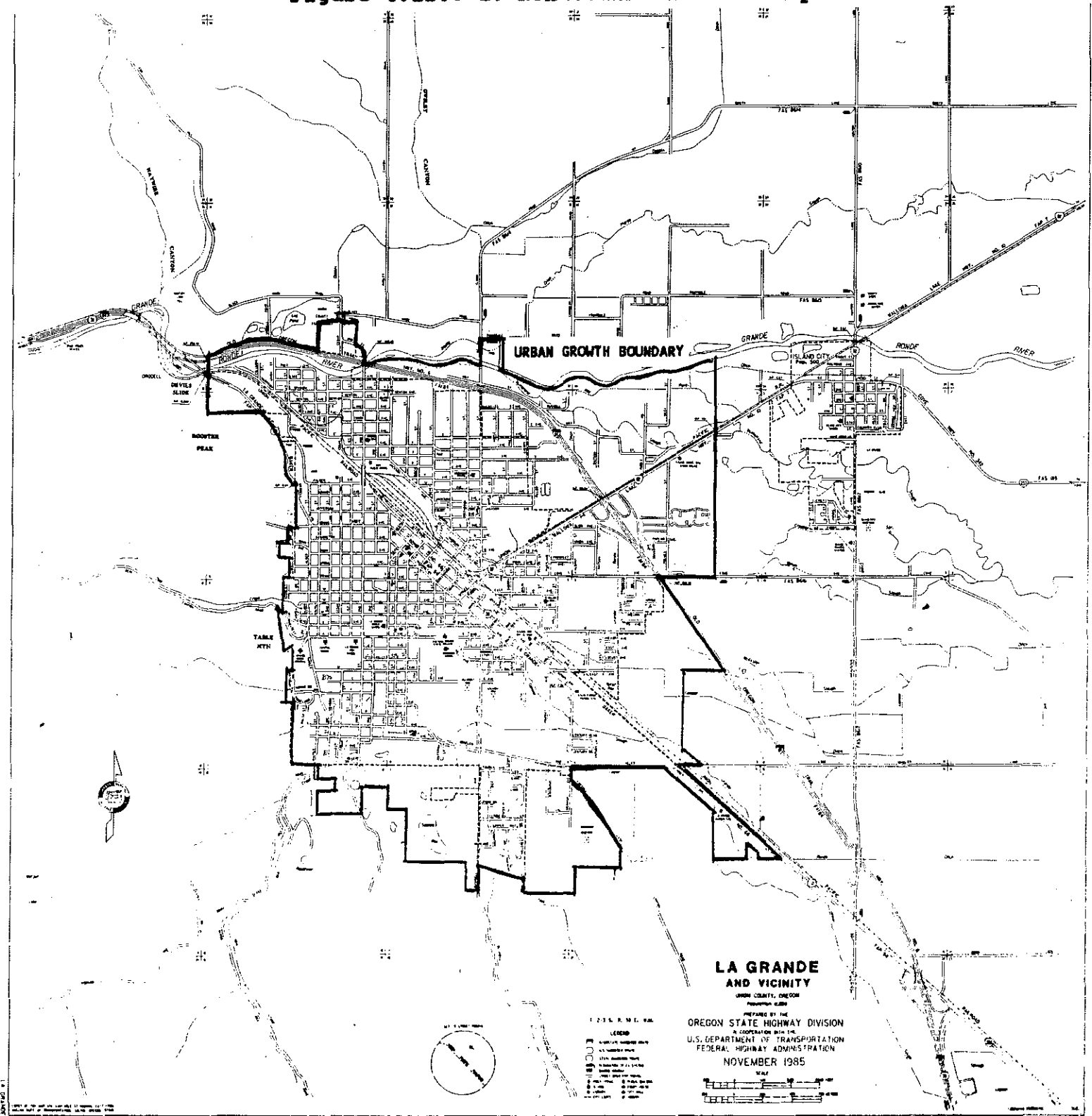
1. The nonattainment boundary must include the geographical area within which national ambient air quality standards are currently being exceeded. Air monitoring saturation studies completed in December of 1985 indicate that although minor day-to-day variations in the pattern of PM_{10} levels exist, depending on wind direction a consistent pattern of maximum concentrations near the Willow Street monitoring site is present. The PM_{10} levels appear to follow the emission density of homes (woodstoves) in the community.

2. The nonattainment boundary must include the area within which air standards may be exceeded in the future. EPA requires that SIP control strategies consider future population, transportation, housing and industrial growth to assure that air standards will be attained and maintained. Development of a strategy to assure maintenance of air standards requires that the nonattainment area boundary be consistent with the regional planning boundary for which community growth projections are available.

3. The nonattainment area must be a legally defined boundary recognized by local governments. A legal definition is required for rulemaking purposes. Additionally, some component of the control strategy may need to be implemented through county land use planning ordinances tied to the Urban Growth Boundary.

Designation of the Urban Growth Boundary as the nonattainment area is the only legally defined boundary that meets all of the above criteria.

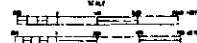
Figure 4.12.0-1: Nonattainment Area Map



**LA GRANDE
AND VICINITY**

UNION COUNTY, OREGON

PREPARED BY THE
OREGON STATE HIGHWAY DIVISION
A COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
NOVEMBER 1985



4.12.0.4 La Grande Meteorology

Because of its elevation, dry climate and low frequency of cloud cover, La Grande experiences very strong and shallow night time winter radiation inversions which break up with day time solar heating. In wintertime, frigid arctic air masses frequently invade the Grande Ronde Valley. Temperatures can remain well below freezing for several weeks at a time.

Winter nights are commonly clear and cool. Under these conditions, nocturnal radiation inversions occur as a result of the snow covered and frozen ground surface, creating temperature inversions over La Grande. These inversions are confined and maintained by the surrounding terrain, creating an impenetrable barrier to local woodstove and fireplace smoke. In addition to temperature inversions, La Grande also experiences windy conditions which creates opportunities for both good ventilation conditions and the transport of significant amounts soil dust into the area.

4.12.0.5 Health Effects of PM₁₀ and Wood Smoke

Particulate matter measuring less than or equal to 10 micrometers is considered a risk to human health due to the body's inability to effectively filter out particles of this size. These particles deeply penetrate and become lodged in the alveolar regions of the respiratory system for days, weeks or even years where they trigger biochemical and morphological changes in the lungs.²

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 which 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.³ Episodic exposure can also cause changes in the activity of the lung's mucous secretions and accelerates the mucociliary action to sweep the particulate out of the lungs. These changes result in increased symptoms of

²J. 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.

³U.S. Environmental Protection Agency, Second Addendum to Air Quality Criteria for Particulate Matter and Sulphur Oxides, (1982: Assessment of Newly Available Health Effects). EPA 600/8-86-020.

cough, phlegm, and dyspnea (difficulty in breathing). Continuous exposure can inhibit defense mechanisms by introducing new particles into the lungs and redistributing those being swept out. This slows the clearance of the bronchial system 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.⁴ Another group that falls into the high risk category are people who breathe through their mouths.⁴

This group includes a wide range of people from chronic mouth-breathers to anyone involved in outdoor exercise and heavy labor. During mouth-breathing, particulate matter is breathed more directly into the lungs since it bypasses the filtering systems of the nasal passages.

Among the sources of PM₁₀ emissions, wood smoke is of particular concern in La Grande because it accounts for a majority of the small particulate matter measured in the nonattainment area. A description of emission sources is found in Section 4.12.2.2. These 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 which are transported deep into the respiratory system. Some of these toxics are then absorbed into the bloodstream.

Wood smoke contains at least fourteen carcinogenic compounds including benzo(a)pyrene, benzo(a)anthracene, and other polycyclic organic materials. Additionally, wood smoke contains several other hazardous compounds such as aldehydes, phenols, carbon monoxide and volatile organic vapors. These compounds can cause or contribute to illnesses ranging from neurological dysfunctions and headaches to lung cancer.³ Many of the components of wood smoke are also found in cigarette smoke and coke oven emissions which can affect the cilia in a similar manner making it difficult for the body to expel the particulate matter. Because wood smoke concentrations are highest in residential areas, a large segment of the population is routinely exposed to wood smoke pollution in the winter months. Additionally, it is those people who are most sensitive, children, the elderly, and the ill, who spend the most time in

their homes, thereby increasing their risk.⁵

4.12.1 Ambient Air Quality

Particulate ambient air quality monitoring for Total Suspended Particulate (TSP) began in La Grande in February, 1970 at Eastern Oregon State College Science Building. During the period of 1970 to 1976, annual average TSP concentrations at this site averaged $43 \mu\text{g}/\text{m}^3$ with maximum 24-hour TSP concentrations reaching $356 \mu\text{g}/\text{m}^3$ in 1974. TSP sampling was also conducted at a site on North Ash Street during the period October, 1984 to May, 1985 and at the Observer from January, 1986 to December, 1984. While levels at these sites were occasionally over the TSP NAAQS, it was thought that rural fugitive dust (considered uncontrollable and not a health hazard by EPA) was the principal contributing source.

PM_{10} air quality monitoring began at the North Ash Street site in October of 1984 and was terminated in May, 1986 when the site was relocated to North Willow Street. PM_{10} monitoring began there in December of 1987 following completion of the December, 1985 area-wide survey designed to characterize the spacial distribution of PM_{10} concentrations.⁶ Results from this saturation study demonstrated that the Eastern Oregon State College and Observer Building monitoring sites were not representative of the highest levels of PM_{10} in the airshed and that levels recorded at the North Willow Street site better represented worst case levels within the area.

The PM_{10} concentration contours shown in Figure 4.12.1-1 were developed from the saturation survey. The Figure also shows the location of the Willow Street site. A review of the area encompassed by the $150 \mu\text{g}/\text{m}^3$ (the 24-hour NAAQS) contour shows that it best approximates the Urban Growth Boundary.

In January of 1990, the Department conducted evening mobile nephelometer surveys to further verify the spacial distribution of PM_{10} concentrations. The results of the 1985 and 1990 surveys show that although the particulate mass varies slightly from day to day depending on wind directions and mixing height, the surveys are basically consistent with the findings of the

⁵P.G. Jenkins, Washington Wood Smoke: Emissions, Impacts and Reduction Strategies, Washington Department of Ecology, Olympia, Washington. December, 1986.

⁶Spatial Distribution of PM_{10} in La Grande, Oregon. Program Planning & Development Section, Air Quality Division, State of Oregon Department of Environmental Quality. June, 1991.

December, 1985 particulate survey that identified the Willow Street area as the location of the highest concentrations.⁶ The surveys also provide evidence that the major sources of PM₁₀ are found within the residential area of La Grande where woodstove emission density is greatest.

Subject to the availability of federal funds, the Department will conduct further area wide PM₁₀ monitoring surveys to verify the finding discussed above. If another location is found, using reference method sampling techniques, to have higher PM₁₀ concentrations, the Department will revise the attainment strategy to the degree necessary to assure attainment.

Figure 4.12.1-1 shows the distribution of concentrations measured during the period of December 23-27, 1985.

4.12.1.1 Air Monitoring Methods

Several sampling methods have been used to measure PM₁₀ concentrations in La Grande:

Integrated Nephelometer measurements of light scattering (a surrogate for PM₁₀) have been conducted during the winter months of highest PM₁₀ concentrations. This method provides hourly light scattering averages which are highly correlated to PM₁₀ concentrations measured by the Medium-Volume sampler.

The PM₁₀ Medium-Volume 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 Chemical Mass Balance receptor modeling purposes. Because of the excellent agreement between PM₁₀ concentrations measured by the Medium-Vol and the HV-SSI reference method, EPA has designated the Medium-Vol sampler as an acceptable equivalent method.

The High Volume air sampler collects samples of Total Suspended Particulate (TSP). The method uses pre-weighted 8" X 10" filters through which air is drawn at 50 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 at the Observer Building, Eastern Oregon State College and the

Ash Street sites. This sampling method is no longer in use.

All of the data discussed below was collected at the Willow Street site in La Grande. Table 4.12.1-1 lists monitoring data collection periods by measurement method.

**Table 4.12.1-1: Data Collection Periods by Method
Willow Street Site**

Measurement Method	Began	Terminated
Integrating Nephelometer (Light Scattering or Bscat)	Aug., 1989	Current
PM ₁₀ Medium-Vol.(MV) * (Daily Sampling)	Dec., 1987	Current
High-Volume TSP (TSP)	Feb., 1986	Sept., 1987

* Both Teflon and Quartz filter substrate are used.

4.12.1.2 PM₁₀ Air Quality in La Grande

Figure 4.12.1-2 illustrates the hourly and seasonal variations in PM₁₀ concentrations in La Grande. As seen in the Figure, the highest 24-hour concentrations occur during the winter space heating season when PM₁₀ concentrations have reached levels as high as 223 µg/m³, significantly exceeding the 24-hour National Ambient Air Quality Standard. Peak 24-hour concentrations have also occurred during the Spring (May 11, 1988) and in the Fall months (September 5, 1988). Chemical analysis of the May, 1988 sample indicate that the primary contributor was fugitive dust. The principal cause of the September, 1988 exceedance was wildfire smoke. Seasonal trends in the data show a clear pattern of increasing concentrations in the fall and winter months as woodstove use increases and atmospheric dispersion decreases, followed by lower levels during the spring and summer months as ventilation improves and woodstove emissions are reduced.

Review of PM₁₀ Concentrations

The four highest concentrations of PM₁₀ mass measured in La Grande during the past 3 years are listed in Table 4.12.1-2, below. Periods when PM₁₀ levels have exceeded the NAAQS are listed in Table 4.12.1-3, below:

Table 4.12.1-2: PM₁₀ Maximum Concentrations, 24-hour Averages

	µg/m ³	Date	Method
Highest Value	223	891220	Medium-Vol.
Second High	201	881216	Medium-Vol.
Third High	200	880511	Medium-Vol.
Fourth High	190	891213	Nephelometer Est.

Table 4.12.1-3: PM₁₀ 24-hr. NAAQS Exceedance Periods

Date	µg/m ³	Comments
871231	159	
880118	182	
880511	200 *	Sample did not run a full 24-hrs.
880905	187 *	Impact from Tee Pee Butte Forest Fire
881216	201	
881217	172	
891219	168	
891220	223	
900331	179	
910128	173	

* Note: These periods are excluded from the attainment analysis process. The Sept. 5, 1988 exceedance qualifies as an exceptional event under EPA's criteria; the May 11, 1988 sample qualified as a Class B sample that does not fully meet quality control requirements as a valid sample. Tabulation current as of July, 1991.

Table 4.12.1-4 summarizes PM₁₀ monitoring data for the Dec., 1987 to Dec. 1990 period over which the design values were calculated. Appendix 1 contains a tabulation of daily PM₁₀ concentrations over this period.

**Table 4.12.1-4: Summary PM₁₀ Data
(µg/m³)**

All Data	1986	1987	1988	1989	1990	
No. Days Sampled	1191	52	58	334	336	361
Arithmetic Mean **	--	54	53	46	42	36
Maximum Value	223 (891220)	109	159	201	223	179
Second High	201 (881216)	104	137	200	168	118
No. Days > 150	9	0	1	5*	2	1

Data Summary from 1990 Air Quality Division Annual Report.

* Includes Sept. 5, 1988 sample influenced by wildfire smoke.

** Annual average values computed as prescribed in 40CFR52 Appendix K.

Hourly Variability

Hourly variations in PM_{10} levels on worst-case winter days can be seen in the diurnal variations of light scattering measurements from the Willow Street site (Figure 4.12.1-2). Particulate concentrations begin increasing from a mid-day low, peak during the 10 PM to 1 AM period and then steadily decrease until 8-9 AM at which time the levels increase before again reaching mid-day concentrations. The early morning peak at 8-9 AM is associated with early morning woodstove start up by La Grande residents.

Worst Case Day Characteristics

During the December, 1987 to December, 1990 period, the number of times the 24-hour NAAQS was exceeded varied from one to five days per year, mostly during the winter months of late October to April. During these periods, residential woodheating reaches it's peak and atmospheric dispersion is at it's poorest. Worst case winter days typically have daily average temperatures of 23 °F (45 degree heating days), snow cover, intense, shallow temperature inversions and extended periods of calm winds. These conditions occur during periods when snow producing storm systems are followed by stable high pressure systems. The spacial distribution of PM_{10} concentrations during worst case day conditions is shown in Figure 4.12.1-1.⁷

Impacts from Sources External to the Urban Growth Boundary

The sources of emissions outside of the UGB include agricultural tilling dust, windblown soils, wildfire smoke, prescribed (slash) and field burning smoke all of which form the background PM_{10} aerosol loading transported into the UGB. In addition, aerosols transported over long distances from global and interstate sources also contribute, in a small amount, to the background air quality.

Slash Burning

Slash burning on the Wallowa-Whitman National Forest is conducted on about 35,000 acres of forest land, consuming about 100,000 tons of fuel.⁸ This generates about 2,600 metric tons of PM_{10} emissions. Most of this burning (73%) occurs during the months of April and May with a large part of the remaining balance occurring in October. About 2% of the burning occurs during the

⁷D. Wallace, "Distribution of PM_{10} Within the La Grande Nonattainment Area" State of Oregon Department of Environmental Quality, Air Quality Division. Report 91-2. June, 1991.

⁸Oregon Smoke Management Annual Report, 1989. State of Oregon Department of Forestry. October 1990.

Figure 4.12.1-1: La Grande PM₁₀ Spatial Distribution
December 23 - December 27, 1985
(5 Day Average, $\mu\text{g}/\text{m}^3$)

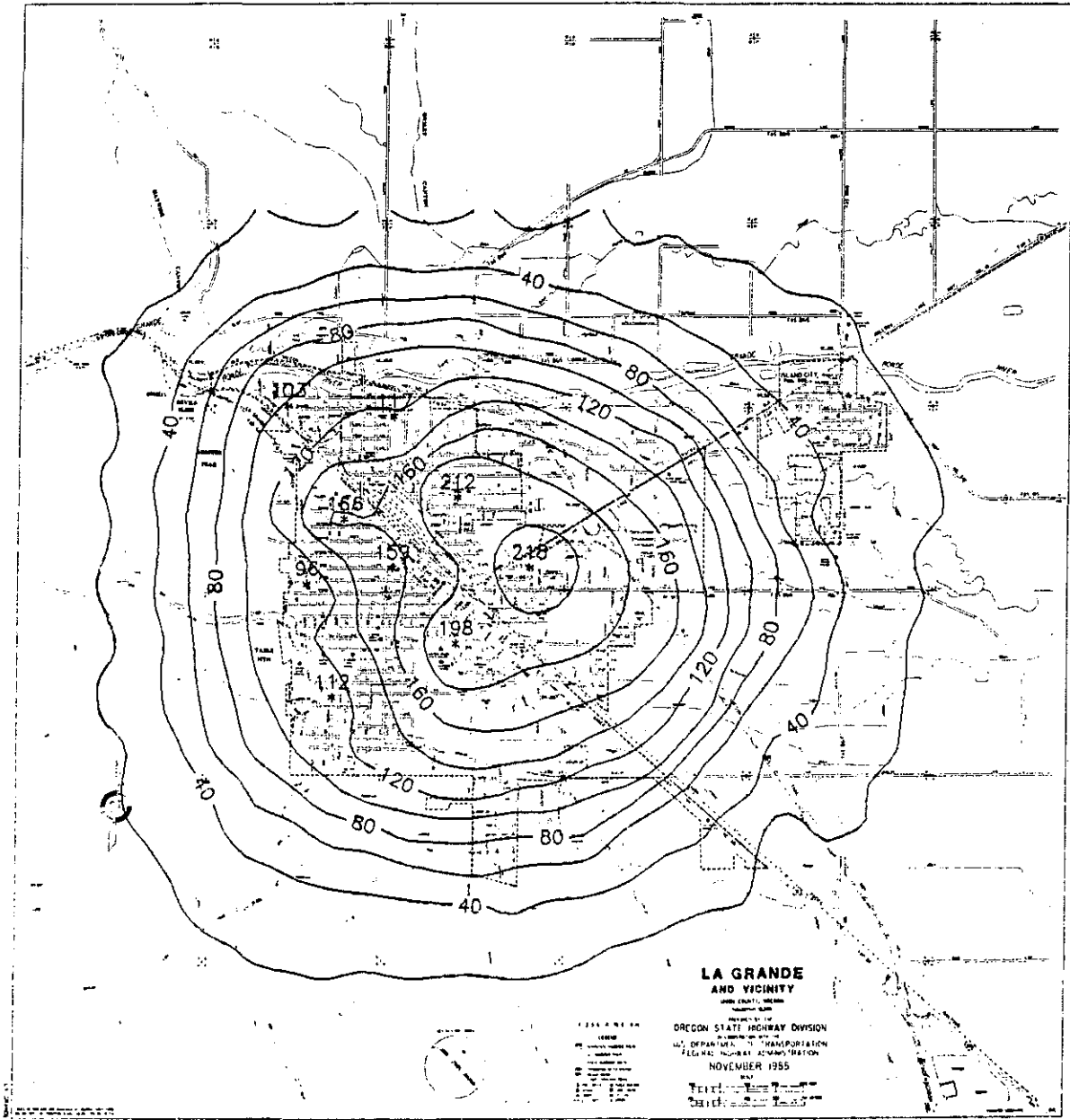
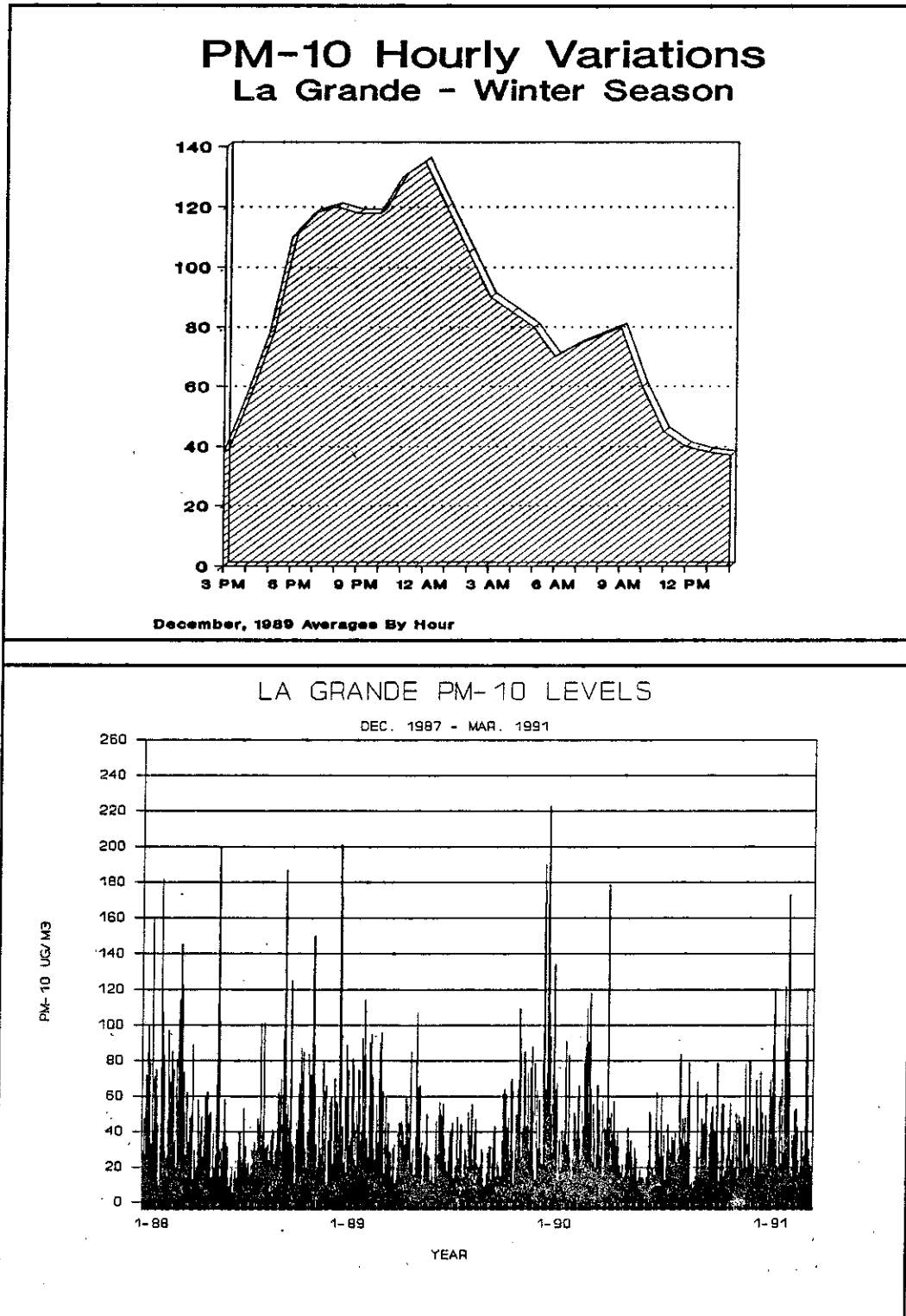


Figure 4.12.1-2: Diurnal & Seasonal Variations in PM₁₀ Levels



winter space heating season of November 1 to April 1. Although there is public concern about slash burning smoke impacts on the community, monitoring information available to date has not indicated that slash burning smoke is a major contributor to PM₁₀ nonattainment in La Grande.⁹

Field Burning

Within the Grande Ronde Valley, approximately 12,000 acres are burned annually of which 8,000 is grass seed stubble and 4,000 is cereal grain stubble. Burning begins in late July and continues until late September, with most of the burning occurring in August. About 50 growers are involved in the program which is coordinated through a voluntary smoke management program. Burning advisories are issued daily during the burning season when fuel and smoke dispersion conditions are favorable. During the 1987 season, field burning smoke impacted La Grande for 11 hours resulting in numerous public complaints. None of La Grande's PM₁₀ nonattainment periods are associated with field burning activity. Chemical analysis of PM₁₀ samples collected during field burning smoke impact events of August, 1988 indicated a 20% contribution to the PM₁₀ mass concentration of 22 to 41 $\mu\text{g}/\text{m}^3$, 24-hour average.

Wildfire Smoke

Wildfire smoke can be a very significant contributor to PM₁₀ levels in La Grande. The September 5, 1988 exceedance of 187 $\mu\text{g}/\text{m}^3$ was caused, in part, by smoke from the Tee Pee Butte Wildfire located about 70 miles NNE of La Grande. Wildfires are a common occurrence in Northeastern Oregon. During 1989, 157 wildfires were reported burning 9,300 acres.¹⁰ Major fires such as Tee Pee Butte create dense clouds of smoke that can be transported long distances and remain active for long periods of time. Since EPA considers NAAQS exceedances caused by wildfire smoke to be exceptional events that are excluded from the nonattainment status determination, wildfire emission control measures are not included in the control strategy.

Agricultural Dust

PM₁₀ soil dust emissions associated with agricultural operations in Union County are estimated to be about 780 tons per year, assuming that about 103,000 acres of land is tilled each year. In addition, wind blown dust from erodible soils occurs

⁹La Grande PM₁₀ Source Contributions: Chemical Mass Balance Analysis of PM₁₀ Source Contributions. Department of Environmental Quality, Air Quality Division. August, 1990.

¹⁰1989 Forest Fire Summary. Oregon State Department of Forestry. December, 1990.

during the summer months. During the winter months, periods of high easterly or southeasterly winds, transport dust from fields located north, east and south of Island City into the La Grande nonattainment area.

Background Air Quality

PM₁₀ aerosols from sources external to the UGB collectively contribute to background PM₁₀ air quality. It is important to quantify the annual and 24-hour worst case day background since this component of the total PM₁₀ mass loading measured within the UGB is often not subject to the provisions of the nonattainment area control strategy. As a result, air quality improvements must be achieved by reducing emissions from those sources that contribute to the locally-generated component of the aerosol.

There have been two PM₁₀ background monitoring sites operated in Eastern Oregon. The first is located in the Quartz Creek Valley (elevation 5,390 ft) at the Quartz Mountain Gold Project 50 miles east of Klamath Falls.¹¹ The Quartz Mountain data was collected by Air Sciences, Inc. of Lakewood, Colorado under contract to the Quartz Mountain mining project. The data was collected pursuant to Federal EIS requirements imposed by the US Forest Service, Bly District. The data was collected pursuant to standard EPA quality assurance requirements. The second site was operated by Portland General Electric near its Boardman coal fired power plant, about 70 miles west of La Grande from December, 1983 to June, 1985. 1984 is the only complete year of sampling during which the monitor was operated on a 6th day schedule collecting 38 samples.

Worst Case Winter Day Background

The Quartz Mountain and Boardman background data during worst case winter days is representative of the La Grande UGB for the following reasons:

1. Both sites are located in remote areas of Eastern Oregon within the same high desert climatology typical of La Grande. Neither site is influenced by urban sources.
2. Worst case winter day background measurements of 7 and 9 $\mu\text{g}/\text{m}^3$ measured at the Quartz Mountain and Boardman sites, respectively, are reasonable considering that windblown fugitive dust emissions are minimized by snow cover and that there are no wildfires or slash burning emissions during the winter months.

¹¹Quartz Mountain Gold Project Environmental Impact Statement. Prepared for the Fremont National Forest by Air Sciences, Inc. Lakewood, Colorado. February, 1989.

Annual Background Levels

On an annual basis, there is little difference between the background levels at Medford's Dodge Road site ($12 \mu\text{g}/\text{m}^3$), the Boardman site ($13 \mu\text{g}/\text{m}^3$) and the Quartz Mountain site ($13 \mu\text{g}/\text{m}^3$), supporting the assertion that none of the sites were being unduly impacted by nearby sources. This uniformity between background levels may also demonstrate that the annual distribution of the data is not being unduly biased by high winter worst case concentrations and that all of the sites are representative of regional background that also influences La Grande.

PM₁₀ monitoring at the Boardman and Quartz Mountain sites was based on size selective high volume samplers equipped with PM₁₀ inlets. Sampling was conducted at Quartz Mountain during the November, 1987 to November, 1988 period (108 observations) and at Boardman between December, 1983 and June, 1985 (64 observations). Both sites operated on a 6th day schedule.

The background air quality values used in the annual and 24-hour winter worst case control strategy calculations are $13 \mu\text{g}/\text{m}^3$ annual arithmetic average and $7 \mu\text{g}/\text{m}^3$ 24-hour average, respectively.

Aerosol Chemistry

La Grande PM₁₀ aerosol chemistry is unlike that of any other Oregon nonattainment area because of the large contribution from soil dust. On average, La Grande's PM₁₀ aerosol chemistry is 21% organic carbon (from smoke sources), 10% silicon and 2.9% aluminum (from soil dust). Other major components include calcium (1.6%) and iron (3.2%), both of which are of soil origin. Lead levels are very low (0.05%). During the winter months, the organic carbon concentration increases to as much as 50% of the aerosol mass while during the summer months, the silicon content can increase to as much as 27% of the mass. Sulfate shows an average of $1.2 \pm 0.7 \mu\text{g}/\text{m}^3$. The balance is associated oxygen, hydrogen, water and ammonium. These data do not reflect source contributions to PM₁₀ aerosol mass but are provided only to describe the chemical composition of the aerosol.

4.12.2 Nonattainment Area Analysis

This section describes the Department's analysis of PM₁₀ air quality in La Grande as it is related to the National Ambient Air Quality Standards. Source contributions to the airshed's PM₁₀ air quality are discussed both in terms of emission strengths and source contributions to air quality as measured at the Willow Street site.

4.12.2.1 Design Values Determination

Attainment of the annual NAAQS requires that a control strategy be adopted which will reduce ambient concentrations from the 1994 design value to below the NAAQS; specifically that the expected number of exceedances of the 24-hour NAAQS not exceed 150 $\mu\text{g}/\text{m}^3$ more than once per year, averaged over three years.

The EPA PM₁₀ Development Guidelines specify that the preferred approach for estimating a design value is through the use of an applicable dispersion model corroborated by receptor models.¹² If there is no applicable dispersion model and at least one complete year of PM₁₀ data is available, then the PM₁₀ data should be used to estimate the design value. This is the case for La Grande.

EPA specifies that the annual design value should be calculated as the arithmetic average of 3 years of PM₁₀ monitoring data and that the 24-hour design concentration should be estimated using the empirical frequency distribution for the largest available data base. Both the annual and 24-hour design concentrations must then be adjusted to compensate for emission changes that will occur as a result of emission growth and control strategy effects likely to occur by 1994, the year in which attainment must be demonstrated.

The current design values are based on PM₁₀ data collected between December, 1987 and December, 1990. The information used to calculate design values is a composite of data collected over the year using two different PM₁₀ measurement methods in accordance with agreements reached with EPA Region X staff in December, 1989. As a result, a hierarchy of daily measurements has been used to build a composite data set. Reference method Medium-Vol. samples were selected first. If only integrating nephelometer scattering coefficient (Bscat) measurements were available, the winter season measurements (Nov. 15 to March 30) were adjusted to medium-vol. equivalent values based on linear regression analysis of paired observations. Based on 129 observations, an R-squared value of 0.89 was obtained. The regression equation is:

$$\text{PM}_{10} (\mu\text{g}/\text{m}^3) = \text{Bscat} * 14.7 + 8.0$$

This approach (1) greatly expands the database available for analysis; (2) provides a design value that is consistent with the measurement method that the Department will be using to determine NAAQS attainment and (3) assures that future receptor modeling analysis of PM₁₀ source contributions are consistent with control strategy design considerations. This approach is described further

¹²PM₁₀ SIP Development Guidelines. US Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. June, 1987. EPA-450/2-86-001.

in Appendix 2.

Table 4.12.2-1: Design Values Summary

24-Hour Design Value, Graphical Procedure	190 $\mu\text{g}/\text{m}^3$
Annual Design Value	47 $\mu\text{g}/\text{m}^3$

The 24-hour design value determined by the graphical procedure provides the same result as the table lookup procedure.

4.12.2.2 Emission Inventory

Introduction

Emission inventories provide information on the relative strength of sources within an airshed and provide a basis for control strategy evaluation. In addition, emission inventories provide a basis for tracking emission reductions and growth. PM_{10} emissions (usually expressed in tons of particulate per year or TPY) are calculated from emission factors and source activity records. Emission factors are the weight of pollutant emitted per unit weight of material processed such as grams of PM_{10} emitted per pound of cordwood burned; pounds of road dust emitted per vehicle mile driven or pounds of particulate emitted per unit area of plywood veneer processed. Emission factors used in this analysis are principally from the Environmental Protection Agency's compilation of emission factors AP-42.¹³

Source activity information on the amount of cordwood burned by residents, vehicle miles driven or veneer production volumes are obtained from a variety of sources including industrial air contaminant discharge permits, public mail surveys and data gathered from other government agencies. Estimation of seasonal or worst-case day PM_{10} emissions requires development of a source operating schedule which describes the percent of annual emissions that occur during specific seasons, months or 24-hour periods.

Base Year Emission Inventory

PM_{10} emissions for the 1986 base year within the Urban Growth Boundary (UGB) were estimated for industrial sources, residential heating (gas, oil and wood), commercial space heating, residential open burning, paved and unpaved road dust, construction, winter road sanding and industrial yard dust as well as transportation sources (cars and trucks). The basis of the emission estimates for the most significant sources are briefly described below. A

¹³Compilation of Emission Factors, U.S. Environmental Protection Agency AP-42 Fourth Edition and subsequent supplements. US EPA Office of Air Quality Planning and Standards. Research Triangle Park, N.C. 27711.

detailed documentation of the emission inventory is found in the appendix:

Industrial Sources: 74 TPY PM₁₀. These emissions are from wood and agricultural product industries as well as institutional space heating sources. Three point sources are included in the inventory the largest of which emits 71 tons per year, or 97% of PM₁₀ point source inventory. The 1986 annual emissions are those that actually occurred during the year.

Residential Woodheating: 356 TPY PM₁₀. Information obtained from the Department's 1987-88 woodheating survey¹⁴ and the City of La Grande indicates that 4,458¹⁵ occupied housing units are located within the UGB and that 67% of the housing units use woodburning devices. Approximately 76% of the devices are woodstoves or fireplace inserts while the remainder are fireplaces. The survey indicates that, on average, residents burn 3.8 cords/year of firewood in their woodstoves and 2.7 cords/year in fireplaces. At 39.9 pounds of PM₁₀ emitted per ton of wood burned in a woodstove, 313 tons of PM₁₀ are emitted per year. Thirty nine rather than the national average emission rate of thirty pounds per ton is used because it is more reflective of Oregon woodstove characteristics during the base year. Fireplace emissions at 26.6 pounds per ton of woodburned total 43 TPY for a total 356 tons per year.

Based on the survey, about 14% of the woodstoves are DEQ-certified models. Forty percent of those surveyed indicated that wood was the main source of heat in their home. Wood is the only source of heat in 10% of La Grande homes.

Fugitive Dust Emissions: 273 TPY PM₁₀. The principal sources of dust within the UGB on an annual basis are paved road dust and the trackout of dirt onto paved roads (236 and 12 TPY, respectively). Emissions from industrial yards are the third largest source (7 TPY). Paved and unpaved road dust estimates are based on a 1985 estimate of 137,600 vehicles miles per day on paved roads. There are 32 miles of gravel road within the UGB and essentially no dirt roads. There are also a number of unpaved parking lots, residential driveways and local roads in the vicinity of the Willow Street sampling site.

¹⁴La Grande, Oregon Wood Heating Survey for 1987-1988 Heating Season. State of Oregon Department of Environmental Quality, Air Quality Division. 1988.

¹⁵City of La Grande Planning Department Correspondence.

Traffic entrainment of dust from road surfaces covered with winter road sanding material is also significant. Approximately 900 tons of 1/4" aggregate was used for road sanding during 1988, mostly on the south side of the City.

Other sources include fugitive dust generated by truck traffic on industrial yards (estimated at 8 tons per year), construction dust (4 tons per year) and emissions from raw materials storage and handling (2 tons per year).

Transportation Sources: 40 TPY PM₁₀. Highway vehicles (autos and trucks) emit 34 TPY PM₁₀ in tailpipe and tire wear particulate. Off highway vehicles emissions are estimated at 6 TPY.

Table 4.12.2-2 and Figure 4.12.2-1 summarize annual PM₁₀ emissions within the UGB.

Table 4.12.2-2: 1986 UGB Annual Emission Inventory

Source	Tons/Year PM ₁₀	Percent
Industry	74	10 %
Residential Woodburning	356	48 %
Commercial Space Heating	4	0 %
Solid Waste Disposal	2	0 %
Fugitive Dust	273	36 %
Transportation	40	5 %
Other Sources	5	1 %
Totals	752	100 %

24-Hour Worst Case Day Inventory

The development of an inventory representative of emissions during 24-hour periods, when PM₁₀ ambient air concentrations reach their highest levels, is important to understanding the sources that cause winter season episodes. The relative proportion of emissions during these periods is expected to be quite different than those reflected in the annual emission inventory because some sources (such as some dust sources) are suppressed by snow cover while others (such as residential woodheating) are much larger.

The 24-hour worst case inventory for the UGB is based on the following information and assumptions:

Industrial Sources. The 1986 worst case day of 0.21 tons/day (429 pounds/day) of industrial emissions are based on 1986 annual emissions increased by the ratio of the daily Plant Site Emission Limit (PSEL) (pounds/hour

PSEL over 24-hours) to the annual PSEL emissions using a 350 day/yr operating schedule. For example, consider a hog fuel boiler with an annual PSEL of 115 tons/yr PM₁₀ and a daily PSEL of 39 pounds/hour. The ratio ((39 lb/dy*24 hrs/dy*5 days/week* 48 weeks/yr)/2000 lb/ton) is less than one (112/115=0.975), so the actual PSEL was used. In other cases where the ratio is greater than one, the annual PSEL was inflated by the ratio to provide a maximum, worst case scenario of industrial emissions.

Transportation Source emissions are assumed to be constant over the year and are therefore 1/365th of the annual emissions.

Residential Woodburning emissions are assumed to be proportional to the coolness of the weather as reflected in the degree heating days statistic tabulated by the National Weather Service. During the 1987-88 heating season (the coolest winter during the 1986-89 period) the coldest day (February 3rd) had 46 degree heating days. Since the total degree heating days for this period was 6,073. This represents 0.76% of the annual total or 2.7 tons (5,338 pounds/day) of PM₁₀ emission.

Winter Road Sanding emissions peak during periods when several inches of snow covers the area. During the winter months, from 800 to 1,000 tons of aggregate are spread on the roads each year within the UGB. Because snow often covers the roadways and landscape, most of the fugitive dust emissions are assumed to originate from road sanding. Chemical analysis of PM₁₀ samples collected on days exceeding the 24-hour NAAQS indicated that 40% (on average) of the PM₁₀ mass was soil dust. Therefore, on winter worst case days, the airshed road sanding emissions are expected to be of similar magnitude in the inventory of about 1,300 lbs/day. The worst case day emission estimates provide the basis for the annual emission estimate for road sanding.

**Table 4.12.2-3: 24-Hour Worst Case Emission Inventory
1986 Base Year Period.**

Source	Tons PM ₁₀	Percent
Industry	0.21	4.9 %
Residential Woodburning	2.70	60.0 %
Commercial Space Heating	0.03	0.6 %
Fugitive Dust	1.55	31.0 %
Transportation	0.10	2.5 %
Other Sources	0.00	1.0 %
Totals	4.59	100 %

Appendix 3 provides a detailed annual and worst case 24-hour emission inventory listing and documentation of the inventory.

Growth Factors

PM₁₀ emission growth factors are used to estimate future year emission inventories and source category impacts. Key indicators used to estimate emissions in 1994 include population growth, increases in transportation (vehicle miles traveled) and Plant Site Emission Limits (PSELS) for industrial sources.

Transportation Growth, estimated at 1.5% per year is used to estimate increases in vehicular and road dust emissions.¹⁶

Population Growth data indicate that the number of people living within the La Grande Urban Growth Boundary will increase by 1.1% per year from 11,570 to 12,626 by the year 1994.¹⁷ Population growth is used to proportionally increase residential open burning emission and woodstove use.

Woodburning Emission Growth from woodstoves is expected to increase by 1% per year (8% total) by the year 1994 as a result of an increased amount of firewood burned; and fireplace emissions are expected to decrease by 2% per year. The one percent growth rate is based on energy projections and fuel cost modeling performed to estimate future woodburning emission growth in the Pacific Northwest.¹⁸ These projections do not account for emission reductions that will occur as a result of woodstove certification programs as these reductions are explicitly accounted for in the Section 4.12.3.2, Evaluation of Potential Control Measures.

Industrial Emission Growth has been projected to increase to the maximum permitted within their current Plant Site Emission Limits (PSELS) for a total of 129 tons/year. The 24-hour worst case growth factor is calculated as the increase from the 1986 actual hourly emissions to their hourly maximum PSEL emission rate over a 24-hour period.

Projected Emissions, 1986 to 1994

The 1986 annual and 24-hour emissions in addition to design value estimates must be adjusted to account for emission growth or

¹⁶State of Oregon Department of Transportation Highway Division Planning Section estimate. February 22, 1989.

¹⁷Oregon Department of Transportation

¹⁸U.S. Environmental Protection Agency, Region X "Residential Wood Combustion Study, Task 3, Fuel Wood Use Projections", EPA 910/9-82-089 (1984).

decreases that may occur within the airshed during the eight year period of 1986-1994. Estimates are based on the emission growth factors described above. The information presented in Table 4.12.2-4 provides a basis for the future year source impact estimates (Section 4.12.3.1) which, in turn, provided the basis for the control strategy analysis.

**Table 4.12.2-4: 1994 Estimated Emissions
(No Strategies Applied)**

Source Category	-Annual- 1994		-24-Hr Worst Case- 1994	
	Tons	%	Tons	%
Industry	129	15 %	0.6	12 %
Residential Woodburning	374	43 %	2.8	54 %
Fugitive Dust	306	35 %	1.5	30 %
Solid Waste Disposal	1	0 %	0.0	0 %
Transportation	45	5 %	0.1	2 %
Other	9	2 %	0.1	2 %
Totals	864	100 %	5.1	100 %

Projected Emissions Beyond 1994

Analysis of the ability of the attainment strategies to maintain the NAAQS during the period 1994 to the year 2000 requires development of a third set of emission estimates. The growth rates assumed for the maintenance analysis are based on the 1994 inventory adjusted to reflect the attainment strategy emission reductions:

- Population growth rate of 1% per year (a conservative assumption) for residential oil, gas and wood combustion emissions; solid waste incineration emissions and structural fires;
- Transportation growth rate of 1.5% per year for transportation sources and paved, unpaved, and construction dust as well as street sanding emissions;
- Industrial emissions are held constant at the annual and 24-hour PSEL emission rates shown in the 1994 emission inventory, less emission reductions achieved through RACT (65 tons/year and 370 pounds/day);

The projected residential wood combustion emissions, following application of a 1.1% per year growth rate, were adjusted to reflect emission reduction credits associated with the woodstove certification program. Information from the City of La Grande indicates that nearly 100% of the new woodstoves being installed in

new construction homes are certified and 10% of these are pelletstoves.¹⁹ The 1991 Oregon Legislature's adoption of a statewide ban on the sale and installation of uncertified woodstoves assures that only certified stoves will be installed in new construction in the future. Additional information from manufacturers suggests that certified pelletstove sales should expand to a larger share of the market in future years. This may be, in part, supported by the fact that pelletstoves owners have not been asked to curtail burning during cordwood stove curtailment periods.²⁰ Therefore, during the period 1994 to 1996, it is assumed that 80% of newly installed stoves are cordwood and 20% are pelletstoves. During the period 1996 to 2000, it is assumed that 70% are cordwood and 30% are pelletstoves.

Actual and projected annual emissions during 1994 to the year 2000 are tabulated in Table 4.12.2-5. Projected 24-Hour Worst Case emissions are summarized in Table 4.12.2-6. Figure 4.12.2-2 shows changes in emission inventories during the period 1986 to the year 2000. The year 1994 annual projected emissions are expected remain stable at about 690 tons while the 24-hour worst case day emissions should decrease by about 80 pounds per day or about 1% through the implementation of the voluntary curtailment program, the woodstove certification program, the winter road sanding and fugitive dust emission control programs, open burning restrictions and other control strategy elements.

**Table 4.12.2-5: 1994 to Year 2000 Annual Emissions
All Strategies Applied - Tons Per Year**

Source Category	1994	1996	1998	2000
Industry	64	64	64	64
Residential Woodburning	268	255	244	234
Fugitive Dust	306	315	325	334
Transportation	45	46	49	50
Other	10	11	10	11
Totals	693	691	692	693

¹⁹Information from City of La Grande, June, 1991.

²⁰Personal communications with the Chairman, Association of Pellet Fuel Industries, Sparks, Nevada. February 22, 1990.

**Table 4.12.2-6: 1994 to Year 2000 24-Hour Worst Case Emissions
(All Strategies Applied - Pounds Per Day)**

Source Category	1994	1996	1998	2000
Industry	830	830	830	830
Residential Woodburning	2702	2581	2459	2343
Fugitive Dust	2686	2767	2850	2935
Transportation	258	265	273	281
Other	106	108	110	112
Totals	6581	6551	6522	6502

4.12.2.3 Source Contributions to PM₁₀

Development of strategies designed to attain and maintain the PM₁₀ NAAQS requires an accurate knowledge of contributions that sources make to the measured PM₁₀ aerosol mass. Two approaches are commonly used to estimate source contributions: (1) atmospheric dispersion modeling and (2) receptor model analysis based on the properties of the aerosol measured at the receptor.

The Environmental Protection Agency PM₁₀ SIP Development Guidelines Section 4.4 describes procedures to be used by the states for utilizing receptor models to estimate source contributions to PM₁₀ concentrations. These guidelines support the use of receptor models as an important element of the SIP strategy development process. Receptor modeling (specifically Chemical Mass Balance or CMB) is especially appropriate in La Grande where severe air stagnation and complex terrain conditions likely make dispersion modeling inappropriate. The specific application of the CMB Receptor Model to PM₁₀ source apportionment in Oregon's Group 1 areas is described elsewhere.²¹

Chemical Mass Balance (CMB) is a form of receptor modeling based upon regression analysis of aerosol features such as trace element concentrations. The model attempts to find the most likely combination of source contribution estimates (SCE's) by minimizing the difference between the measured and model-predicted concentration of aerosol features. Values for the ambient aerosol matrix are obtained through chemical analysis of PM₁₀ filters taken at the Willow Street sites, while the source "fingerprint" values are obtained through analysis of stack emissions. The CMB modeling

²¹La Grande PM₁₀ Source Contributions: Chemical Mass Balance Analysis of PM₁₀ Source Contributions. State of Oregon Department of Environmental Quality, Air Quality Division. August, 1990.

protocol applied follows EPA guidance.²² All of the CMB modeling has been conducted using EPA's Version 7.0 CMB program.²³

Ambient Aerosol & Source Emission Analysis

Forty-three PM₁₀ samples from the Willow Street site have been chemically analyzed for CMB analysis. Seven of the samples exceeded 150 µg/m³ and were collected in January, May, October and December. The highest sample analyzed was 201 µg/m³ on December 16, 1988. Chemical characterization of the samples include 19 trace elements analyzed by x-ray fluorescence, 3 anions and elemental/organic carbon, providing a data set that is compatible with the source emission profiles. Analytical uncertainties for each value are routinely reported and included in the CMB calculations.

PM₁₀ source profiles representing all major emission groups within the airshed were used in the modeling. All of the profiles were obtained from the Pacific Northwest Source Profile Project.²⁴

Receptor Model Source Contribution Estimates 24-Hour Exceedance Days

Table 4.12.2-7 is a summary of the source contribution obtained for those samples that exceeded the 24-hour NAAQS during the winter months.

Table 4.12.2-7: Average Winter Exceedance Day PM₁₀ Source Contribution Estimates

Source	PM ₁₀ (µg/m ³)	% PM ₁₀
Soil Dust	68.0	39.0 %
Wood Smoke	106.0	58.0 %
Transportation	0.2	0.1 %
Sec. Aerosol	2.0	1.0 %
Others	3.0	2.0 %
	179.2	100 %

²²protocol for Reconciling Differences Among Receptor and Dispersion Models. US EPA 450/4-87-008. March, 1987.

²³Receptor Model Technical Series, Volume III (Revised): CMB User's Manual (Version 6.0) US EPA 450/4-83-014R. May, 1987.

²⁴Pacific Northwest Source Profile Library Project, Final Report Prepared by the State of Oregon Department of Environmental Quality, Air Quality Division. J. Core, editor. September, 1989.

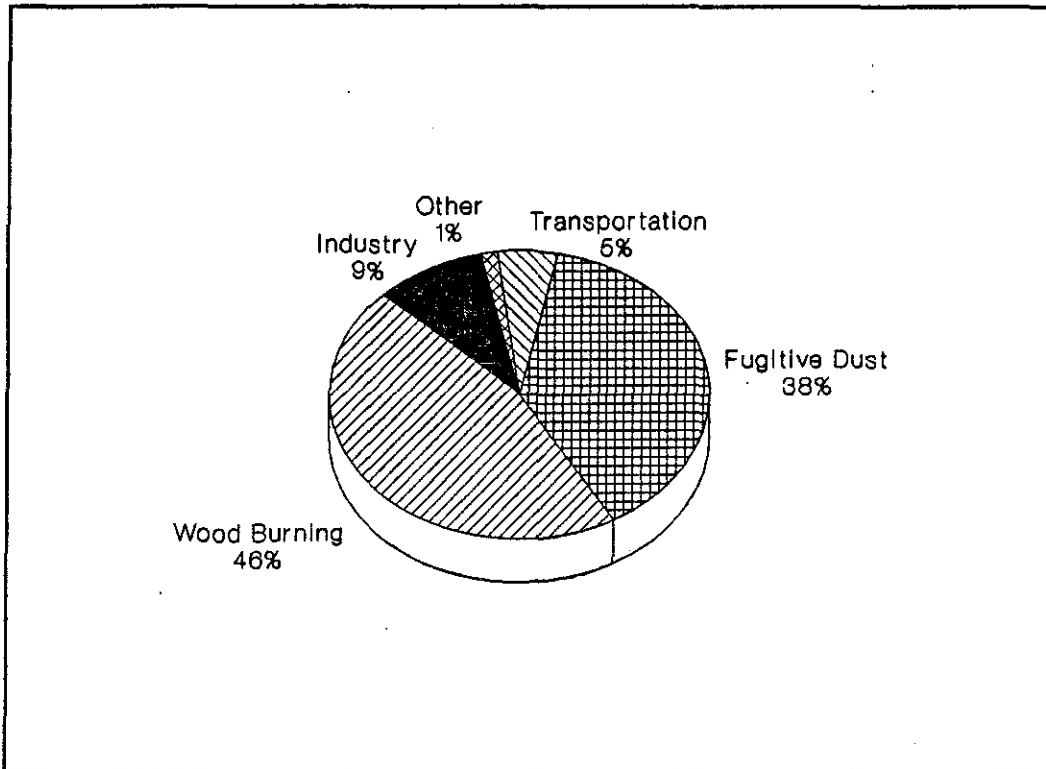
Other sources noted in Table 4.12.2-7 include water associated with the aerosol, though minor contributions and uncertainties in the apportionment are cause for some variation. Studies recently conducted in Los Angeles suggest that as much as 7% of the PM₁₀ mass is water.²⁵ No contribution from hogged fuel boilers was detected on these exceedance days. US EPA Chemical Mass Balance guidance specifies that the apportionment should account for at least 80% of the measured aerosol mass. Ninety-three percent of the mass has been apportioned in the above table. Average source contribution uncertainties (relative percent of mass) are 18% for wood smoke, 11% for hog fuel boilers and 8% for soil dust.

Annual Average Contributions

The annual average source contribution estimates noted in Table 4.12.2-8 were estimated from CMB analysis of PM₁₀ samples with mass loadings that approximate monthly average mass loadings. The average mass loading of the analyzed filters was 45 $\mu\text{g}/\text{m}^3$ as compared to an actual annual arithmetic mean of 44 $\mu\text{g}/\text{m}^3$ during the December, 1987 to March, 1989 period. Since the source contributions shown are based on a limited number of samples, the annual averages shown in Figure 4.12.2-3 are only approximations of the true annual source contributions.

²⁵S. Witz, R. Eden, C. Liu and M. Wadley, "Water Content of Collected Aerosols in the Los Angeles Basin," Presented at the Pacific Conference on Chemistry and Spectroscopy, Irvine, CA. October, 1987.

Figure 4.12.2-1: La Grande PM₁₀ Emission Inventories



**Figure 4.12.2-2
1986 to 2000 Emission Projections
(24 Hour Worst Case-With Strategies)**

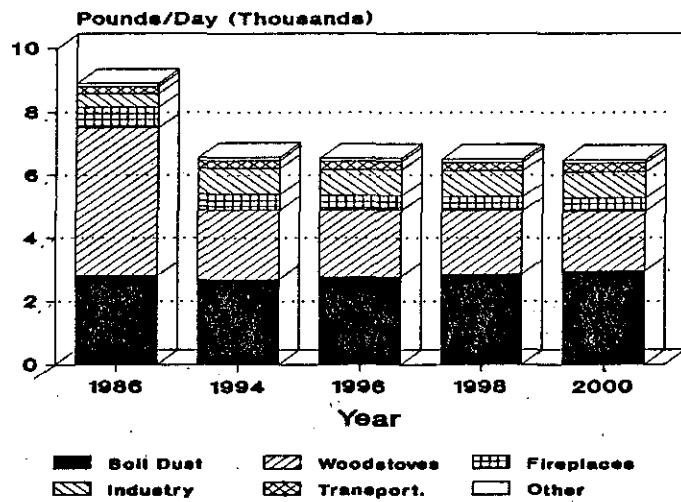


Table 4.12.2-8: Annual Average PM₁₀ SCE's

Source	PM ₁₀ (µg/m ³)	% PM ₁₀
Soil Dust	21	47 %
Wood Smoke	14	31 %
Burning *	4	9 %
Sec. Aerosol	2	4 %
Others	4	9 %
	45 µg/m ³	100 %

* Burning includes slash and field burning, land clearing and residential open burning.

Multiple Linear Regression Analysis

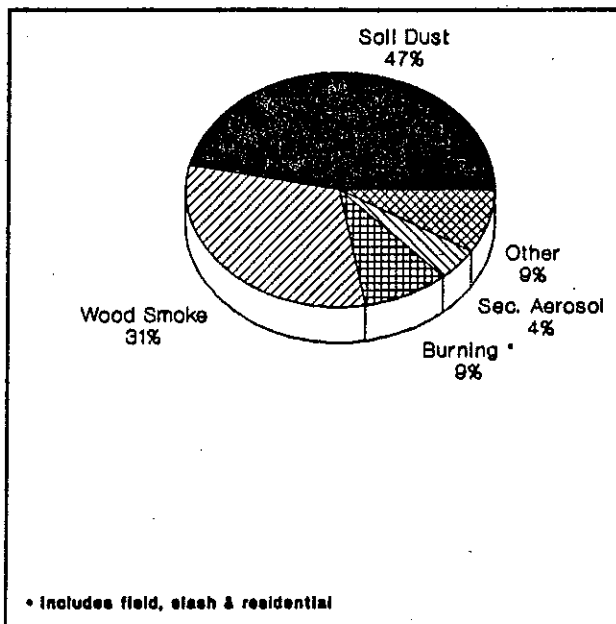
A second receptor modeling method of apportioning source contributions is multiple linear regression, wherein the source contributions are estimated from variability in the aerosol chemistry. The MLR analysis was completed to determine the degree to which PM₁₀ mass concentrations could be predicted from the aerosol chemistry, and as a second independent check on the CMB source apportionment. Based on 49 observations, 80% (R-Sq = 0.91) of the PM₁₀ mass variability can be accounted for on the basis of the silicon (a tracer for soil dust), sulfate (a secondary aerosol), organic carbon (from woodburning), lead (transportation sources) and sodium. Relative standard errors for the coefficients are 11%, 43%, 16%, 26% and 58%, respectively.

The results indicate that the PM₁₀ mass can reasonably be estimated from measurements of these five aerosol components. The remaining trace element components are not statistically significant in explaining variability in the PM₁₀ mass. The regression equation is:

$$PM_{10} = 4.7(Si) + 9.8(S) + 1.5(OC) + 878(PB) + 50.2(Na) - 24.5$$

Source apportionment based on MLR analysis was applied to annual average aerosol chemistry. Fifty three percent of the PM₁₀ mass is soil dust, 5% is sulfate and 38% is smoke from a variety of sources. These findings support the emission inventory and receptor modeling conclusions that soil dust and woodburning are significant contributors to La Grande PM₁₀ levels. Since industrial emissions cannot be identified by any single aerosol component, industry contributions cannot be reliably estimated using this approach. Multiple linear regression could not be applied to infer source contributions during exceedance periods because there are only 7 cases.

Figure 4.12.2-3: La Grande PM₁₀ Annual Source Contributions by Chemical Mass Balance



Analysis of Impacts by Source Categories

Receptor modeling of samples collected on days exceeding the NAAQS clearly show that residential wood smoke is the predominant source, that wood smoke may account for as much as 78% of the PM₁₀ mass and that these impacts are consistent with the aerosol chemistry observed within the airshed. These findings are also generally consistent with diurnal and seasonal variations in La Grande PM₁₀ concentrations (Figure 4.12.1-2).

Comparisons between emission inventory and receptor modeling results have been used to provide a qualitative assessment of the relative significance of source categories. The source contribution estimates by these two methods for the winter 24-hour worst case and annual average periods are shown in Tables 4.12.2-10 and 4.12.2-11. They illustrate the generally close agreement between the source categories. The wood products industry contributions as estimated by emission inventory are higher than that estimated by receptor modeling because dispersion of the emissions is not considered.

Background PM₁₀ concentrations and sources are discussed above. The estimated contributions to the background are listed in Table 4.12.2-9.

Table 4.12.2-9: Background PM₁₀ Source Contributions

Source	Annual Ave. PM ₁₀ (µg/m ³)		24-Hr Ave. Exceedance Day	
Soil Dust	3.9	30.6 %	4.3	62 %
Industry	0.6	4.5 %	0.0	0 %
Wood Smoke	6.2	48.0 %	1.9	27 %
Sec. Aerosol	1.2	9.3 %	0.6	8 %
Others	0.8	6.6 %	0.2	3 %
	12.7 µg/m ³		7.0 µg/m ³	

Estimation of "Local" Air Quality Impacts

Estimation of the impact of emission sources within the UGB requires that background components listed in Table 4.12.2-9 be subtracted from the source contributions listed in Table 4.12.2-7 and 8. The difference between these two sets of estimates is the contribution of "local" sources identified in the emission inventories. Table 4.12.2-10 and 11 lists the "local" source contribution estimates (SCEs) to PM₁₀ mass average winter days which exceed the NAAQS and annual PM₁₀ mass loading, respectively.

Table 4.12.2-10: Average Exceedance Day "Local" PM₁₀ SCE's

Source	PM ₁₀ (µg/m ³)	% PM ₁₀	Emission Inventory
Soil Dust	64.0	37.6 %	32 %
Industry	0.0	0.0 %	5 %
Wood Smoke	104.0	61.2 %	60 %
Sec. Aerosol	0.6	0.3 %	----
Others	2.0	1.1 %	3 %
	170 µg/m ³	100.0 %	100 %

Table 4.12.2-11: Annual Average "Local" PM₁₀ SCE's

Source	PM ₁₀ (µg/m ³)	% PM ₁₀	Emission Inventory
Soil Dust	17.1	53.4 %	36 %
Industry	0.0	0.0 %	10 %
Wood Smoke	11.8	36.8 %	48 % **
Sec. Aerosol	0.8	2.5 %	-----
Others	2.3	7.1 %	6 %
	32 µg/m ³	100.0	100 %

Table 4.12.2-11 Notes:

** Includes residential woodburning and solid waste disposal open burning.

The above analysis demonstrates that the 1986 emission inventory and receptor modeling analysis results are reasonably comparable. The validated emission inventories support the use of the 1994 emission inventory projection as the basis for the emission rollback calculations used in the attainment demonstration.

4.12.3 Emission Reduction Analysis

This section describes the emission reductions necessary to attain the NAAQS (4.12.3.1), a review of potential control measures that may be applied in La Grande (4.12.3.2), and a demonstration of the adequacy of the control measures to attain and maintain the NAAQS within the time limits specified by Section 110 (a) of the Clean Air Act (4.12.3.3). Emission Offsets and Emergency Action Plans are described in Sections 4.12.3.4 and 3.5.

4.12.3.1 Emission Reduction Necessary for Attainment

The EPA PM₁₀ SIP Development Guidelines specify that a proportional model can be used to estimate the control strategy requirements of the SIP. In the analysis below, the contribution of emission sources to the 1994 design values have been apportioned based on the 1994 annual and 24-hour worst case emission inventory estimates. Emission growth rates between 1986 and 1994 were first applied to each emission inventory source category. The sum of the 1994 source impacts plus background provide the 1994 24-hour worst case design value. A similar approach is taken to estimate 1994 annual emission reduction requirements.

Projected 24-Hour Source Impacts in 1994

Table 4.12.3-1 lists 1994 source contribution estimates for the 24-hour worst case scenario. Source contributions at the 1994 design level were apportioned using the 1986 24-hour worst case day emission inventory percentages applied to the "local" PM₁₀ air quality level of 183 $\mu\text{g}/\text{m}^3$ (190 $\mu\text{g}/\text{m}^3$ design value less the 7 $\mu\text{g}/\text{m}^3$ background).

**Table 4.12.3-1: Projected Future Source Category Impacts
(24-Hr Worst Case)**

Source	1986	"Local"	1986-94	1994	
	Worst Day EI	Design ($\mu\text{g}/\text{m}^3$)	Growth (%)	1994 $\mu\text{g}/\text{m}^3$	% "Local" PM ₁₀
Woodstoves	53 %	96.5	8.0 %	104	49.0 %
Fireplaces	7 %	13.2	-16.0 %	11	5.2 %
Industry	5 %	8.8	179.7 %	25	11.6 %
Fugitive Dust	32 %	57.6	12.0 %	65	30.4 %
Transportation	2 %	4.6	12.0 %	5	2.5 %
Other Sources	1 %	2.0	8.0 %	3	1.0 %
Subtotals		182.9		212 $\mu\text{g}/\text{m}^3$	
Background				7 $\mu\text{g}/\text{m}^3$	
Total				219 $\mu\text{g}/\text{m}^3$	

Air quality improvement needed = $69 \mu\text{g}/\text{m}^3$ ($219 - 150 \mu\text{g}/\text{m}^3$)
or a 32.6% ($69/212$) reduction in worst case day emissions
equivalent to 3350 pounds per day.

The control strategy must be comprised of a mix of individual source reduction measures such that the sum of the reductions equal or exceed the total reduction requirement. Adopted control strategies must be shown through a demonstration of attainment (Section 4.12.3.3) to attain and maintain the NAAQS by reducing emissions such that an overall reduction in PM₁₀ 24-hour worst case concentrations is at least $69 \mu\text{g}/\text{m}^3$.

Projected Annual Source Impacts in 1994

Table 4.12.3-2 lists 1994 source contribution estimates for the annual scenario. Source contributions at the 1994 annual design level were apportioned using the 1994 annual emission inventory percentages applied to the "local" PM₁₀ air quality level of $34 \mu\text{g}/\text{m}^3$ ($47 \mu\text{g}/\text{m}^3$ design value less the $13 \mu\text{g}/\text{m}^3$ background).

Table 4.12.3-2: Projected Annual Source Category Impacts

Source	1986 Annual EI	"Local" Design ($\mu\text{g}/\text{m}^3$)	1986-94 Annual Growth	1994 Annual $\mu\text{g}/\text{m}^3$	1994 % "Local" PM ₁₀
Woodstoves	42 %	9.0	8 %	6.9	29 %
Fireplaces	6 %	1.2	-16 %	0.8	4 %
Industry	10 %	0.4	74 %	0.4	16 %
Fugitive Dust	36 %	15.3	12 %	17.2	39 %
Transportation	5 %	0.4	12 %	0.4	6 %
Open Burning	0 %	0.0	9 %	0.4	0 %
Other Sources	1 %	7.6	9 %	7.9	5 %
Subtotals		33.9		33.9 $\mu\text{g}/\text{m}^3$	
Background				13 $\mu\text{g}/\text{m}^3$	
Total				47 $\mu\text{g}/\text{m}^3$	

No air quality improvement is needed on an annual average basis since the NAAQS is attained in both the 1986 base year and in 1994.

4.12.3.2 Evaluation of Potential Control Measures

The base PM₁₀ attainment control strategy for La Grande includes the following elements:

Woodburning Controls:

1. A voluntary woodburning curtailment program designed to achieve a 30% compliance rate (low income, sole source persons exempted). The program includes surveys to determine the effectiveness of the program;
2. A ban on the sale of and installation of used uncertified woodstoves;
3. EPA\DEQ woodstove certification program;
4. Woodburning public education program;
5. Home weatherization and woodstove replacement program for low income homeowners funded at \$325,000 in Community Block Grant Funds during the 1991-1992 period.

Fugitive Dust Controls:

1. Winter road sanding emissions reduced by 30%;
2. Control of highway right-of-way trackout through Oregon Department of Transportation administrative rules;
3. Stabilization of dust on unpaved gravel roads;
4. Paving of gravel streets;
5. Phase-out of unpaved roads, parking lots and staging areas;
6. Requirements for dust control plans for construction,

- land clearing or material storage piles;
- 7. Paving of commercial developments;
- 8. Curbing of new paved streets;
- 9. Stabilization of unpaved areas using chemical palliative.

Open Burning Controls:

1. Prohibition on residential open burning on curtailment days;
2. Voluntary forestry smoke management program on forest lands within approximately 20 miles of the nonattainment area;
3. Mandatory agricultural smoke management program.

In addition, a mandatory forestry smoke management program is under discussion with the Oregon Department of Forestry, as is the establishment of a Special Protection Zone within approximately 20 miles of the nonattainment area. Special protection zone restrictions during the winter months may be required.

Industrial Controls:

1. Boise Cascade's replacement of their hog fuel boiler with a natural gas unit will result in a 75 ton per year reduction of their current emission limit of 91 tons per year PM₁₀. During the 1986 base year, plant emissions were 71 tons per year. Application of RACT -level technology to the hog fuel boiler would result in a reduction of 65 ton per year reduction from the 71 ton per year level or a 90% annual credit. On a 24 hour worst case day basis, a 370 pound per day deduction will occur for a 30% credit relative to the plant's daily PSEL (370/1200 pounds/day). The emission reduction is enforced through a reduction in the annual PSEL.

Residential Wood Combustion:

1. Mandatory woodheating curtailment program designed to achieve at least a 30% compliance rate;
2. State backup authority from 1991 Legislature to require removal of uncertified woodstoves upon sale of a home;
3. Backup authority from 1991 Legislature to the DEQ to adopt mandatory curtailment programs in the event that local governments fail to adopt\implement or enforce local ordinances.

PM₁₀ Control Strategy Elements

The control strategy elements referred to above have been set in place to assure attainment of the 24-hour PM₁₀ NAAQS and continued maintenance of the annual NAAQS. Emission reduction credits associated with each element are listed and discussed. A PM₁₀ emission reduction credit is a measure of the reduction in PM₁₀ emissions that would be accomplished through adoption and

implementation of the program element. The strategy elements and credits are further described in Section 4.12.3.3.

**Table 4.12.3-3 PM₁₀ Control Strategy Elements
(24 Hour Worst Case Day)**

Element	Emission Reduction Credits by 1994
Attainment Strategies	
1 Woodstove Certification Program	24%
2 Voluntary Woodburning Curtailment Program	30%
3 Woodstove Replacement Program	2%
4 Winter Road Sanding Control Program	30%
5 Industrial Emission Reduction	30%
6 Other Fugitive Dust Strategies	No Credit Taken
7 Other Woodburning RACM Strategies	No Credit Taken
8 Public Education Programs	No Credit Taken
9 Forestry & Agricultural Smoke Management Programs	No Credit Taken

Residential Wood Smoke Control Elements

There are two basic approaches to reducing woodsmoke from stoves and fireplaces: (1) improving the performance of the woodheating systems such as through a certified woodstove program; and (2) burning less wood through woodstove curtailment programs. Some strategies have multiple advantages. Certified woodstoves, for example, improve emission performance by reducing the amount of woodsmoke per cord of woodburned while improving energy efficiency, thus reducing the amount of wood burned. Other examples include well designed public information, energy conservation, or firewood seasoning programs that result in better combustion (lower emissions) and better energy efficiency (less fuel burned). The key elements of the residential wood smoke control program are described below.

The Woodstove Certification Program

In 1983, the Oregon Legislature directed the Department to require that all new woodstoves sold in the State be laboratory tested for emissions and efficiency prior to sale to assure compliance with established emission standards. As a result, stoves sold after July, 1986 were required to emit 50% less smoke than conventional woodstoves. After July, 1988 new woodstoves were required to emit 70% less smoke.

Subsequent to the adoption of Oregon's emission standards, the Environmental Protection Agency (EPA) adopted a slightly more

restrictive national certification program which became effective July, 1990. In March, 1990 the Department completed rulemaking to modify the Oregon woodstove certification rules (OAR 340 Division 21) to assure consistency with EPA's national program.

In-home studies of first generation certified woodstoves have indicated that they actually reduce emissions by about 30%. Second generation certified stoves have been shown to reduce emission by about 50%. The majority of stove certified by the Department and sold in Oregon have been second generation stoves.

Second generation catalytic stove designs have incorporated new advancements in combustor technology which in part accounts for the stoves increased effectiveness. First generation catalytic stoves incorporated less effective catalytic elements which are currently reaching the end of their useful life. When replaced with new generation catalysts, the first generation catalytic stoves will provide effective emission reductions approaching that of second generation stoves. These improved first generation stove will make up part of the stove population in 1994.

Additionally, sales of pelletstoves in nonattainment areas, and in other areas of the state, are reported to have significantly increased and are expected to accelerate in the foreseeable future. Pelletstoves provide a 90% reduction in emissions and are expected to become a significant segment of the woodstove population in nonattainment areas where they have typically been exempted from curtailment programs. Therefore, the Department is conservatively using a 50% emission reduction credit overall for the woodstove population in 1994.

RESIDENTIAL WOODBURNING

WOODSTOVES:

Residential woodstove emissions are 42% (313 tons per year) of the 1986 baseline PM₁₀ emission inventory. The growth of residential woodstove use was estimated by comparing a study of projected firewood use, conducted by Del Green Associates, and actual woodheating surveys conducted by the Department from 1981 through 1987. The Del Green projections can be used to estimate wood use growth from 1986 to 1994 at a 1% per year increase. This projection is conservative compared to the actual firewood use trends projected from the 1981 and 1987 woodheating surveys.

FIREPLACES:

Fireplace emissions in La Grande represent 6% (43 tons per year) of the 1986 PM₁₀ baseline emission inventory. The emissions from fireplaces have been separated from woodstove use in calculating the emission reduction benefit derived from the woodstove certification program. The Del Green projections for wood use

trends in fireplaces estimates a 2% per year decrease in fireplace use from 1986 through 1994. This estimate is also conservative when compared to the actual firewood use trends for fireplaces from the 1981 and 1987 woodheating surveys.

PELLETSTOVES:

Residential pelletstoves are included as part of the 1986 baseline woodstove emission inventory and are expected to grow at an accelerated rate in the near future. A conservative estimate of pelletstove growth is to assume a growth rate equivalent to cordwood stoves.

The following calculations are included in Appendix 8.

RESIDENTIAL WOODSTOVES

Basis for a 24.0% Woodstove Certification Program Credit

As noted above, firewood use in residential woodstoves is projected to increase by 1% per year over the 8 year period from 1986 to December, 1994. This is the basis of the growth factor used in calculating projected 1994 wood smoke emissions. Therefore, in the absence of any certification program, emissions would increase by:

$$1\% \text{ per year} \times 8 \text{ years} = + 8\%$$

Building permit authorities in La Grande indicate that essentially all permitted installations are certified stoves and that about 10% of these are pelletstoves. A 5% per year replacement rate for removal of conventional stoves and installation of certified stoves is also assumed.

(1) For new certified cordwood stoves emitting 50% of conventional stoves, emissions would be expected to decrease over the period 1986-1994 by :

(a) Assuming 90% are new or replacement cordwood stoves:
 $90\% \times \{ [8\% \times (100\% - 50\%)] \times \text{BL86} + [5\%/\text{Yr.} \times 8 \text{ Yrs} \times (100\% - 50\%)] \times \text{BL86} \} = 21.6\% (\text{BL86}) [\text{tons}]$

Where BL86 = Baseline emissions in 1986 (tons per year)

(2) For new certified pelletstoves emitting 10% of conventional stoves, emissions would be expected to decrease over the period 1986-1994 by :

(a) Assuming 10% are new or replacement pelletstoves:
 $10\% \times \{ [8\% \times (100\% - 10\%)] \times \text{BL86} + [5\%/\text{Yr.} \times 8 \text{ Yrs} \times (100\% - 10\%)] \times \text{BL86} \} = 4.3\% (\text{BL86}) [\text{tons}]$

(3) The total emission reduction as a function of the 1994 uncontrolled woodstove emissions is:

$$\frac{(21.6(\text{BL86}) + 4.3(\text{BL86}))}{1.08(\text{BL86})} = \frac{25.9(\text{BL86})}{1.08(\text{BL86})} = 24.0\%$$

Where: $\text{BL94} = 1.08 \times \text{BL86}$

Therefore, the woodstove certification program alone provides a 24.0% credit by 1994.

RESIDENTIAL FIREPLACE EMISSION PROJECTION

Emissions from residential fireplaces are expected to decrease 2% per year from 1986 to 1994.

NET BENEFIT OF CERTIFICATION PROGRAM AND FIREPLACE TRENDS

Net Emission Reduction

Growth in new stoves, and replacement rates of 5%/yr (90% of replacement stoves will be certified cordwood stoves, and 10% pelletstoves in 1994); combined with the yearly decrease in fireplace emissions will produce a net emission reduction in 1994 of 88 tons. The yearly emission reduction through 1994 from the 1986 base line will be 11.0 tons per year. This yearly reduction is based on the emission reduction from 1986 to 1994, distributed over the eight year period.

1986 combined woodstove\fireplace baseline [356] - 1994 combined emissions [268]/ 8 years = 11.0 tons/yr.

Woodstove Replacement:

The emission reduction achieved from the replacement of traditional stoves with certified woodstove and pelletstoves will be 8.4 tons per year from the 1986 baseline. The yearly reduction is applied consistently (not compounded) each year from 1986 to 1994.

$[90\% \times (5\%/yr \times .50)] + [10\% \times 5\%/yr \times .90] + 2.7\%/yr.$ reduction

1986 woodstove baseline [313] x .027/yr = 8.45 tons/Yr.

New Woodstoves and New Pelletstoves:

Assuming 90% of new certified stoves will be cordwood stoves, and 10% to be pelletstoves; the net emission increase due to growth will be 4.5 tons/yr. This yearly increase is applied consistently (not compounded) from 1986 to 1994. The credit is calculated as follows:

$[90\% \times (1\%/yr \times .5)] + [10\% \times (1\%/yr \times .1)] = 0.46\%/yr \text{ increase.}$

1986 woodstove baseline $[313] \times .0046 = 1.4 \text{ tons/yr.}$

Residential Fireplace Trend:

Residential fireplace use is projected to decrease by 2% each year. This means a constant reduction of 0.9 tons per year, (not compounded) from the 1986 fireplace emission baseline, calculated as follows:

$$[43 \text{ tons/yr} \times .02] = 0.9 \text{ tons/yr.}$$

The following table summarizes the expected trends in emissions from woodburning devices:

Table 4.12.3-4: Emission Trends for Woodburning Devices

Source Category	ANNUAL EMISSIONS BY YEAR (Tons)						
	1986	1987	1988	1989	1990	1991	1992
Existing Stoves	313	304	295	286	277	269	245
New Stoves	0	1	3	4	6	7	11
Old & New Fireplaces	43	42	41	40	39	39	36
TOTAL	356	347	339	330	322	314	292

The net reduction due to the woodstove certification program and fireplace usage trends (from the projected 1994 uncontrolled residential wood combustion emissions of 374 tons) becomes 22%:

$$1 - \frac{[1994 \text{ controlled}] \quad 292 \text{ tons}}{[1992 \text{ uncontrolled}] \quad 374 \text{ tons}} = 21.9 \% \text{ Reduction}$$

Maintenance Credits Beyond 1994

The credits claimed for the certification program beyond 1994 follow the same approach but are based on the fact that pelletstoves are likely to be an increasing proportion of the new stoves being installed. During the period 1994-1996, an 80%/20% cordwood/pelletstove mix is assumed increasing to a 70%/30% mix during the period 1996 to year 2000. Growth in new stoves is

expected to increase to 1.1% per year, reflecting the projected population growth rate.

Stove replacement is expected to remain 5% per year, and fireplace use trends will continue at a 2.0% per year reduction. The calculated net benefits adjusted for emission growth provide a 17 ton reduction during the 1995-96 period, and an additional 26 ton reduction during the period of 1997 to 2000.

Maintenance Period 1994 through 1996

Replacement: Woodstoves and Pelletstoves

$$[80\% \times (5\%/yr \times .5)] + [20\% \times (5\%/yr \times .9)] = 2.9\%/yr$$

$$BL1994 [245 \text{ tons}] \times .029/yr = - 7.1 \text{ ton/yr reduction.}$$

New: Woodstoves and Pelletstoves

$$[80\% \times (1.1\%/yr \times .5)] + [20\% \times (1.1\% \times .1)] = 0.46\%/yr$$

$$BL1994 [11 \text{ tons}] \times .0046/yr = + 0.05 \text{ tons/yr increase.}$$

Fireplace: continue at -2%/yr. from the 1994BL[36 tons] x .02/yr] = - 0.7 tons/yr decrease.

The following table summarizes the expected trend in emissions from woodburning devices:

Table 4.12.3-5: Emission Trends in Woodburning, 1994-96

	1994	1995	1996
Existing Stoves	245	238	231
New Stoves	11	11	11
Fireplaces	36	35	35
TOTAL	293	285	277

Net Emission Benefit for 1994 - 1996:

$$[293 - 277] = 16 \text{ ton reduction}$$

Maintenance Period 1996 through 2000

Replacement: Woodstoves and Pelletstoves

$$[70\% \times (5\%/yr \times .5)] + [30\% \times (5\%/yr \times .9)] = 3.1\%/yr$$

$$BL1996 [231 \text{ tons}] \times .031/yr = - 7.2 \text{ ton/yr reduction.}$$

New: Woodstoves and Pelletstoves

$$[70\% \times (1.1\%/yr \times .5)] + [30\% \times (1.1\% \times .1)] = 0.42\%/yr$$

$$BL1996 [11 \text{ tons}] \times .0042/yr = + 0.05 \text{ ton/yr increase.}$$

Fireplace: continues at -2%/yr. from the 1996BL [34] x .02/yr = - 0.68 tons/yr decrease.

Table 4.12.3-6: Emission Trends in Woodburning, 1996-2000

	1996	1997	1998	1999	2000
Existing Stoves	231	224	217	210	202
New Stoves	11	11	11	11	11
Fireplaces	35	34	33	32	32
TOTAL	277	269	261	254	246

Net Emission Benefit for 1996 - 2000:

$$[277 - 246] = 31 \text{ ton reduction.}$$

The City of La Grande's Air Quality Program

By resolution (No. 4122, Series 1991) adopted August 7, 1991, the La Grande City Council established La Grande's Air Quality Improvement Program under the direction of the City Community Development Department. The program was established to implement the La Grande Air Quality Program. The program is funded by the City at a level of approximately \$15,000 per year. These resources are used to fund the services of a City Planner and temporary staff during the winter heating season. Additional special project funds are provided by the Department to support major capital outlay and other one-time program needs. The Department also provides air quality and meteorological monitoring support. The City's Air Quality Program is found in Appendix 4. Key elements of the program are described below.

1. Public Information Programs.

A comprehensive public information program is essential for public cooperation and support in reducing woodsmoke emissions. The program describes the need for the public's cooperation, the health-safety-energy-economic benefits to individuals and the community, and precisely what individuals can do to help.

Periodic in-field surveys will be conducted as a means of assessing the effectiveness of the voluntary curtailment program. If such surveys indicate that less than 30% of the public is following the curtailment advisories, the City of La Grande will adjust the public education program to increase the compliance rate. The Department of Environmental Quality will work with the City and provide supplemental resources needed to assure that a 30% compliance rate is achieved.

The La Grande education program fulfills all of these criteria. Key elements of the will program include:

- Operation of the La Grande Woodburning Advisory telephone system to advise the public on the daily status of the voluntary curtailment program;
- News media involvement to include some or all of the following: radio and television public service announcements, press releases, interviews, news reports, photographs and advertisements;
- Printed materials describing La Grande's air quality problem, health effects and actions the public can take help solve the problem;
- Printed materials on woodstove sizing and stove safety, how to purchase a certified woodstove, fuel wood seasoning and how to reduce stove opacity;
- Public forums on health effects of woodsmoke and air quality hosted by local civic groups;

Additional elements that may be included, resources permitting, are:

- Newspaper articles on clean air issues, Air Pollution Index (API) trends and woodburning curtailment calls;
- "Good Neighbor" woodburning packets distributed to households observed burning on "Yellow" or "Red" curtailment days;
- Promotion of displays explaining air quality conditions in La Grande and proper woodstove operation during community events;

- Coordination with advisory committees, woodstove dealers environmental and governmental groups;
- Formation of a "Speakers Bureau" to inform local groups on the nature of the problem and need for public involvement and an in-school fire safety education program.
- A voluntary fuel wood moisture measurement program may be established by the City of La Grande to provide a means for homeowners to determine if the wood is seasoned.

EPA's Guidance Document for Residential Wood Combustion Emission Control Measures recognizes public education programs as an essential element of any residential woodburning control strategy. The highest level education program described by EPA is based on a comprehensive, aggressive program that includes most of the elements found in the La Grande program. Although EPA recognizes public education programs as an essential element of woodburning control programs, no emission reduction credits can be assigned to the program without further technical justification.²⁶

2. Home Weatherization and Stove Replacement Program

In June of 1991, the City of La Grande received a \$325,000 grant from the State of Oregon Community Block Grant program for a home weatherization and woodstove replacement program similar to the Medford CLEAR and Klamath Falls PURE Projects. Approximately 100 low income homes will be weatherized and conventional woodstoves replaced by natural gas, electrical furnaces or pelletstoves with these grant funds. Award of the funds will decrease the number of households exempt from the voluntary curtailment program. Additional funding would eliminate other exemptions to the curtailment program.

3. Curtailment During Poor Ventilation Episodes

A Voluntary Woodburning Curtailment Program is a key element of the attainment strategy. The strategy has been designed to limit the use of woodstoves and fireplaces during periods likely to exceed the 24-hour NAAQS. Woodburning curtailment forecasts are made once daily at 3 PM during the woodheating season by the City Planning Department. The forecasts are made daily between November 1st and March 1st.

²⁶US EPA, "Guidance Document for Residential Wood Combustion Emission Control Measures," EPA-450/2-89-015 (1989).

A "Yellow" forecast is issued if the 3 PM to 3 PM 24-hour levels of PM_{10} are forecast to be between 50 and $95 \mu g/m^3$.²⁷ A "Red" forecast is issued if the forecast is for PM_{10} levels to be greater than $95 \mu g/m^3$. The curtailment calls are based on criteria provided by the Department, and are based on a forecast algorithm using National Weather Service and barometric pressure data, forecasts of synoptic meteorology, surface temperatures and wind speed/direction. Nephelometer measurements of hourly light scattering and local observations of air quality conditions are also used. A detailed discussion of the curtailment methodology is found in Appendix 7.

Woodburning curtailment advisories are issued at three levels:

"Green" advisories are issued for periods during which NAAQS violations are unlikely. Woodburning is unrestricted during these periods but the public is asked to follow good woodburning practices.

"Yellow" advisories are issued for periods approaching exceedance of the NAAQS. Under a "Yellow" curtailment, the public is asked to curtail all unnecessary woodburning, excepting only pelletstoves, certified woodstoves and those that use wood as their sole source of heat.

"Red" advisories are issued for periods of severely restricted ventilation during which PM_{10} levels are expected to exceed the NAAQS. Only households in which woodburning is the sole source of heat are permitted to burn during these periods.

Based on the past three years of air monitoring data, about 9 "Red" and 39 "Yellow" curtailment days are expected to occur during the space heating season. This is about one-third of the days between November 1 and April 1.

Compliance with the advisories is determined through surveys of woodburning activity during "Green," "Yellow" and "Red" curtailment periods.

²⁷Bscat measured by integrating nephelometer in units of $10^{-4} M^{-1}$.

Long-Term Woodheating Control Strategy

Woodheating curtailment is viewed as a short-range control strategy to allow rapid attainment of the short term (24 hour) PM₁₀ air quality standard. The Department of Environmental Quality is committed to pursue permanent reductions in woodheating emissions as a long-range strategy to reduce and eliminate the reliance on curtailment and to provide significant improvement in annual PM₁₀ air quality.

At a minimum, the following measures will be pursued to permanently reduce woodheating emissions:

- Public education activities will include more specific information on the true cost of woodheating in relation to other alternative cleaner heat sources. The major goal of this effort is to persuade those households that they are spending more money to heat with wood in uncertified stoves than with conventional fuels, such as natural gas, or certified stoves.
- Further information and studies on the toxicity, health effects and other detrimental effects of woodstoves will be pursued and heavily publicized in a continuing effort to convince more people that they should reduce their woodheating smoke.
- Funding sources will be perused to implement the programs authorized by the 1991 Oregon legislature for loans and grants to accelerate the replacement of uncertified woodstoves.

Basis for Voluntary Curtailment Program Credit

The goal of the La Grande Woodburning Advisory Program is to reduce PM₁₀ emissions from woodburning by at least 30% on the 2 to 3 days per year on which violations of the PM₁₀ health standard would be expected. The La Grande compliance rate is expected to be similar to that reported for other voluntary curtailment programs. The first four years of the Medford, Oregon program gained a 25% compliance rate while the first and second years of the Klamath Falls, Oregon voluntary program had compliance rates of 25% and 45%, respectively. The Missoula, Montana voluntary curtailment program achieved a compliance rate of 30%. The City will provide on-going assessments of the program's compliance rate. If less than a 30% compliance rate is indicated, the Department will provide the City with additional economic and technical assistance for increased public education efforts, or other methods to improve the compliance rate.

Since La Grande is in attainment with the annual NAAQS, annual emission reduction credits are not required.

State of Oregon Statute

The 1991 Oregon Legislature passed several measures in HB2175 which will be available as either as control strategies or contingency measures for the control of PM₁₀ emission from residential woodheating. These measures are outlined below:

Residential Woodheating Controls

I. WOODSTOVE CHANGEOUT PROGRAM (OAR 340 Division 34)

- A. The Residential Woodheating Air Quality Improvement Fund created under Section 10 of HB2175 provides for a two faceted program that offers both low, or no interest loans, as well as total subsidies for the replacement of uncertified woodstoves with alternate heat sources. The low/no interest loan program, available to woodheating households within the western interior valleys or any PM₁₀ nonattainment area, provides criteria under which a uncertified stove may be removed and destroyed, and a high efficiency, low polluting heating system installed to building code and manufacturers specifications.
- B. The subsidy program would fund local governments or regional authorities in PM₁₀ nonattainment areas to provide subsidies for the replacement of uncertified stoves. In order to receive funding a local government or control authority must meet eligibility criteria, among which is the adoption of an ordinance that limits visible emissions from woodstoves and fireplaces during periods of air stagnation. This provision does not restrict the establishment of a woodstove curtailment program if deemed necessary. Both programs include eligibility requirements for individual applicant households.

FUNDING AND RESOURCES:

Although the Residential Woodheating Air Quality Improvement Fund was established to provide resources for the Low/No Interest Loan, and Stove Subsidy programs; the legislature did not authorize an emission fee on the sale of cord wood which would have provided funding.

The Department intends to fully pursue the funding of these programs through federal assistance grants and other grant sources. The Department will also consider returning to the 1993 legislative session and try to establish a permanent source of funding for these programs.

At such time as funding is provided the Department will provide staff resources to administer both programs, and to fully analyze the most efficient and effective means

most critical areas.

Emission Reduction:

Emission reduction benefits vary considerably depending upon the number of participants, and the type of replacement heating system selected. Stove replacement subsidy programs with a high degree of participation that are focused within a limited geographical area will see the most immediate benefit in improved air quality.

If a community were to participate in a local stove replacement subsidy program it would be possible for each household to achieve a reduction in PM₁₀ emissions of approximately 50% if uncertified stoves were replaced with EPA phase II certified stoves. If each household were to replace their uncertified stove with a gas furnace the emission reduction would be approximately 99%.

II. REMOVAL OF UNCERTIFIED STOVE UPON SALE OF HOME IN PM₁₀ NONATTAINMENT AREA EFFECTIVE DECEMBER 31, 1994 (OAR 340 Division 34)

The 1990 Clean Air Act requires states to revise PM₁₀ control strategies for problem areas to include contingency plans and other provisions to insure that PM₁₀ health standards will be achieved by specified dates. HB2175 requires that after December 31, 1994 all uncertified woodstoves, except antique and cookstoves, be removed and destroyed upon sale of a home. The Department views this program as a primary contingency measure for the overall PM₁₀ control strategies required by EPA.

The requirements of the statute are immediately enforceable through civil penalties by amending OAR Chapter 340, Division 12. By December 1994, the Department will also develop an advisory committee comprised of representatives from Oregon Title Companies, the Oregon Association of Realtors, and the State Real Estate Agency in Salem. The goal of the advisory group will be to outline the most efficient means to disseminate information about the sale requirements to all home sellers in the nonattainment areas, and to ensure that the stove removal and destruction requirement is carried out.

FUNDING AND RESOURCES:

The Department will commit staff resources to the enforcement of the statute where necessary. The Department will also coordinate the advisory group

efforts to enhance the development and implementation of a comprehensive education and enforcement effort in each PM₁₀ nonattainment area.

EMISSION REDUCTION:

The long term emission reduction potential of the stove removal contingency strategy will vary depending upon the turn over rate of homes with uncertified stoves, and the choice of replacement heat. An evaluation of census information and surveys of real estate transactions estimates an average annual home turn over rate of approximately 3% per year, with the average home being owned for 20 years.

A random home replacement distribution over 20 years, at 3% per year would increase the replacement rate of uncertified stoves from 5% to 8%. The expected emission reduction from both stove replacement strategies may range from 50% cleaner in the case of a certified woodstove being chosen as the replacement heating device, to 99% cleaner if a gas heater is chosen.

III. STATEWIDE WOODSTOVE CURTAILMENT (OAR 340 Division 34)

The 1991 Oregon legislature authorized the following program to be put in place in any area of the State where such a program is required under the Clean Air Act: If a local government or regional authority has not adopted or is not adequately implementing the Clean Air Act required woodstove curtailment program, the Environmental Quality Commission may adopt by rule and the Department of Environmental Quality may operate and enforce a program to curtail residential woodburning during periods of air stagnation. The curtailment program would apply to woodstoves, fireplaces, and other woodheating devices. The State curtailment program must include at a minimum:

- ♦ A provision for a two stage curtailment program based on the severity of the projected air quality conditions.
- ♦ A provision to exempt all Oregon certified woodstoves from the first stage of curtailment.
- ♦ A provision for low income exemptions.
- ♦ A provisional exemption for sole source woodburning households.

- ♦ An exemption for pelletstoves.
- ♦ A provision for the Department to defer the operation and enforcement of the curtailment program at such time as the local government or regional authority has adopted and is adequately implementing the required curtailment program.

FUNDING AND RESOURCES:

Should it become necessary for the Department to implement a State residential wood smoke curtailment program within a community the Department would seek assistance from the EPA to fund the necessary public education, daily advisory, monitoring, surveyance, and enforcement efforts.

The Department staff could provide support for a public education campaign, and distribute the daily burn advisory. The Department would explore the possibilities of contracting with local agencies to provide services in the areas of monitoring, compliance surveys, and enforcement.

EMISSION REDUCTION:

EPA guidance regarding woodheating curtailment programs suggests that a minimum 10% credit for emission reduction can be taken for a voluntary curtailment program, and that a minimum 50% emission reduction credit may be taken for a mandatory program. The Department has had several years of experience establishing and monitoring curtailment programs in the Medford, Klamath Falls, Jackson County, and Grants Pass PM₁₀ nonattainment areas.

The Department's experience with curtailment programs supports that a 30% emission reduction credit is a reasonable estimate for a voluntary woodburning curtailment program. A mandatory curtailment program, given the proper effort in the area of community education and information is capable of attaining emission reductions in the range of 70% to 90%.

IV. USED STOVE BAN (OAR 340 Division 34)

The 1991 legislature enacted a ban on the sale of uncertified used woodstoves. As of the effective date of House Bill 2175, August 5, 1991, no person shall advertise for sale, offer to sell or sell, a used woodstove that was not certified for sale as new to the 1986 Oregon woodstove emission standard. Additionally,

HB2175 has charged the State Building Code Agency to amend their administrative rules, prohibiting the installation of uncertified used woodstoves.

FUNDING AND RESOURCES:

The Department's Woodheating Program staff will investigate potential violations of the uncertified used stove sales ban, and with assistance from the Department's enforcement section will take the appropriate enforcement action when necessary. The Department's Public Relations section in conjunction with the Woodheating Program staff will mount a public education and information campaign to make the public aware of the new ban on used stove sales.

The State Building Code Agency will enforce these regulations prohibiting the installation of uncertified used stoves.

EMISSION REDUCTION:

Our best information indicates that 1 out of every 4 stoves purchased is a uncertified used stove. Prohibiting their purchase and installation will ensure that the full emission credit potential offered by the normal change over to certified stoves will be realized. With the prohibition on uncertified used stoves each new stove purchase will provide at a minimum a 50% decrease in emissions or better depending upon the type of replacement heating device chosen. The 1991 Oregon Legislature adopted a new statute (HB2175) prohibiting the commercial sale of uncertified woodstoves and requiring the removal of conventional woodstoves upon sale of a home. Stove removal upon sale has been reserved as a contingency measure (see below) to be implemented in the event that the attainment strategy fails to achieve the NAAQS. Both measures greatly accelerate the woodstove changeover rate.

Fugitive Dust Control Element

A 30% reduction in urban fugitive dust emissions from fugitive dust sources is required to attain the 24-hour NAAQS on worst-case winter days. These emission reductions will be accomplished under the City of La Grande's Development Standards Section of the Zoning Ordinance. The ordinance requires that:

1. Construction trackout onto paved streets must be cleaned up at frequent intervals;
2. Construction vehicles are cleaned and have their loads

secured to prevent carryout of dirt onto paved streets;

3. Material spilled from trucks or earth moving equipment must be removed within 8 hours;

4. Requires that dust from material storage piles or construction activity be suppressed upon notification by the City through use of dust palliative, water, compacting or other methods;

5. Unpaved roads of more than 50 feet in length used as haul roads must be treated with water or chemical suppressants to control dust emissions;

6. An approved dust control plan is required to use an unpaved commercial or industrial staging area;

7. The disturbance or removal of soil cover from any area larger than 5,000 sq.ft. is prohibited unless a dust control plan has been approved by the City;

8. All off-street parking areas including driveways and truck loading areas must be paved;

9. All access streets to industrial or commercial sites must be improved to City standards including paving, curbing, roadbed or right of way stabilization.

Since all of the heavily traveled roads in the La Grande UGB are paved, reductions in resuspended road dust from paved streets may also be considered should additional emission reductions be required. Other methods of control include the addition of asphalt shoulders and curbs to new major paved streets thereby eliminating trackout from the edge of the pavement into the traffic lanes.

The paving of unpaved roads and control of mud trackout from construction sites is also required under the City's Zoning Ordinance as is rapid cleanup of winter road sanding materials from the City streets.

Basis for 30% Credit for the Fugitive Dust Control Program

The specifics of the winter road sanding control strategy are contained in City of La Grande's Air Quality Program (Appendix 4) and commitments from the State of Oregon Highway Division (Appendix 5). The 30% credit is based on the commitments from the State and City to reduce winter road sanding by at least 36% (emissions from Highway Division maintained roads accounts for 84% of the airshed road sanding emissions) through (a) a reduction in the amount of aggregate used by maintenance crews, (b) rapid cleanup using street washing or sweeping of road sanding materials used on major thoroughfares and (c) use of sanding materials with a lower silt

content. During worst case winter days, at least a 436 pound per day emission reduction is expected from this program (See Appendix 8).

Road sanding emission reductions will be documented on the basis of Highway Division records of the number of cubic yards of sanding material applied each winter to roadways. Since roadway emissions are linearly related to road surface silt loading, emission reduction credits can be easily calculated, assuming that silt content of the aggregate does not change. Because of significant yearly variations in snowfall, the use of road sanding aggregate should also be expected to vary.

Industrial RACT Emission Reductions

A 30% reduction in industrial emissions is required to attain the 24-hour NAAQS on worst-case winter days. These emission reductions will be mandated and enforced by the Department through application of a RACT-level reduction of 65 tons per year in Boise Cascade's PSEL.

Other Strategies

The following additional elements have been developed to help assure the success of the attainment strategy. Restrictions to open burning and forestry prescribed burning are included in the attainment strategy but no emission reduction credits have been taken for these programs.

Restrictions on Open Burning

The City of La Grande's Air Quality Program includes a prohibition (Resolution 4122, Series 1991) on open burning and the use of burn barrels on "Yellow" or "Red" woodburning curtailment days. Open burning is prohibited at all times other than during the months of April and May; October and November under Section 8 of the Uniform Fire Code. In addition, the burning of prohibited materials (dry garbage, rubber products, asphalt, etc) in a woodstove or fireplace is prohibited.

Forestry Slash Burning

PM₁₀ emissions from forestry slash burning, both because of the magnitude of the emissions and the proximity of the burning to the nonattainment area, can potentially have a significant impact on La Grande air quality. Forestry burning is regulated under Oregon law (ORS 477.515) which requires that the State Forester and the Department of Environmental Quality jointly approve a plan to manage smoke from slash burning in areas they designate.

By statute, the Oregon Department of Forestry (ODOF) is responsible for the administration of rules (OAR 629-43-043) and

written procedures to assure the protection of air quality. At present, the mandatory, daily burning instructions issue by ODOF apply only within the smoke management plan's Restricted Area which covers western Oregon (crest of the Cascades west) and the Deschutes National Forest. Since the La Grande Nonattainment Area is outside of the Restricted Area, a voluntary smoke management program will be established through the Oregon Department of Forestry to manage slash burning near La Grande. The provisions of this program will meet EPA's requirements for Reasonably Available Control Measures (RACM) for forestry smoke management programs.

Additional forestry slash burning measures are being discussed which may include establishment of a voluntary Special Protection Zone within which special restrictions would apply during the winter months when violations of NAAQS are most likely. Also under discussion is a contingency measure should the La Grande nonattainment area fail to attain the NAAQS within the deadlines established under the Act and slash burning smoke is implicated as a significant contributor. In this case, La Grande would be established as a Designated Area and a year around, mandatory smoke management program be implemented by ODOF as a contingency measure.

Public hearings on revisions to the Smoke Management Plan by the Oregon Board of Forestry are expected to occur in December, 1991 or January, 1992 with adoption shortly thereafter.

Agricultural Open Field Burning

Each summer, approximately 12,000 acres of grass seed and cereal grain stubble are burned within the Grande Ronde Valley. Because the smoke from the burning was impairing visibility within the wilderness, a mandatory field burning smoke management program was adopted by Union County (Ordinance 1991-6) in response to the Class I area visibility impairment provisions of the Clean Air Act (Section 169A). The ordinance requires that agricultural burning be prohibited when smoke can impact either the Eagle Cap Wilderness or the La Grande PM₁₀ nonattainment area. The ordinance is enforced by Union County and is included in Appendix 6.

Although none of the past PM₁₀ NAAQS exceedances have occurred during periods when fields were being burned, the nonattainment area protection provisions of the ordinance minimize the likelihood that future smoke intrusions will cause an exceedance of the NAAQS. The provisions of the ordinance meet EPA's requirements for Reasonably Available Control Measures (RACM) for agricultural burning programs.

Industrial Emission Reductions

Since a reduction in industrial emissions is needed to attain air quality standards in La Grande, the Clean Air Act requires that RACT-level control technology be applied. A 65 ton per year

reduction in industrial emissions will be achieved through application of RACT. The control strategy relies on emission reductions being achieved through Boise Cascade's planned changeout of their hog fuel boiler to a natural gas fired unit. The current emission limit for the hog fuel boiler is 130.6 tons per year of total suspended particulate (TSP) or 91 tons per year PM_{10} . Actual emissions during the 1986 base year were 71 tons per year.

Had RACT-level emission control technology been installed on the hog fuel boiler, an emission reduction of 65 tons per year of PM_{10} emissions would have occurred, assuming that 70% of the TSP emissions are within the PM_{10} size fraction. Boise Cascade's Plant Site Emission Limit (PSEL) will be reduced by 65 tons per year PM_{10} to assure that the emission reduction credit is enforceable. After the 65 ton per year emission reduction credit is taken, an additional 10 tons per year of PM_{10} will remain available as a contingency plan reduction should BACT be required.

Boise Cascade has indicated their willingness to accept a 65 ton per year reduction in their PSEL. They plan to proceed with the boiler replacement program upon Department approval of a Notice of Construction.

RACM Elements

Reasonably Available Control Measures (RACM) for Urban Fugitive Dust, Residential Wood Combustion and Prescribed Burning are defined by the EPA's April 2, 1991, Memorandum on PM_{10} Moderate Area SIP Guidance. Further guidance is contained in EPA-450/3-88-008 (September, 1988), Control of Open Fugitive Dust Sources and EPA-450/2-89-015 (September, 1989), Guidance Document for Residential Wood Combustion Control Measures.

URBAN FUGITIVE DUST RACM MEASURES

EPA guidance requires that the following fugitive dust RACM elements be included in the PM_{10} SIPs if the source is a significant contributor to PM_{10} nonattainment, and it is economically and technologically feasible to control:

(1) Pave, vegetate or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads; (2) Require dust control plans for construction or land clearing projects; (3) Require haul trucks to be covered; (4) Provide for traffic rerouting or rapid clean up of temporary (and not readily preventable) sources of dust on paved roads (water erosion runoff, mud/dirt carryout areas, material spills, skid control sand), delineate who is responsible for clean up;

(5) Prohibit permanent unpaved haul roads, and parking or staging areas at commercial, municipal, or industrial facilities; (6)

Develop traffic reduction plans for unpaved roads using speed bumps, low speed limits, etc. to encourage use of other (paved) roads; (7) Limit use of recreational vehicles on open land (e.g., confine operations to specific areas, require use permits, outright ban); (8) Require improved material specification for and reduction of usage of skid control sand and salt (e.g., require use of coarse, nonfriable material during snow and ice season); (9) Require curbing and pave or stabilize (chemically or with vegetation) shoulders of paved roads; (10) Pave or chemically stabilize unpaved roads; (11) Pave, vegetate, or chemically stabilize unpaved parking areas; (12) Require dust control measures for material storage piles; (13) Provide for storm water drainage to prevent water erosion onto paved roads; (14) Require revegetation, chemical stabilization, or other abatement of wind erodible soil, including lands subjected to water mining, abandoned farms, and abandoned construction sites; and (15) Rely upon the soil conservation requirements (e.g., conservation plans, conservation reserve) of the Food Security Act to reduce emissions from agricultural operations.

Fugitive dust control measures that have already been adopted by rule are found in Chapter 340, Division 21, Department of Environmental Quality. These rules apply within incorporated cities of 4,000 or more population and are enforced under OAR 340-21-060. These rules implement the following fugitive dust RACM measures:

<u>RACM Element</u>	<u>OAR 340 Division 21 Section:</u>
1	(2) (a)
2,10,11	(2) (b)
3	(2) (f)
4	(2) (g)
12	(2) (c)

In addition, the City of La Grande's Zoning Ordinance requires implementation of RACM element 4 (trackout), 9 (curbing) and 10 (paving\stabilizing unpaved roads). The contingency plan implements element 5 (paving of industrial staging areas). Emissions associated with the remaining RACM measures are not believed to be significant contributors to the nonattainment problem.

REASONABLY AVAILABLE RESIDENTIAL WOOD COMBUSTION CONTROL MEASURES

EPA guidance requires that the State PM₁₀ SIPs include strategies from each of the following four RACM measures:

1. Establish an episode curtailment program, including: a curtailment plan; a communication strategy to implement the plan; a surveillance plan (e.g., "windshield" survey, opacity trigger); and enforcement provisions including procedures, penalties, and exemptions). A voluntary program will be deemed reasonable if the area demonstrates attainment.

The La Grande voluntary curtailment program fulfills these requirements as it includes a program evaluation survey provision and communication strategy.

- 2. Establish a public information program to inform and educate citizens about stove sizing, installation, proper operation and maintenance, general health risks of wood smoke, new technology stoves, and alternatives to woodheating.**

The La Grande public education program, administered by the City of La Grande provides comprehensive information on each of the elements of this RACM measure. This program is supplemented by the Department's public information program.

- 3. Encourage improved performance of woodburning devices by:**

- Establishing a program to identify, through opacity observation, deficiencies in stove operation and maintenance. (Under such a program, advice and assistance should be provided to the identified households to help reduce visible emissions from their devices);

- La Grande's voluntary curtailment surveillance program is used both to assess compliance rates and may be used to identify homeowners that are operating woodstoves with excessive emissions.

- Providing voluntary dryness certification programs for dealers and/or making free or inexpensive wood moisture checks available to burners;

- The La Grande program may include a voluntary cordwood certification program implemented through local civic groups or fire districts.

- Evaluating and encouraging, as appropriate, the accelerated changeover of existing devices to new source performance standards or other new technology stoves (e.g., hybrid designs, pelletstoves) by such approaches as subsidized stove purchases tax credits or other incentives.

- Accelerated changeover is encouraged through the woodstove changeout program established under OAR 340 Division 34 and through the low income home weatherization program operated by the City of La Grande.

- 4. Provide inducements that would lead to reductions in the stove and fireplace population (or use) by:**

- Encourage a reduction in the number of woodburning devices (i.e., removing or disabling the devices) through tax credits or other incentives;
- OAR 340 Division 34 includes, as a contingency measure, removal of uncertified stoves upon home sale.
- Discouraging the resale of used stoves through taxes, fees or other incentives;
- OAR 340 Division 34 bans the sale of used woodstoves.

RACM Measures not included in the La Grande SIP include:

- Discouraging the availability of free (or very inexpensive) firewood by increasing cutting fees or limiting the cutting season.
- Slowing the growth of woodburning devices in new housing units by taxes, installation permit fees, or other disincentives.

These measures are not viewed as necessary to assure NAAQS attainment.

REASONABLY AVAILABLE CONTROL MEASURES FOR PRESCRIBED BURNING

EPA guidance requires that RACM measures from prescribed (slash burning) be included where it is shown that prescribed burning is or does contribute significantly to PM₁₀ exceedances within the nonattainment area. The guidance specifies that such a program must include (1) smoke dispersion forecasts based (at minimum) on National Weather Service data; (2) a process for preparation and approval of burn plans; (3) availability of training programs for burners; (4) a public information program; (5) provisions for surveillance and enforcement of any mandatory requirements; (6) development of emission inventories and (7) State oversight of the smoke management programs.

Oregon's forestry smoke management program administered by the Oregon Department of Forestry (ODOF) is administered through a voluntary program on forest lands surrounding La Grande. The voluntary program meets all of the above RACM requirements. Smoke dispersion forecasts issued daily by ODOF's smoke management center for the La Grande area are based on NWS and local weather data. The program requires the preparation and approval of burn plans prior to ignition. Training is provided each year by ODOF staff to all burners. For Federal employees, this training is supplemented by training programs offered by the US Forest Service and the Bureau of Land Management. ODOF and the Federal agencies all offer information on their programs to the public. Air monitoring surveillance is provided through the Department's programs and

through aircraft plume tracking conducted by those conducting the burning. Emission inventories are developed in cooperation with ODOF using state of the art fuel consumption models. The Department oversees ODOF's program through periodic reviews and through ORS 477.515 which requires that the Director of the Department approve the program.

4.12.3.3 Demonstration of Attainment

This section describes the application of emission reduction credits described in Section 4.12.3.2. in demonstrating attainment of the NAAQS. The calculations are based on the application of receptor modeling and proportional rollback of 1994 analysis of projected PM₁₀ emission. The Demonstration of Attainment analysis follows EPA supplemental guidance.²⁸

Receptor modeling - proportional rollback calculations were completed in lieu of dispersion modeling because no historical meteorological database exists in La Grande. The receptor modeling - rollback approach is appropriate for use in La Grande because of the complex topography of the area, the lack of industrial emissions, the relatively uniform distribution of area source emissions and the fact that woodstove smoke and fugitive dust are the principal emission sources. Saturation monitoring studies have demonstrated that the North Willow Street site is located within the area of maximum PM₁₀ concentrations. Appendix 8 contains the detailed rollback calculations that support the following text.

Strategy Emission Reductions - 24-Hour Worst Case Day

Attainment of the 24-hour NAAQS in 1994 will require an 17% reduction in worst case day emissions equalling a reduction of 1,447 pounds per day. The needed reduction is achieved through the strategy elements listed below.

²⁸US EPA, OAQPS Memorandum from J. Calcagni to Regional Air Directors re: PM-10 SIP Attainment Demonstration Policy for Initial Moderate Nonattainment Areas. March 4, 1991.

Table 4.12.3-7: Summary of 24-Hour Emission Reductions To Be Achieved by 1994

<u>Strategy Element</u>	<u>Credit</u>	<u>Emission Reduction</u>
Industrial Emission Reduction	30%	370 Pounds/Day
Winter Road Sanding Practices	30%	436 Pounds/Day
Woodburning Strategies:		
- Woodburning Curtailment	30%	1,679 Pounds/Day
- Certification of Woodstoves	24%	852 Pounds/Day
- Woodstove Replacement	2%	105 Pounds/Day
Woodstove Strategies, Total		<u>2,636 Pounds/Day</u>
Total reduction from all strategies....		3,442 Pounds/Day
Required emission reduction		3,350 Pounds/Day

(Note: Because emission reductions are calculated on a declining balance basis, the product of percentage credits and total reduction (3,442 pounds/day) will not yield the individual element emission reductions shown. See Appendix 8)

No credits have been taken for the City of La Grande's public education programs and the voluntary forestry smoke management program. Credits related to restrictions on open burning or many of the fugitive dust control measures included in the City's Air Quality Program are not included in the demonstration of attainment because the emissions from the sources cannot be inventoried.

4.12.3.4 Air Quality Standard Maintenance

During the six year period following attainment of the NAAQS, a net decrease in emissions is projected to occur as a result of attainment strategies and the replacement of older conventional stoves with certified cordwood and pelletstoves, offsetting increases in fugitive dust and transportation emissions. Both the 24-hour and annual NAAQS are projected to be maintained past the year 2000 at which time worst case day and the annual average PM₁₀ air quality is projected to be 134 and 46 µg/m³, respectively.

4.12.3.5 Contingency Measures & Emission Reductions

Section 172(C)(9) of the Clean Air Act Amendments of 1990 Clean Air Act requires that the State Implementation Plan include contingency measures for significant sources of PM₁₀. These measures are to take effect without any further action by the state if the area fails to attain the PM₁₀ standard by the attainment date required by the Act. Contingency measures are triggered upon publication by EPA of notice in the Federal Register that the area has failed to attain the National Ambient Air Quality Standard for

PM₁₀ by the attainment date required in the Clean Air Act. Depending upon the effectiveness of the control strategies, EPA could make this determination in 1994 or subsequent years. The following elements have been included to fulfill this requirement of the Act:

State backup authority from the 1991 Legislature requires removal of uncertified woodstoves upon sale of a home. The rules to implement the statute are being proposed as a revision to OAR 340 Division 34.

Other contingency measures include a mandatory woodburning curtailment program established under City of La Grande ordinance designed to achieve at least a 50% compliance rate (or implemented under the Department's authority should local government fail to act) and the woodstove certification program. A mandatory forestry smoke management program may be included in future revisions to the Forestry Smoke Management Plan that would be implemented should slash burning smoke be implicated as a significant contributing source to nonattainment.

Emission Reductions From Contingency Measures

The attainment plan is projected to reduce PM₁₀ emissions by about 156 tons per year between the 1994 projected emissions inventory (without strategies applied) and the 1994 attainment period inventory (with all strategies applied). Some control measures in the attainment plan will continue to provide emission reductions after 1994; the contingency plan, if triggered, would also provide additional emission reductions after 1994.

- The woodstove certification program will provide a 48 ton per year net reduction (accounting for increased firewood use due to population growth) in residential woodburning emissions between the years 1994 and 2000.
- Woodstove emissions would be reduced an additional 32 tons per year by the year 2000 due to the requirement in the contingency plan for removal and destruction of uncertified woodstoves upon home sale.
- The application of BACT emission control technology to industrial emissions would result in an additional reduction of 10 tons per year of PM₁₀ emissions. This reduction would further reduce the emission reduction credits Boise Cascade achieved through the planned replacement of their hog fuel boiler with a natural gas fired unit.
- Additional contingency plan reductions which cannot be quantified by the emission inventory would be achieved through seasonal restrictions on open burning, additional slash burning emission reductions.

These contingency measures represent at least a 90 tons per year reduction in PM₁₀ emissions. This is a 57% or more additional emission reduction compared to the 156 ton per year emission

reduction found in the attainment plan.

4.12.3.6 Enforceability

The Clean Air Act requires SIP control strategies to be enforceable. Based on EPA guidance, a voluntary woodstove curtailment program may be credited with a 30% emission reduction. Emission reductions achieved in other communities that have operated aggressive voluntary curtailment programs have been shown to obtain reductions that are substantially greater than 30%. For example, the actual average compliance rate on days surveyed during the 1989-90 season under Klamath County's voluntary program was 45% as measured by infrared field surveys.

The road sanding strategy is implemented through a City of La Grande's Air Quality Program and Development Standards Section of the Zoning Ordinance as well as commitments from the Highway Division of the Oregon Department of Transportation. Industrial control measures are enforced through the Department. Union County is responsible for enforcement of the agricultural field burning smoke management program. The Oregon Department of Forestry is responsible for enforcing all provisions of the forestry smoke management program.

4.12.3.7. Public and Governmental Involvement

The PM₁₀ emission control programs implemented through this revision to the State Implementation Plan has been developed in close cooperation with the La Grande Air Quality Advisory Committee, the City of La Grande, the Oregon Department of Forestry, the Union County Seed Growers Association, the Environmental Protection Agency and others. Public comment on the SIP will be received through written comment prior to and during public hearings on the SIP.

4.12.3.8. Emergency Action Plan Provisions

OAR 340 Division 27 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 significant harm level for PM₁₀ particulate matter of 600 $\mu\text{g}/\text{m}^3$, 24-hour average (adopted by the Environmental Quality Commission April, 1988). The PM₁₀ "Alert" level is 350 $\mu\text{g}/\text{m}^3$; the "Warning" level is 420 $\mu\text{g}/\text{m}^3$ and the "Emergency" level is 500 $\mu\text{g}/\text{m}^3$,

24-hour average. These levels must be coupled with meteorological forecasts for continuing air stagnation to trigger the Action Plan. None of these levels have been recorded in La Grande.

Authority for the Department to regulate air pollution sources during emergency episodes is provided under ORS 468, including emissions from woodstoves. The provisions of HB2175 which authorizes the Department to regulate woodstoves are implemented under OAR 340-34-150 through - 175. These rules and statute give the Department authority to regulate woodstoves under emergency episode conditions. When there is an imminent and substantial endangerment to public health (the significant harm level), 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.

4.12.4 Implementation of the Control Strategy

All of the elements of the attainment strategy will be adopted and implemented well within the 18 months allowed by the Clean Air Act. Specific elements of the strategy were implemented as noted below.

4.12.4.1 Schedule for Implementation

The Oregon Woodstove Certification Program became effective June 30, 1986; the City of La Grande resolution implementing a voluntary woodburning curtailment, open burning and fugitive dust control programs will be adopted and implemented by November 15, 1991. The Union County field burning smoke management program was adopted June 5th, 1991 and was implemented during the summer of 1991. The Oregon Department of Forestry will establish a voluntary smoke management plan prior to November 15, 1991.

The provisions of HB2175 (removal of stoves upon home sale, State backup authority to require mandatory woodburning curtailment programs and prohibition of the resale and installation of used uncertified woodstoves) became effective in September 1991. Rules to implement the statute will be adopted by the Environmental Quality Commission prior to November 15, 1991. Other supporting rules, such as the La Grande RACT industrial rules will be adopted on the same schedule. All of these rules will be immediately effective.

4.12.4.2 Rules, Regulations and Commitments

The following rules and commitments have been adopted to assure the enforceability of the control strategies. The statutory ban on the installation of used, uncertified woodstoves is to be

codified into State rules by the Building Codes Agency. Contingency measures are marked with an asterisk (*).

State of Oregon Rules

Woodstove Certification Program	OAR 340 Division 34
Woodstove Changeout Program	OAR 340 Division 34
Ban on Used Woodstove Sale	OAR 340-34-010
La Grande Industrial RACT Controls	OAR 340-30-200 to 230
Woodstove Removal On Home Sale *	OAR 340-34-200
Mandatory Curtailment Authority *	OAR 340-34-150

City of La Grande Resolutions & Ordinances

Air Quality Improvement Program Resolution 4122, Series 1991	
City of La Grande Zoning Ordinance	Ordinance XX-XXX
La Grande Mandatory Curtailment *	Ordinance XX-XXX

Union County Ordinances

Field Burning	Ordinance 1991-6
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Interagency Commitments

Winter Road Sanding Program, Oregon Department of Transportation Highway Division.

Forestry Smoke Management Voluntary Program

4.12.4.3 Reasonable Further Progress

Part D of Title I of the Clean Air Act Amendments of 1990 (Section 171) requires that State Implementation Plans for PM₁₀ make Reasonable Further Progress (RFP) toward attainment of the National Ambient Air Quality Standards (NAAQS). The Act further specifies that RFP means those annual incremental reductions of PM₁₀ emissions necessary to attain the NAAQS by the attainment date. The Department believes that the scheduled implementation of the provisions of the La Grande PM₁₀ SIP and attainment of the NAAQS within the La Grande nonattainment area fulfills the RFP requirement of the Act.

4.12.4.4 Revisions to the Plan

In the event that the La Grande nonattainment area fails to meet Reasonable Further Progress milestones, or the applicable PM₁₀ attainment deadline, then the Department, as the designated lead agency, will first notify in writing the affected local governments and industrial organizations. Within 30 days of notification, the Department will complete a written analysis of control strategy

commitments, evaluating the adequacy of implementation. Any deficiencies in implementation will be corrected through rulemaking, if necessary, within six months of the original deficiency notification. The six month time frame will accommodate the State's normal rulemaking process. Additionally, affected parties will be notified of the requirement to implement expeditiously the contingency measures, if necessary. As the lead agency, the Department will submit a plan revision that meets all relevant Clean Air Act and EPA requirements within 18 months of a notification from EPA that the area has failed to meet the attainment deadline and has been reclassified to "Serious."

4.12.4.5 New Source Review Permitting Authority

The New Source Review rules (OAR 340-20-220 to -276) and Air Contaminant Discharge Permit rules (OAR 340-20-140 to -185) identify the procedures for reviewing and permitting new sources. The significant emission rate for PM₁₀ emissions in the La Grande Nonattainment Area is twenty five tons per year (OAR 340-20-225). The New Source Review rule (OAR 340-20-240) identifies requirements for sources in nonattainment areas, including applying the lowest achievable emission rate (LAER) and a 1:1 offset ratio, both required in the La Grande Nonattainment Area.

4.12.4.6 Delegation of Lead Agency Authority

Barbara Roberts, Governor of the State of Oregon, has delegated the Department of Environmental Quality as the lead agency to implement, maintain and enforce the requirements of the Clean Air Act for PM₁₀ air quality in La Grande.

4.12.5 Resource Commitments

Residential woodburning programs are being implemented by the City of La Grande with a FY 91 budget of \$15,000 to operate public information programs, the daily woodburning advisory, and voluntary curtailment program (including field surveillance) as well as progress reporting. The Department operates the air monitoring network used by the City for the daily woodburning advisory, provides public information assistance, and administers the woodstove certification program; these services are part of the statewide Department's base program identified in the State/EPA Agreement (SEA).

Financial assistance programs are available through the City of La Grande's program to assist low-income households in weatherization and replacement of conventional woodstoves with cleaner burning units. About \$325,000 has been raised to date.

Industrial compliance assurance programs are implemented by DEQ as part of the statewide base program; resources are identified in the SEA. Open burning control programs are implemented by the

City and local fire departments.

The voluntary forestry slash burning programs will be coordinated by the Oregon Department of Forestry in cooperation with the US Forest Service, the Bureau of Land Management and other private forest land owners as part of their base programs.

4.12.6 Public Involvement

Development of the La Grande PM₁₀ control strategy entailed several areas of public involvement including continuing Citizen Advisory Committees, public participation at hearings on proposed industrial source rules and attendance at hearings conducted by the La Grande City Council.

4.12.6.1 Citizen Advisory Committee

The La Grande City Manager appointed members to the La Grande Air Quality Advisory Committee in June of 1989 to assist the City and the Department in the development of control programs for the La Grande Nonattainment Area. The 13 member committee was advised of the requirements of the Clean Air Act and State Implementation Plan, considered alternative control strategies and provided recommendation to the City in October, 1989.²⁹

4.12.6.2 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.

4.12.6.3 Public Hearings

The Advisory Committee recommendations were consolidated in the form of City Resolution No. 4122, Series 1991. Public comment on the resolution were heard July 17th and August 1st, 1991 and adopted by the City on August 7, 1991. The Resolution is found in Appendix 4.

Public hearings on the proposed SIP are scheduled for October, 1991.

4.12.6.4 Intergovernmental Review

Public hearing notices regarding adoption of this revision to

²⁹Report and Recommendations of the La Grande Air Quality Committee to Improve Air Quality in the City of La Grande. Committee Report of October 1, 1989 submitted to the Mayor and City Council of La Grande.

the State Implementation Plan will be distributed for local and State agency review through the A-95 State Clearinghouse process forty-five days prior to adoption by the Environmental Quality Commission.

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JEC:BRF
RPT\AH20066
(10/29/91)

**RULEMAKING STATEMENTS FOR PROPOSED LA GRANDE PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE OF OREGON CLEAN AIR ACT IMPLEMENTATION PLAN**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-20-047. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

La Grande is a nonattainment area for PM₁₀ air pollution. PM₁₀ refers to particulate matter ten micrometers or smaller in diameter. PM₁₀ particles are considered a risk to human health due to the body's inability to effectively filter out particles of this size.

The federal Clean Air Act requires that States develop and adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ health and welfare standards are brought into attainment with those standards within prescribed time frames. The proposed control strategy document describes the State of Oregon plan to attain and maintain the annual and 24-hour PM₁₀ standards in the La Grande PM₁₀ Nonattainment Area.

The principal means of achieving the necessary air quality improvements is through PM₁₀ emission reductions from woodstoves/ fireplaces and road dust. Additional reductions are expected from the phase in of certified woodstoves, a ban on the installation of used, non-certified stoves, and seasonal restrictions on open burning. Contingency plans to be implemented if the airshed fails to attain the air quality standards by December 31, 1994, include implementation of a mandatory woodburning curtailment program established under city ordinance (with state backup authority), removal of woodstoves upon sale of a home, and new industrial controls.

(3) Principal Documents Relied Upon

The Clean Air Act Amendments of 1990, Title I. 42 U.S.C. 7401 et seq., as amended. November 15, 1990.

PM₁₀ SIP Development Guideline, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park NC, June 1987, EPA-450/2-86-001.

Previous staff reports to the Environmental Quality Commission (EQC):

Agenda Item D, January 22, 1988, EQC Meeting, Informational Report: New Federal Ambient Air Quality Standard for Particulate Matter (PM₁₀) and Its Effects on Oregon's Air Quality Program.

Guidance Document for Residential Wood Combustion Emission Control Measures, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park NC, September 1989, EPA-450/2-89-015.

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

BRF:e
RPT\AH15015
(8/14/91)

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED LA GRANDE PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN**

PROPOSAL SUMMARY

The La Grande area exceeds Federal and State air quality standards. The federal Clean Air Act requires that States develop and adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ health and welfare standards are brought into attainment with those standards within prescribed time frames. A contingency plan is also required to be developed and automatically implemented if the area fails to meet the deadline. The proposed control strategy document describes the State of Oregon plan to attain and maintain PM₁₀ health standards in the La Grande PM₁₀ Nonattainment Area.

The principal means of achieving the necessary air quality improvements is through PM₁₀ emission reductions from woodstoves/fireplaces and road dust. Additional reductions are expected from the phase in of certified woodstoves, a ban on the installation of used, non-certified stoves, and seasonal restrictions on open burning.

The implementation of the PM₁₀ control strategy involves residents, local governments, and state and federal agencies. The group most affected by the proposed PM₁₀ control strategy for La Grande are the residents with woodstoves or fireplaces. If the contingency plan is implemented, local industry would also have to take steps to reduce plant emissions. No adverse fiscal impact on small businesses (less than 50 employees) is anticipated. Heating system dealerships may benefit from the contingency measure requiring woodstove removal upon sale of a home.

COSTS TO RESIDENTS WITH WOODSTOVES OR FIREPLACES

Woodstove and fireplace emissions will be reduced by a public education program addressing firewood seasoning and woodstove operation, a local voluntary woodburning curtailment program, the Oregon woodstove certification program, financial assistance programs for low income households for replacement of existing woodstoves with cleaner burning units, and a ban on installation of used, non-certified woodstoves.

The typical cost of woodburning curtailment is estimated at \$2-\$5 per curtailment day per woodburning home, depending primarily on the type of alternative heat, amount of weatherization, and size of home. According to a 1988 wood heating survey, approximately 67% (2,987) of the homes in La Grande burn wood. These homeowners would be asked not to burn wood on 25 to 50 days during the winter

heating season when the voluntary curtailment program is in effect. Based on these estimates, the total homeowner cost associated with the voluntary curtailment program may range between \$150,000 and \$750,000 dollars per year.

Costs associated with the ban on the sale and installation of used noncertified woodstoves is discussed in the fiscal impact statement for proposed rule (OAR 340-34-010).

Costs associated with the contingency plan element requiring the removal of woodstoves from homes upon sale is discussed in the fiscal impact statement for the proposed rule (OAR 340-34-200).

The above costs are somewhat offset by a woodstove replacement program for low-income families in La Grande. A \$325,000 community block grant was awarded to the City in June of 1991.

CONTINGENCY PLAN COSTS TO WOOD PRODUCTS INDUSTRY

If La Grande fails to attain the air quality standards by the Clean Air Act deadline of December 31, 1994, a reduction in current industry emissions would be required under the contingency plan. However, it is likely that local industry will not be affected by this contingency measure, as they have committed to install new equipment prior to December 31, 1994 which may satisfy contingency plan requirements for emissions control. If this does not occur, and La Grande fails to demonstrate attainment on this date, the contingency requirement for industrial emissions would be implemented, pursuant to the Department's proposed Industrial Contingency Requirements for PM₁₀ Nonattainment Areas (OAR 340-21-005 to -250). These emission reductions are estimated to be about 78 tons of PM₁₀ per year. The estimated capital cost for local industry to install these control systems is approximately \$1 million, with related operation and maintenance costs estimated at \$50,000 - \$80,000 per year. Additional details are discussed in the proposed Industrial RACT/BACT Rule Fiscal Impact Statement (OAR 340-21-005 to 250).

COSTS TO STATE AND LOCAL GOVERNMENT AGENCIES

The attainment plan includes a commitment from the City of La Grande and State of Oregon Department of Transportation to reduce emissions from winter road sanding by 10% through rapid cleanup of sanding aggregate and use of less sanding material. The Department does not believe a reliable estimate of the costs associated with this 10% reduction can be ascertained. Other costs for which no reliable estimate can be made are those associated with the fugitive dust controls contained in the La Grande's Air Quality Improvement Program, which are part of the City's Development Standards Section of the Zoning Ordinance.

Costs to the Oregon Department of Forestry (ODOF) associated with operation of the voluntary forestry smoke management program are

about \$23,000 per year for forecasting and program coordination services. Costs to the US Forest Service and private land owners to reschedule slash burning to days with favorable smoke dispersion capacity have been estimated by ODOF at \$23,000 per year.

The contingency plan industrial emission control provisions, if implemented, will require additional plan reviews, inspections, monitoring report reviews, and other compliance assurance activities by Department of Environmental Quality staff. This additional work would be integrated into the permit program and fee structure.

The compliance assurance surveys for the voluntary woodburning curtailment program will be conducted by the City of La Grande. La Grande has been funded \$15,000 for the 1991-92 winter heating season to cover the costs associated with both the curtailment and the public education program.

NOTICE OF PUBLIC HEARING

Hearing Dates: September 26,
27, 30 & October
1, 1991

Comments Due: October 2, 1991

WHO IS AFFECTED:

Individuals, especially those with woodstoves, and board product industries statewide, local governments, agricultural operations and industries in or near the Medford-Ashland, Klamath Falls, Grants Pass and La Grande PM₁₀ Nonattainment Areas.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the State of Oregon Clean Air Act Implementation Plan to:

- o Revise fine particulate (PM₁₀) Pollution Control Strategies for the Medford, Grants Pass and Klamath Falls areas;
- o Add a new PM₁₀ Control Strategy for the La Grande area;
- o Add new regulations for woodstoves, OAR Chapter 340, Division 34;
- o Add new contingency industrial particulate emission standards for PM₁₀ nonattainment areas, OAR Chapter 340, Division 21;
- o Revise the Medford/Grants Pass Particulate Standard Rules, OAR Chapter 340, Division 30;
- o Revise Board Products Particulate Emission Standard Rules, OAR Chapter 340, Division 25;
- o Revise Ambient Air Standard Rules, OAR Chapter 340, Division 31;
- o Revise Rogue Basin Open Burning Control Area rules, OAR Chapter 340, Division 23.

WHAT ARE THE HIGHLIGHTS:

The federal Clean Air Act requires states to submit PM₁₀ attainment Control Strategies for PM₁₀ Nonattainment Areas to the U.S. Environmental Protection Agency (EPA) by November 15, 1991. The Control Strategies specify how federal PM₁₀ air quality standards will be attained by the Act's deadline of December 31, 1994. They primarily rely on controlling PM₁₀ emissions from residential woodheating, industry and open burning.

ATTACHMENT D

The proposed rules which would implement PM₁₀ Control Strategies will:

- o Regulate residential woodheating according to new legislative authority including:
 - > Banning the sale of used, uncertified woodstoves statewide;
 - > allowing DEQ to prohibit woodheating on poor air quality days if local governments fail to adopt or implement such programs where needed;
 - > Requiring the destruction of uncertified woodstoves upon the sale of a home as a contingency measure if an area fails to attain compliance with the PM₁₀ standard by December 31, 1994.
- o Require industries in PM₁₀ nonattainment areas to meet Reasonably Available and Best Available Control Technology requirements of the Clean Air Act as a contingency measure if areas fail to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Require tighter meteorological criteria for allowing open burning in the Rogue Basin Open Burning Control Area, and ban open burning from November through February in this area as a contingency if it fails to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Address housekeeping/enforceability issues raised by EPA with respect to existing state regulations covering the Board Products Industry, Medford/Grants Pass Industrial Particulate Emission and Ambient Air Standards.

HOW TO COMMENT:

Copies of the complete proposed rule packages may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact:

Merlyn Hough at (503) 229-6446 (Medford-Ashland)
John Core at (503) 229-5380 (Klamath Falls)
Howard Harris at (503) 229-6086 (Grants Pass)
Brian Finneran at (503) 229-6278 (La Grande)
Andy Ginsburg at (503) 229-5581 (Industry)
David Collier at (503) 229-5177 (Woodstoves)

ATTACHMENT D

Public hearings will be held before a hearings officer at:

7:00 pm
September 26, 1991
Commission Hearing Room
Courthouse Annex
Klamath Falls, Oregon

7:00 pm
September 30, 1991
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
September 27, 1991
City Council Chambers
101 NW "A" Street
Grants Pass, Oregon

7:00 pm
October 1, 1991
City Hall
1000 Adams Avenue
La Grande, Oregon

3:00 pm
October 1, 1991
DEQ Offices
811 SW Sixth Avenue
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received no later than 5 pm, October 2, 1991.

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments and Control Strategies identical to the proposed amendments, adopt modified rule amendments and Control Strategies on the same subject matter, or decline to act. The adopted rules and Control Strategies will be submitted to the EPA as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on November 7, 1991, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

YM:a
RPT\AH15041
(8/14/91)

168.300

PUBLIC HEALTH AND SAFETY

(2) in determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(L) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.785]

168.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.825]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.782]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register

- L N Paving of gravel streets;
- L N Phase-out of unpaved roads, parking lots and staging areas;
- L N Requirements for dust control plans for construction, land clearing or material storage piles;
- L N Paving of commercial developments;
- L N Curbing of new paved streets;
- L N Stabilization of unpaved areas using chemical palliatives;
- S N Control of highway right-of-way trackout from unpaved areas by Oregon Department of Transportation rules;

Open Burning Controls:

- L N Prohibition on residential open burning on curtailment days;
- L N Mandatory agricultural open field burning smoke management program;
- S C Voluntary forestry smoke management program implemented within Union County and surrounding forest lands if smoke is a significant contributor to nonattainment.

Industrial Controls:

- S N Require installation of RACT industrial particulate emission controls.
- S C Require installation of BACT industrial particulate emission controls.

BRF:e
 RPT\AH15017
 (8/14/91)

DEQ LAND USE EVALUATION STATEMENT
FOR RULEMAKING

PROPOSED LA GRANDE PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN

(1) Explain the purpose of the proposed rules.

The purpose of the proposed revision to the State Implementation Plan (SIP) is to assure that the La Grande area attains the PM₁₀ standards within the time frames prescribed by the federal Clean Air Act Amendments of 1990. The control strategy includes a compilation of existing and proposed state and local rules and commitments which become federally enforceable upon adoption of the SIP by the Environmental Quality Commission and approval of the SIP by the U.S. Environmental Protection Agency.

(2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes No

(a) If yes, identify existing program/rule/activity:

The control strategy includes concurrently proposed new industrial PM₁₀ emission standard rules and other related house-keeping measures which affect a land use program identified as "Issuance of Air Contaminant Discharge Permits (ACDP)".

No other concurrently proposed provisions of the control strategy are:

- (1) Specifically referenced in the statewide planning goals; or
- (2) Reasonably expected to have significant effects on:
 - (a) resources, objectives or areas identified in the statewide planning goals, or
 - (b) present or future land uses identified in acknowledged comprehensive plans.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes No

If no, explain: Not Applicable.

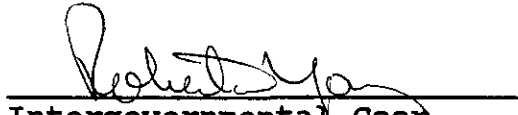
(c) If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

Not Applicable.

(3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not Applicable.


Division


Intergovernmental Coop.

10-21-91
Date

ADG:a
MISC\AH19055
(9/9/91)

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 24, 1991

TO: Environmental Quality Commission
FROM: Linda Wishart, Hearings Officer *LW*
SUBJECT: Hearings Report for La Grande PM₁₀ Control Strategy

Five hearings were held to accept testimony on four PM₁₀ Control Strategies and three packages of supporting rules required to meet the Clean Air Act November 15, 1991 deadline for PM₁₀ State Implementation Plan revisions. These hearings were authorized by the Environmental Quality Commission at an August 22, 1991, telephone conference.

On September 26, 1991 a public hearing, held in the Commission Hearing Room of the Courthouse Annex, Klamath Falls, Oregon, was attended by 24 persons; 15 gave oral comments and 7 submitted written comments.

On September 27, 1991, a public hearing was held at the City Council Chambers, 101 NW "A" Street, Grants Pass, Oregon. There were nine persons in attendance, one gave oral testimony and two submitted written comments.

On September 30, 1991, a public hearing was held at the Smullin Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 34 persons present, 15 gave oral testimony and 13 submitted written comments.

On October 1, 1991, a public hearing, held in Zabel Hall, room 110, Eastern Oregon State College, La Grande, Oregon, was attended by 21 persons; five gave oral comments, four submitted written comments.

On October 1, 1991, a public hearing was held at the conference room of the Oregon Operations office of the U.S. Environmental Protection Agency (EPA), 811 SW Sixth Avenue, Portland, Oregon. Four people attended. Three gave oral testimony. No written testimony was received.

Additional testimony was received prior to the October 2, 1991 deadline. Copies of written comments have been provided to the Environmental Quality Commission. The following is a summary of all comments received, both oral and written.

La Grande Control Strategy

No.	Testimony Summary/Issues	Whose Comment
1.	EPA noted a discrepancy in the emission reduction calculations involving woodstove certification credit. Correcting this calculation significantly decreases the emissions reduction credit claimed by this control measure and results in an inability to demonstrate attainment with the PM₁₀ standard.	EPA
2.	EPA questioned whether the monitoring site data used to demonstrate attainment truly represent the highest impact point in the airshed.	EPA
3.	EPA questioned adequacy of the voluntary woodstove curtailment program if the required 30% compliance rate was not achieved. Department needs to indicate what action will be taken if compliance surveys indicate less than 30%.	EPA
4.	EPA identified additional documentation needed for the control strategy. Those are: 1) fugitive dust emission reductions, 2) the emission factor used for wood burning, and 3) contingency measure reductions totaling 25%.	EPA
5.	Two citizens testified that the data presented in La Grande Control Strategy on home heating does not incorporate woodstove changes since 1988. Records show major changes have occurred. A local chimney sweep business showed 50% upgrades to gas and 10% to pellet stoves, and that woodstoves are becoming a secondary source rather than a primary source of home heat. A new survey should be conducted by an independent consultant to provide accurate and unbiased data on current status of home heating.	L1, L5

6. **Two citizens commented on the inadequacy of this summer's field burning smoke management program in Union County and requested additional measures.** Although field burning is not a major contributor to the PM10 problem in La Grande, additional measures belong in the control strategy. Field smoke produces a quicker, more severe reaction from those suffering from respiratory ailments than do other sources of pollution. Also, no data is available on chemicals present in field smoke. DEQ should conduct a study analyzing toxic air pollutants in field burning smoke. Two-way radios should be required for growers who burn. This basic smoke management tool is inexpensive and critical. DEQ should have required this and other controls in the smoke management program. L6, L7
7. **City of La Grande questioned data in the control strategy which indicated that more dust is generated from paved streets than unpaved streets. The City also pointed out minor discrepancies in the control strategy which need correction.** L5
8. **Sierra Club supports woodstove curtailment provisions and suggests additional measures for forestry smoke management.** There should be designation of restricted areas in the control plan, not the contingency plan. There should be no slash burning on yellow or red days within a 50-mile zone of nonattainment boundaries. P6

9. **The Wood Heating Alliance and Wood Energy Institute found objections to the 50% credit assigned to certified stoves, inclusion of the term "durable", and the woodstove replacement program priorities.**

P8, P9

a. The Control Strategies reference studies that show 50% cleaner-burning woodstoves. These studies pertain to stoves no longer on the market. EPA Phase II stoves tested out at 90% and 70% reductions in the Klamath Falls and Crested Butte studies.

b. Reference to "durable" woodstoves should be withdrawn. Durability will be addressed by market and EPA compliance testing, and is preempted by HB 2175 until after December 1994.

c. Programs to encourage replacement of uncertified woodstoves are biased against replacements with certified woodstoves and are unacceptable.

10. **Representatives from both the Umatilla National Forest and the Wallowa-Whitman National Forest Management oppose the contingency measure for a mandatory smoke management program if La Grande fails to demonstrate attainment. Recent reports on forest health of the Blue Mountains indicate more extensive use of prescribed burns is needed for disease control and to reduce threat of wildfires.**

L2, L3,
L4

They requested that DEQ evaluate and address the following:

a. There should be no additional restrictions imposed on prescribed burning. Professional use of fire already follows strict guidelines, and addition limits are unnecessary.

b. Rationale for the proposed 20-mile designated area boundary for La Grande is unclear and appears arbitrary. Burning should be based on evaluation of geography, topography, wind direction, and other burning prescription factors.

11. **Other comments not related to the La Grande PM₁₀ Control Strategy:**

a. Allow more participation by local government and the local air quality committee in funding decisions made by DEQ for La Grande. L1,

b. The intergovernmental agreement between the City of La Grande and DEQ for conducting a public education program was signed in July, effective in August, and has yet to be implemented. DEQ should follow through with this contract. L6

c. Data from nephelometers and filter samples don't correspond. L5

d. Results from filter sampling takes too long to obtain. Speed up this process if possible. L5

Testimony References

Public Testimony Given in La Grande

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
L1.	A	Grant Darrow, Chimney Sweep
L2.	B	Francis Mohr, Acting Air Resource Manager Wallowa-Whitman National Forest
L3.	B	R.M. Richmond, Forest Supervisor, Wallowa-Whitman National Forest
L4.	C	Jeff Blackwood, Forest Supervisor, Umatilla National Forest
L5.	D	Larry Dalrymple, City Manager, La Grande
L6.	no	Jim Brown, Air Quality Committee, Citizens
L7.	no	Roberta Bates, Resident, La Grande

Public Testimony Given in Klamath Falls

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
K1.	no	Doss Decker, Resident, Klamath Falls
K2.	no	Nancy Roeder, Resident, Klamath Falls
K3.	no	Harry Fredricks, County Commissioner
K4.	E	Stan Meyers, Vice President Engineering, JELD-WEN, INC.
K5.	F	Joseph Riker, Community Development Director, City of Klamath Falls
K6.	G	John D. Monfore, Land Use Manager, Weyerhaeuser

K7. no Leo Dunn, Resident,
Klamath Falls

K8. H Drew Honzel, Columbia Plywood Corp.

K9. I Ron Loveness, Resident, Klamath Falls

K10. no Del Parks, State Representative,
Klamath County

K11. J James Keller, City Manager,
Klamath Falls

K12. K Kurt Schmidt, Employee,
Modoc Lumber Co.

K13. no Roy Ford, Resident,
Klamath Falls

K14. L Steve Kandra,
President Klamath County Chamber of
Commerce

K15. no Bob Flowers, Farmer, Klamath Falls

K16. M Nina Pence, President,
League of Women Voters,
Klamath County

K17. N Carol Yarbrough, President,
Citizens for Quality Living

Public Testimony Given in Grants Pass

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
G1.	no	Paul Brandon, Resident, Grants Pass
G2.	O	Dennis Spencer, Regional General Manager, Stone Forest Industries
G3.	P	Candace Bartow, Mayor, Grants Pass
G4	Q	Josephine County Board of Commissioners

Public Testimony Given in Medford

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
M1.	R	Wallace Skyrman, Resident, Central Point
M2.	S	Anna Hirst, League of Women Voters
M3.	T	Frank Hirst, Audubon Society
M4.	U	Robert Palzer, PhD., Coalition to Improve AQ
M5.	no	James Dodson, Resident, Medford
M6.	no	Gary Stevens, Environmental Health Department, Jackson County
M7.	V	Vera Morrell, Chairperson, Coalition to Improve Air Quality
M8.	W	Paul Wyntergreen Regional Director, Oregon Environmental Council
M9.	X	Neil Robbins, Resident, Medford
M10.	Y	Patricia Kuhn, Resident, Medford
M11.	no	Ronald Meyer, Farmer, Talent
M12.	no	Myra Erwin, Chairperson, Rogue Group Sierra Club
M13.	Z	William Barbour, Farmer, Medford
M14.	Z	Victoria Montgomery, Resident, Medford
M15.	AA	Jan Young, Pulmonary Rehabilitation Coordinator, Medford
M16.	BB	Greg Miller, Executive Vice President, Southern Oregon Timber Association

M17. BB Bob Morris,
Environmental Affairs Committee Chair,
Southern Oregon Timber Association

M18. CC Kathleen Muir, Resident, Ashland

M19. DD Phyllis Hughes,
Rogue Group Sierra Club

M20. EE Garl Grigsby, Double Dee Lumber Company

M21. FF Anne & Bob Gottschalk,
Residents, Talent

M22. GG Robert Owens, Co-Executive Council
American Indian Cultural Center

M23. HH C. Herschel King, MD
Retired Anesthesiologist, Ashland

Public Testimony Given in Portland and Misc. Letters Submitted

<u>NO.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
P1.	no	Joe Weller, Lung Association
P2.	no	Jim Britton, Executive Director, Asphalt Paving Association
P3.	no	Harry Fredricks, Klamath County Commissioner
P4.	II	David Kircher, Chief Air Programs Development Section
P5.	JJ	David Kircher, Chief Air Programs Development Section
P6.	KK	Bob Palzer, Air Quality Coordinator, Sierra Club
P7.	LL	James Whitty, Legislative Counsel, Associated Oregon Industries
P8.	MM	Tim Nissen, President, Wood Energy Institute
P9.	NN	John Crouch, Emissions Specialist, Wood Heating Alliance

LLW:a
RPT\AH20069
(10/24/91)

**RESPONSE TO TESTIMONY RECEIVED AT THE PUBLIC HEARING
ON THE PROPOSED PM₁₀ CONTROL STRATEGY FOR THE
LA GRANDE NONATTAINMENT AREA**

Issue No. 1: The Environmental Protection Agency pointed out a discrepancy in the emission reduction calculations related to woodstove certification credit in the SIP, which would result in a substantive change in the overall demonstration of attainment for La Grande.

Response: The Department recognized this error and made the necessary corrections to the woodstove certification credit calculations. Since this resulted in an overall shortfall in the total emission reductions needed to demonstrate attainment, additional emission reductions needed to be identified. A 30% credit was identified by adding Industrial RACT controls to the attainment plan, as required by the Clean Air Act. This element was discussed with the local industry, which agreed to this approach based on future emission reductions expected from the replacement of wood-fired boilers with a natural gas boiler and other improvements. Another emission reduction was obtained by tightening the fugitive road dust element to increase the reduction credit from 10% to 30%. This was accomplished by obtaining a commitment from the state Department of Transportation to further reduce emissions from road sanding in La Grande.

Issue No. 2: EPA questioned whether the monitoring site data used to demonstrate attainment truly represents the highest impact point in the airshed.

Response: The Department is reasonably confident that the current monitoring site is representative of highest PM₁₀ levels in the airshed based on previous multiple point sampling studies and the fact that the site is closest to the three major sources of PM₁₀ in the airshed (i.e., woodsmoke, fugitive dust, and industry). The Department is supplying EPA with all pertinent monitoring data that exists for the La Grande area to document the representativeness of this site. In addition the control strategy has been modified to commit to conducting further area wide monitoring acceptable to EPA, and to revise the control strategy as necessary if a higher impact site is found.

Issue No. 3: EPA raised concern over the adequacy of the voluntary woodstove curtailment element in the Attainment Plan, should the 30% compliance rate not be achieved.

Response: Through subsequent discussions with EPA, the Department has agreed to add to the SIP a commitment to provide economic and technical assistance to the City of La Grande for increased public education efforts, should annual compliance surveys indicate less than a 30% compliance rate related to voluntary woodstove curtailment.

Issue No. 4: Additional issues of a technical nature were raised by EPA concerning additional documentation of fugitive dust emission reductions, the emission factor for wood burning, and contingency measure reductions totaling 25%.

Response: The Department responded to these technical items as follows: 1) provided further documentation on reductions for fugitive dust emissions;; 2) justified use of the emission factor for woodburning by explaining that emissions calculated on this basis correspond to woodstove impacts and data from Oregon in-home studies; and 3) added estimates of contingency measure reductions totaling 25% to the control strategy.

Issue No. 5: Two persons testified that since the emissions inventory in the SIP relied on woodheating survey results from 1987-88 indicating the number of woodstoves and fireplaces in use in La Grande, that the calculations in the SIP are not accurate due to the believed increase in the rate of woodstove replacement with certified woodstoves or natural gas stoves, and that therefore the Department should conduct a new woodheating survey.

Response: In preparing the emission inventory for the SIP the Department followed current EPA guidelines for SIP development by establishing a 1986 base year for PM₁₀ emissions, from which a 1994 "design value" is determined to identify necessary emission reductions to demonstrate attainment with the federal air quality standards. Therefore, the Department believes that the 1987-88 survey was appropriate for use in the La Grande SIP. The Department concurs that periodic updates should be conducted to track any changes occurring, and intends to repeat this survey in 1992.

Issue No. 6: Two persons testified that although field burning smoke is not a significant contributor to PM₁₀ levels in La Grande, the severity of the smoke impacts are such that public health is at risk, even if the impacts are of short duration, and that additional controls for field burning should be identified in the SIP.

Response: Earlier this year the Department worked with local farmers in developing a mandatory field burning smoke management program, adopted as a county ordinance. This ordinance requires that field burning be conducted when

favorable weather conditions exist for field burning, and when the smoke will not impact either the Eagle Cap Wilderness Area or the La Grande PM₁₀ Nonattainment Area. This is an enforceable ordinance which the Department believes will minimize the likelihood of smoke intrusions into La Grande, and which meets EPA's requirements for RACM for agricultural burning programs. The Department intends to annually review the effectiveness of this program, and identify improvements should this be necessary.

Issue No. 7: A representative from the City of La Grande questioned data in the control strategy which indicated that more dust is generated from paved streets than unpaved streets, and also pointed out minor discrepancies in the report which needed correction.

Response: The Department explained that, despite unpaved roads having the potential to create more dust emissions than paved streets, total dust emissions from paved streets were significantly higher because of the much greater traffic volume on these streets and the more miles of paved than unpaved road in La Grande. The minor discrepancies identified in the report were corrected.

Issue No. 8: The Sierra Club supports woodstove curtailment provisions and suggests additional measures for forestry smoke management.

Response: The Department believes that since smoke impacts in La Grande from forestry slash burning is currently not significant contributor to nonattainment, additional measures for controlling slash burning belong in the contingency plan, as proposed, not the attainment plan.

Issue No. 9: The Woodheating Alliance and Wood Energy Institute found objections to the 50% credit assigned to certified stoves, inclusion of the term "durable", and the woodstove replacement program priorities.

Response: In terms of the 50% credit, the Department must follow EPA's guidance document on residential woodstove emission control measures, which allows this percentage and no higher. Use of the term "durable" was removed and the discussion of woodstove replacement programs was revised to be consistent with the language in HB 2175.

Issue No. 10: Two forest service representatives testified that the proposed mandatory controls on forestry burning in the contingency plan are unnecessary, as they believe no additional restrictions on prescribed fire use should be imposed, especially since forestry burning has not been identified in the SIP as a significant contributor to La Grande PM₁₀ levels. They also

questioned the proposed 20 mile designated area boundary for La Grande as being arbitrary.

Response: The proposed contingency requirements for forestry burning contained in the La Grande SIP are conditional upon La Grande failing to demonstrate attainment with the NAAQS and subsequent identification of forestry burning as a significant contributor to nonattainment. EPA PM₁₀ guidelines indicate that any source found to be a significant contributor to a nonattainment area should be included in an emission reduction strategy. The proposed 20 mile boundary was based on the recommendation of the Oregon Smoke Management Resource Advisory Committee, in consideration of the need to protect airsheds in PM₁₀ nonattainment areas, and the need to minimize impact on forestry slash burning.

BRF:a
RPT\AH20070

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991

Agenda Item: M

Division: Air Quality

Section: Planning

SUBJECT:

Adoption: Revised PM₁₀ Control Strategy for Grants Pass

PURPOSE:

To meet new requirements of the Clean Air Act

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

Authorize Rulemaking Hearing

Adopt Rules

- Proposed Rules
- Rulemaking Statements
- Fiscal and Economic Impact Statement
- Public Notice
- Land Use Evaluation Statement

Attachment A
Attachment B
Attachment C
Attachment D
Attachment G

Issue a Contested Case Order

Approve a Stipulated Order

Enter an Order

Proposed Order

Attachment



811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696



DESCRIPTION OF REQUESTED ACTION:

This report requests the Environmental Quality Commission (EQC, Commission) to adopt a revision to the PM₁₀ control strategy for the Grants Pass Urban Growth Boundary (UGB) area within Josephine County. As a result of the public hearing testimony and subsequent evaluation, the Department has made changes in both the original control strategy document, adopted on November 2, 1990, and the Addendum document, authorized for hearing on August 22, 1991.

The changes proposed to be incorporated into the original document consist of eliminating obsolescent language on woodstoves and clarifying the attainment date to be consistent with the new Clean Air Act. In the Addendum document, the industrial contingency has been changed to establish only Reasonably Available Control Technology (RACT) at this time. A detailed discussion of this change is contained in the Industrial Rule package, Agenda Item I. The amended original document and the Addendum ensure that all the requirements of the new Clean Air Act are satisfied. All the proposed changes are described below.

- Original document, p. A-37--The PM₁₀ attainment deadline is properly referenced to the new Clean Air Act.
- Original document, pp. A-43, A-47 and A-48--The text has been modified by principally deleting language describing problems with first generation woodstoves and durability of stove components. Even though attainment could be reached by as early as 1992 if implementation of the strategies goes well, the projected attainment date is clarified as 1994 on p. A-48 to be consistent with the PM₁₀ provisions of the new Clean Air Act.
- Addendum, p. A-8--The effective date of new legislation is correctly noted as September 29, 1991;
- Addendum, p. A-14--The paragraph dealing with Industrial Controls has been changed to indicate that the contingency plan will incorporate only Reasonably Available Control Technology (RACT) requirements. This is in response to the considerable objections raised at the public hearings. Also, this is the minimal action needed to meet the new Clean Air Act requirements.
- Addendum, p. A-15--The discussion of emission reductions from the contingency measures has been revamped to quantify the percentage reduction attributable to the

contingencies, as requested by the U.S. Environmental Protection Agency (EPA).

AUTHORITY/NEED FOR ACTION:

___ Required by Statute: _____	Attachment ___
Enactment Date: _____	
<u>X</u> Statutory Authority: <u>ORS 468.305</u>	Attachment <u>E</u>
___ Pursuant to Rule: _____	Attachment ___
___ Pursuant to Federal Law/Rule: _____	Attachment ___
___ Other: _____	Attachment ___
<u>X</u> Time Constraints: (explain)	

The 1990 Clean Air Act requires states to:

- o Submit revised PM₁₀ control strategies (including contingency plans) by November 15, 1991;
- o Fully implement the attainment strategies by December 10, 1993;
- o Attain PM₁₀ standards by December 31, 1994; and
- o Implement contingency plan by July 1, 1995, if PM₁₀ standards are not met by December 31, 1994.

DEVELOPMENTAL BACKGROUND:

___ Advisory Committee Report/Recommendation	Attachment ___
<u>X</u> Hearing Officer's Report/Recommendations	Attachment <u>H</u>
<u>X</u> Response to Testimony/Comments	Attachment <u>I</u>
<u>X</u> Prior EQC Agenda Items:	

Agenda Item E, September 8, 1989, EQC Meeting, Industrial PM₁₀ Rules for Medford-Ashland and Grants Pass: To Consider Adoption of New Industrial Rules That Were Taken to Public Hearings in January 1989.

Agenda Item E, November 2, 1990, EQC Meeting, Proposed Adoption of Rules for PM₁₀ Control Strategy for Grants Pass.

___ Other Related Reports/Rules/Statutes:	Attachment ___
<u>X</u> Supplemental Background Information:	

Summary of Proposed PM₁₀ Control Strategy, Grants Pass Urban Growth Boundary Attachment F

A public hearing was held in Grants Pass on September 27, 1991. The timing of the Industrial Rules RACT/Best Available

Meeting Date: November 8, 1991
Agenda Item: M
Page 4

Control Technology (BACT) were the only major issues raised. Resolution of the Industrial Rules issues is discussed in the Industrial Rules staff report, Agenda Item I. Outstanding technical issues with EPA have been resolved, and EPA's request for quantification of the contingency measures in percentage terms relative to the main control strategy has been addressed.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The testimony from the public hearing in Grants Pass that was specific to the Grants Pass control strategy is summarized in Attachment H. The City of Grants Pass presented and submitted a letter that was generally supportive of the overall strategy. The city did not raise any major issues. The city, however, expressed a desire to see the Grants Pass Woodheating Survey analysis completed. The city's comments are addressed in Attachment I.

The Department received a letter from EPA addressing the entire PM₁₀ Rules package. For the Grants Pass control strategy, EPA requested that the Department quantify in percentage terms the emission reductions expected to result if the contingency measures were implemented after 1994. EPA's comments are addressed in Attachment I, and the Addendum document has been changed to respond to EPA's concerns.

The Sierra Club submitted a letter addressing the smoke management plan (refer to DEQ response in Attachment I).

Other testimony, given in Grants Pass, that related to either the Industrial Rules, or the Residential Woodheating Rule Amendments is summarized and addressed in detail in the respective staff reports for these rules (Agenda Items I and J). In particular, some facets of the Industrial Housekeeping Rules were criticized (refer to Agenda Item I, Attachment I for the Department's response).

The major issue on the Industrial Rules was the proposal to establish BACT as a part of the contingency element for industrial sources. BACT would affect certain-sized air conveying systems (emitting at a 3 tons/year level) in Grants Pass. A preponderance of testimony favored establishing only the application of Reasonably Available Control Technology (RACT), the minimal EPA requirement, in the contingency element. In response to the testimony, the Department is proposing to establish only RACT in the industrial

contingency. This issue is fully discussed in the Industrial Rules staff report, Agenda Item I.

The original economic impact analysis is outlined in Attachment C.

PROGRAM CONSIDERATIONS:

The proposed additional control measures may require additional staff resources. However, imposition of RACT for the industrial contingency element is unlikely to require additional Department work, since none of the existing industrial sources in Grants Pass would need to install new pollution control equipment to meet the RACT requirements.

The Department is concerned about long-term local and state government resources to implement critical residential woodheating elements of the PM₁₀ control strategy, particularly the operation of curtailment and public information programs as well as financial incentives for replacement of existing woodstoves with cleaner burning units. The Department will continue to explore funding options and may propose new legislation to address this need.

With respect to the mandatory woodburning curtailment contingency, the Department would first try to persuade local government to operate and enforce such a program if the contingency appeared to be in danger of being triggered. Failing that, some additional Department field staff would be needed to operate and enforce a mandatory woodburning curtailment program. In that event the Department would seek EPA funding.

A seasonal ban on open burning could impose additional staffing requirements upon local governments that are already cutting back on staff. Significant cuts in Josephine County's operating budget may jeopardize continued operation of the existing voluntary woodburning curtailment program beyond the 1991-1992 winter heating season. If this occurs, then other funding sources would have to be sought by the Department to operate these programs.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Defer action to EPA. If a state fails to meet the Clean Air Act PM₁₀ requirements, EPA is required to impose sanctions and ultimately prepare a Federal Implementation Plan (FIP) to address the PM₁₀ problems.

2. Rely only on the destruction of uncertified woodstoves upon home sales for the contingency plan and not address other significant sources affecting airshed PM₁₀ violations. This alternative could be perceived by the community as inequitable and could weaken cooperative efforts of citizens needed to effectively implement the plan.
3. Adopt the proposed revisions to the Grants Pass PM₁₀ control strategy, including a State ban on sale of uncertified woodstoves, a contingency plan for industry, woodstoves and open burning.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the third alternative, specifically that the Commission adopt the proposed amendments and addendum to the control strategy for the Grants Pass PM₁₀ Nonattainment Area (Attachment A) as a revision to the State of Oregon Clean Air Act Implementation Plan. Adoption is required for the Department to submit a fully approvable PM₁₀ control strategy to the Environmental Protection Agency within the time frame required by the Clean Air Act.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed revision to the PM₁₀ control strategy for the Grants Pass area is consistent with Goals 2, 3, 4, and 5 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy. The proposed strategy and supporting rules are consistent with the Oregon Benchmarks goal of increasing the percentage of Oregonians living in areas which meet ambient air quality standards.

ISSUES FOR COMMISSION TO RESOLVE:

Does the EQC concur with the proposed resolution of the Industrial Rules issues and the other changes in the control strategy documentation?

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INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan revisions (amendments and addendum to the Grants Pass PM₁₀ control strategy) to EPA for approval.
2. Implement the Grants Pass PM₁₀ air pollution control strategy (including industrial, woodheating, fugitive dust, open burning and slash burning control measures) and enforce all mandatory control measures.
3. Monitor emission reductions and progress toward attainment of PM₁₀ air quality standards. If PM₁₀ air quality standards are not met by the December 31, 1994, deadline:
 - a. Immediately implement the contingency plan; and
 - b. Revise the PM₁₀ control strategy within 18 months to include Best Available Control Technology (BACT) for any industrial sources not already meeting BACT, and Best Available Control Measures (BACM) for any area sources (residential woodheating, slash burning, open burning, etc.) not already meeting BACM.
4. Seek long-term funding assistance for local and state residential woodburning emission control programs.

Approved:

Section: John E. Kowalczyk

Division: Deputy Director

Director: Jill Hansen

Report Prepared By: Howard W. Harris

Phone: 229-6086

Date Prepared: October 25, 1991

HWH:a
RPT\AH20071
(10/25/91)

Attachment A

PM-10 Control Strategy for Particulate Matter (Addendum)

**Grants Pass, Oregon
Nonattainment Area**

**A Plan for Attaining and
Maintaining the National Ambient
Air Quality Standard for PM-10**

**State of Oregon
Department of Environmental Quality
Air Quality Division**

October 1991

State of Oregon
Department of Environmental Quality
Air Quality Division

State Implementation Plan Revision (Addendum)
for PM₁₀ in Grants Pass

A Plan for Attaining and Maintaining the
National Ambient Air Quality Standards
for PM₁₀

(Note: The original control strategy document, adopted by the Environmental Quality Commission on November 2, 1990, is available upon request at the Oregon Department of Environmental Quality/Air Quality Division, 811 SW 6th Avenue, Portland, OR 97204.)

October 1991

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Executive Summary (Revised)

The U.S. Environmental Protection Agency (EPA) adopted new particulate National Ambient Air Quality Standards (NAAQS) for PM₁₀ on July 1, 1987. PM₁₀ particulate is less than 10 micrometers in aerodynamic diameter or about one-tenth of the diameter of a human hair. The Clean Air Act requires that states develop and adopt State Implementation Plan (SIP) revisions to assure that areas which exceed the PM₁₀ standards are brought into attainment [~~within the time frames prescribed by the Clean Air Act (September 1991)~~] by December 31, 1994. This document describes the State of Oregon plan to attain the PM₁₀ standards in the Grants Pass nonattainment area (City of Grants Pass Urban Growth Boundary).

High exposure to particulate matter is of concern because of human health effects such as changes in lung functions and increased respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alternation in the body's defense system against foreign materials, damage to lung tissue, increased risk of cancer and, in extreme cases, premature death. Most sensitive to the effects of particulate matter are people with chronic obstructive pulmonary cardiovascular disease and those with influenza, asthmatics, the elderly, children and mouth-breathers.

Air quality measurements taken in Grants Pass from 1985 to date [~~have determined~~] indicate that the 24-hour PM₁₀ health NAAQS is exceeded about 1-10 days per year during the winter months. The annual average concentration of PM₁₀ does not exceed the annual average PM₁₀ NAAQS. The NAAQS adopted by the US Environmental Protection Agency were established to protect public health and welfare.

The 24-hour PM₁₀ NAAQS is 150 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$). Excluding the pollution episode due to the Silver Complex wildfire, which occurred in September, 1987, the maximum concentration of PM₁₀ measured at the 11th and K Streets monitor in Grants Pass was 208 $\mu\text{g}/\text{m}^3$ on January 21, 1987. The 24-hour standard cannot be exceeded more than three times averaged over three calendar years. The annual average PM₁₀ concentration in Grants Pass is 42 $\mu\text{g}/\text{m}^3$ (four years of data) as compared to the average annual PM₁₀ NAAQS of 50 $\mu\text{g}/\text{m}^3$.

An inventory of PM₁₀ emissions developed for the Grants Pass Urban Growth Boundary (UGB) indicates that the major sources of particulate emissions during winter periods of worst-case 24-hour PM₁₀ concentrations are residential wood combustion (54%), industrial emissions (25%) and soil dust (13%). On an annual basis, these sources contribute 31%, 39%, and 17% respectively. Emission inventory information representative of worst-case 24-hour conditions have been qualitatively confirmed through receptor

modeling techniques which apportion source contributions on the basis of their chemical "fingerprints".

An air monitoring survey conducted in October 1985 showed that the PM₁₀ problem area in Grants Pass includes the central portion of the urban area (city limits and the urbanized area south of the Rogue River). Based on this survey, ambient air monitoring conducted at 11th & K Streets represents the highest PM₁₀ levels within the Urban Growth Boundary.

PM₁₀ design values are those 24-hour worst case and annual average concentrations from which reductions must be made to achieve the NAAQS. Analysis of all of the available PM₁₀ air quality data over the period of December, 1985 to November, 1989 indicates a 24-hour design value of 171 $\mu\text{g}/\text{m}^3$, and an annual average design value of 42 $\mu\text{g}/\text{m}^3$. For the control strategy analysis, these design values were compared to a 1986 base year emission inventory. Control strategies included in this plan have been designed to reduce current 24-hour concentrations of PM₁₀ by at least 22 $\mu\text{g}/\text{m}^3$. The strategy will also reduce the annual average PM₁₀ concentration.

The control strategies needed to assure attainment and maintenance of the PM₁₀ National Ambient Air Quality Standard focus on control of industrial emissions and residential wood combustion. Additional reductions are expected from local efforts to control open burning and statewide efforts to reduce slash burning smoke.

Although residential wood combustion (RWC) emissions are the predominant source contributing to the occasionally high winter 24-hour concentrations found in Grants Pass, industrial controls will contribute substantially (approximately 55%) to the necessary reduction to meet the 24-hour standard. A voluntary curtailment program on woodstove and fireplace use during pollution episodes, coupled with a public information effort and normal phase-in of certified stoves, will provide the balance of control needed to meet the PM₁₀ health standard. The Department estimates that 25% of the wood burning households will forego use of their woodstoves during the [~~1-10~~3-5] days of voluntary curtailment likely to occur each winter. These strategies will bring the area into attainment by the end of [~~1992~~1994] with an ample safety margin at the 11th & K critical monitoring site, which is near the City's industrial area. This safety margin will insure attainment at other non-monitored sites where the source impacts are more oriented toward residential wood combustion. In fact, the wood heating control strategy alone will be sufficient to achieve attainment in these areas.

With respect to slash burning, those emissions will be reduced in western Oregon by about 50% between 1978 and year 2000 as part of the Oregon Visibility Protection Plan. These emission

reductions will further insure that background PM₁₀ concentrations will not increase in future years.

The above outlined control strategy was adopted by the Environmental Quality Commission on November 2, 1990 and forwarded to EPA for review and approval. Although the adopted plan appeared to meet all EPA requirements, the Clean Air Act Amendments of 1990 (effective on November 15, 1990) imposed additional planning requirements, necessitating a revision of the Grants Pass PM₁₀ control strategy.

The amended Clean Air Act requires that PM₁₀ control strategies include a contingency plan that would automatically go into effect if the Grants Pass area does not meet PM₁₀ standards by December 31, 1994. The Grants Pass contingency plan consists of residential woodburning, industrial and open burning elements. The specific contingency plan elements that would go into effect, if the Grants Pass area fails to meet PM₁₀ standards by the Clean Air Act deadline, include:

1. Backup authority for DEQ to implement mandatory residential woodburning curtailment programs where necessary to meet PM₁₀ standards;
2. Requirement for uncertified woodstove removal upon home sale;
3. New Industrial Reasonably Available Control Technology (RACT) requirements; and
4. Open burning ban during November through February.

Implementation of the PM₁₀ control strategy will require the efforts of residents and industries within the Grants Pass UGB, Josephine County, the Oregon Department of Environmental Quality, the State Forestry Department, U.S. Forest Service and Bureau of Land Management.

Maintenance of ambient PM₁₀ concentrations below the NAAQS will rely on the same strategies. To demonstrate continued maintenance of the annual and 24-hour NAAQS for PM₁₀, annual and worst case day emissions were projected to the year 2000. For the worst case day, the emissions for each individual source category were forecast, taking into account expected growth and the application of the relevant control strategy element. Individual source impacts were then determined directly from the change in emissions between 1992 and 2000. The projection indicates a worst case day concentration in the year 2000 of 135 µg/m³, which is significantly less than the 24-Hour standard of 150 µg/m³. To check for continued maintenance of the annual standard, the total annual emissions for 1986 (the base year for which the annual design value was determined to be below the annual standard) and 2000 were compared. Annual emissions are expected to be approximately 18% lower in 2000 than in 1986. Thus, continued maintenance of the annual standard will be achieved.

4.13.6 State Implementation Plan Revision (Addendum) for Grants Pass PM₁₀ Nonattainment Area

4.13.6.1 Purpose of the Addendum

On November 2, 1990, the Environmental Quality Commission adopted a revision to the State Implementation Plan (SIP) Rule (OAR 340-20-047) to include the PM₁₀ control strategy for the Grants Pass nonattainment area (Urban Growth Boundary). The control strategy plan was subsequently forwarded to the Environmental Protection Agency (EPA) for its review and approval. Although the control plan appeared to meet all the requirements of the EPA at the time of adoption, the Clean Air Act Amendments of 1990, signed into law on November 15, 1990, imposed additional planning requirements which are outlined below.

The additional requirements include: 1) commitments for a contingency plan that would automatically go into effect if PM₁₀ standards are not achieved by the Clean Air Act deadline (December 31, 1994); 2) evaluation of the adopted control strategy against Reasonably Available Control Measures (RACM) and Best Available Control Measures (BACM); 3) Reasonably Available Control Technology (RACT) applied to significant industrial sources; and 4) identification and commitment of resources to insure that the control strategy will be implemented and enforced.

These new requirements are addressed in this Addendum. Additional control measures, which primarily enhance the effectiveness of the previously adopted controls, are also incorporated into the revised strategy. Specifically, this Addendum includes an ambient air quality update and the following elements:

Additional Control Measures

1. A ban on used woodstove sale, or installation;
2. Revised ventilation index criteria for open burning (to 400 index);

Contingency Plan

1. State backup curtailment authority for residential woodburning;
2. Woodstove removal upon home sale;
3. Reasonably Available Control Technology (RACT) for industrial sources of PM₁₀;
4. A ban on open burning within the Grants Pass Urban Growth Boundary during November, December and January;

Resource Commitment

1. Local government staffing requirements and funding sources;

2. State staffing requirements and funding sources.

4.13.6.2 Ambient Air Quality Update

The maximum and second highest daily concentrations of PM₁₀ measured at the 11th & K monitoring site are displayed below for 1985 through 1990.

Table 4.13.6-1: PM₁₀ Highest and Second Highest Concentrations, 24-Hour Averages

<u>Year</u>	<u>11th & k</u>	
	<u>µg/m³</u>	
	<u>Max.</u>	<u>2nd High</u>
1985	200	183
1986	148	104
1987	268(208)*	230(128)*
1988	136	135
1989	151	132
1990	113	106

* These measurements occurred in September 1987 during the Silver Creek wildfire. Such wildfires are considered to be exceptional events, and the resulting measurements are not used in developing air quality control strategy plans. The concentrations in parentheses were the next two highest levels of PM₁₀ outside the wildfire episode that were recorded during 1987.

4.13.6.3 Additional Control Measures in Attainment Strategy

The original control strategy focused on the primary sources of PM₁₀ in the Grants Pass air shed: residential woodburning and the wood products industry. Additional control measures, some of which specifically target open burning, have been developed since adoption of the original strategy in November 1990. Controls on open burning will serve to reinforce and strengthen the previously adopted control strategy by securing reductions from a highly visible source of PM₁₀ emissions. The additional control measures are described below.

Ban on the Sale, or Installation of Uncertified Woodstoves

The 1991 Legislature established by statute a ban on the sale of used, uncertified woodstoves. Also by statute, the State Building Code Agency is required to prohibit the installation of used, uncertified woodstoves. These requirements became effective on September 29, 1991.

Revised Ventilation Index Criteria

The ventilation index criteria for open burning within the Rogue Basin Open Burning Control Area has been revised in OAR 340-23-043 from a 200 index to the more restrictive 400 index. Based on 1983-1990 Medford Airport data (the source of the ventilation index forecasts for Grants Pass and Medford), this will increase the number of "no burn" days from 73 to 149 on an annual basis and from 54 to 83 on a November to February, seasonal basis.

Slash Burning Restrictions

PM₁₀ emissions from forestry slash burning, both because of the magnitude of the emissions and the proximity of the burning to the nonattainment area, can potentially have a significant impact on air quality within the Grants Pass area. Forestry burning is regulated under Oregon law (ORS 477.515) which requires that the State Forester and the Department of Environmental Quality jointly approve a plan to manage slash burning smoke in areas they designate.

By statute, the Oregon Department of Forestry (ODOF) is responsible for the administration of rules (OAR 629-43-043) and written procedures to assure the protection of air quality. Mandatory, daily burning instructions are issued by ODOF within the Smoke Management Plan's Restricted Area which covers western Oregon (crest of the Cascades west) and the Deschutes National Forest. The objective of the Plan is to prevent smoke resulting from burning on forest lands from being carried to or accumulating in designated areas. The Grants Pass area has been set aside as one of these designated areas. The provisions of this program exceed EPA's requirements for Reasonably Available Control Measures (RACM) for forestry smoke management programs.

Provisions included in the Oregon Visibility Protection Plan (OAR 340-20-047, Section 5.2) establish a goal of a 22% reduction in slash burning emissions (relative to 1982-84 levels) by the Year 2000. Emission information received from ODOF suggests that this goal has nearly been achieved. In addition, major reductions in slash burning emissions are expected to occur within the coming five years due to reductions in timber harvest levels on National Forest lands in Western Oregon. As a result, contributions from slash burning to PM₁₀ background air quality and direct impacts of smoke from forestry burning are expected to decline in the near future.

4.13.6.4 Reasonably Available Control Measures (RACM/RACT) and Best Available Control Measures (BACM/BACT)

The Clean Air Act requires that PM₁₀ control strategies include Reasonably Available Control Measures (RACM). EPA guidance lists control measures that are considered to be RACM and

indicates that listed RACM measures must be included in the attainment plan if any of those measures are needed to demonstrate attainment. Otherwise, RACM is to be included in the contingency plan for all significant source categories contributing to PM₁₀ violations. Individual source categories may be excluded from meeting RACM requirements if any such sources do not contribute significantly to the PM₁₀ problem. Also, a specific RACM may be excluded if analysis indicates that the measure would be infeasible to implement. RACM for industrial point sources is referred to as Reasonably Available Control Technology (RACT).

For an area that fails to meet PM₁₀ standards by December 31, 1994, the Clean Air Act requires that the area be redesignated as a "serious" nonattainment area and that a revised PM₁₀ control strategy include additional control measures. EPA guidance indicates Best Available Control Measures (BACM) must be included for all significant source categories contributing to PM₁₀ violations. BACM for industrial point sources is referred to as Best Available Control Technology (BACT).

The individual RACM measures are listed below and analyzed for applicability to Grants Pass and/or feasibility of implementation.

Available Fugitive Dust Controls

The predominate sources of fugitive dust in the Grants Pass area are paved and unpaved roads. Both Josephine County and the City of Grants Pass have ongoing programs to reduce those emissions. Additionally, the State regulates such sources on a statewide basis in the restricted air sheds of the State. The original analysis of the problem indicated that a strategy focused on industry and woodburning would be sufficient to meet the PM₁₀ 24-hour standard, so no emission reduction credits were applied to projections of paved and unpaved road dust emissions.

EPA guidance requires that the following fugitive dust RACM elements be included in the PM₁₀ SIPs if the source is a significant contributor to PM₁₀ nonattainment and it is economically and technologically feasible to control:

(1) Pave, vegetate or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads; (2) Require dust control plans for construction or land clearing projects; (3) Require haul trucks to be covered; (4) Provide for traffic rerouting or rapid clean up of temporary (and not readily preventable) sources of dust on paved roads (water erosion runoff, mud/dirt carryout areas, material spills, skid control sand). Delineate who is responsible for clean up;

(5) Prohibit permanent unpaved haul roads, and parking or staging areas at commercial, municipal, or industrial

facilities; (6) Develop traffic reduction plans for unpaved roads using speed bumps, low speed limits, etc. to encourage use of other (paved) roads; (7) Limit use of recreational vehicles on open land (e.g., confine operations to specific areas, require use permits, outright ban); (8) Require improved material specification for and reduction of usage of skid control sand and salt (e.g., require use of coarse, nonfriable material during snow and ice season); (9) Require curbing and pave or stabilize (chemically or with vegetation) shoulders of paved roads; (10) Pave or chemically stabilize unpaved roads;

(11) Pave, vegetate, or chemically stabilize unpaved parking areas; (12) Require dust control measures for material storage piles; (13) Provide for storm water drainage to prevent water erosion onto paved roads; (14) Require revegetation, chemical stabilization, or other abatement of wind erodible soil, including lands subjected to water mining, abandoned farms, and abandoned construction sites; and (15) Rely upon the soil conservation requirements (e.g., conservation plans, conservation reserve) of the Food Security Act to reduce emissions from agricultural operations.

Fugitive dust control measures that have already been adopted by rule are found in Chapter 340, Division 21, Department of Environmental Quality. These rules apply within incorporated cities of 4,000 or more population and are enforced under OAR 340-21-060. These rules implement the following fugitive dust RACM measures:

<u>RACM Element</u>	<u>OAR 340 Division 21 Section:</u>
1	(2)(a)
2,10,11	(2)(b)
3	(2)(f)
4	(2)(g)
12	(2)(c)

In addition, the City of Grants Pass has implemented a program to pave all unpaved roads under its jurisdiction. This program began in 1988 and is expected to be completed by the end of 1991. The City also plans to go to washed, fractured rock for its sanding material after the existing supply has been used. Josephine County has all but 3 miles of its roads with bituminous, or better surfaces.

Available Residential Wood Combustion Control Measures

EPA lists four types of RACM for wood combustion. Each measure is listed below with a brief summary of how the measure is incorporated into the control plan for Grants Pass.

1. Establish an episode curtailment program, including: a curtailment plan; a communication strategy to implement the plan; a surveillance plan (e.g., "windshield" survey, opacity trigger); and enforcement provisions including procedures, penalties, and exemptions). A voluntary program will be deemed reasonable if the area demonstrates attainment.

A voluntary woodburning curtailment program, conforming to EPA guidance, has been adopted as a control strategy element (refer to Section 4.13.4.1). The contingency plan provides for a mandatory curtailment program to secure required additional emission reductions.

2. Establish a public information program to inform and educate citizens about stove sizing, installation, proper operation and maintenance, general health risks of woodsmoke, new technology stoves, and alternatives to woodheating.

A comprehensive public information program has been included as part of the control strategy for Grants Pass (refer to Section 4.13.4.1).

3. Encourage improved performance of woodburning devices.

The voluntary woodburning curtailment program contains a tracking element which involves follow-up contacts with identified problem woodburners.

4. Provide inducements that would lead to reductions in the stove and fireplace population (or use).

This Addendum includes a ban on the sale, or installation of used, uncertified woodstoves (refer to Section 4.13.6.3).

Prescribed Burning Control Measures

Prescribed burning and open burning are predominately background sources of PM₁₀ in the Grants Pass nonattainment area. Local fire authorities indicated that little, or no, residential open burning occurred during the December to January period, when peak PM₁₀ concentrations are usually measured. The peak day emission inventory for the UGB showed that Solid Waste Disposal and Fires, in combination, contributed only 0.3% to the Worst Case Day emissions. Even on an annual basis, such sources within the nonattainment area were estimated to contribute just 0.8% of the total annual emissions. The year-round ban on residential open burning in Grants Pass primarily bolsters the adopted control strategy by eliminating a highly visible source of PM₁₀ emissions.

To reduce the level of PM₁₀ background concentrations in the Grants Pass air shed and other nonattainment areas, the main emphasis has been to develop and implement a slash burning control

program, widely applicable to the forested areas of southern Oregon. EPA guidance requires that RACM measures from prescribed (slash) burning be included where it is shown that prescribed burning is or does contribute significantly to PM₁₀ exceedances within the nonattainment area. The guidance specifies that such a program must include: (1) smoke dispersion forecasts based (at minimum) on National Weather Service data; (2) a process for preparation and approval of burn plans; (3) availability of training programs for burners; (4) a public information program; (5) provisions for surveillance and enforcement of any mandatory requirements; (6) development of emission inventories; and (7) State oversight of the smoke management programs.

Oregon's forestry smoke management program, administered by the Oregon Department of Forestry (ODOF), exceeds all of the above RACM requirements for the nonattainment areas within Western Oregon. Smoke dispersion forecasts are issued daily by ODOF's smoke management center which are based on NWS and local weather data. The program requires the preparation and approval of burn plans prior to ignition. Training is provided each year by ODOF staff to all burners. For Federal employees, this training is supplemented by training programs offered by the US Forest Service, the Bureau of Land Management and the National Park Service. ODOF and the Federal agencies all offer information on their programs to the public. Air monitoring surveillance is provided through the Department's programs and through aircraft plume tracking provided by those conducting the burning. The program is enforced by ODOF Forest Practices foresters located in offices throughout the State. Emission inventories are developed in cooperation with ODOF using state of the art fuel consumption models. The Department oversees ODOF's program through periodic reviews and through ORS 477.515 which requires that the Director of the Department approve the program.

RACT Determinations for Stationary Sources

The determination of what constitutes Reasonably Available Control Technology requires case-by-case analysis with respect to technological feasibility and economic feasibility. The adopted industrial rules for the Medford-Ashland AQMA and the Grants Pass Nonattainment area are considered to meet EPA's RACT guidance with respect to hog fuel boilers and veneer dryers. Since control of these sources appeared to be sufficient for meeting the 24-hour PM₁₀ standard in Grants Pass, no additions to the primary control strategy adopted in November, 1990, have been proposed. However, the contingency plan provides for additional controls on air conveying systems, which will fulfill the RACT requirements. The technological and economic feasibility of the additional air conveying system controls are summarized in the industrial rule documentation.

4.13.6.5 Contingency Plan Commitments

The Clean Air Act requires that the State Implementation Plan include contingency measures for significant sources of PM₁₀. These measures are to take effect without any further action by the state if the area fails to attain the PM₁₀ standard by the attainment date required in the Act. Accordingly, the following measures are included as contingency measures which will take effect only upon publication by EPA in the Federal Register that the area has failed to attain the PM₁₀ air quality standard by the required attainment date. Depending upon the effectiveness of the control strategies, EPA could make this determination in 1994, or subsequent years.

Backup Woodburning Curtailment Authority

EPA has determined that both a voluntary and an enforceable (mandatory) woodburning curtailment program represent RACM. Even though an enforceable program is not needed to demonstrate attainment in Grants Pass, it must be incorporated into the contingency plan because it is listed as a RACM that would be feasible to implement. The Department's backup curtailment authority will meet this requirement. However, if it becomes apparent that attainment will not be reached by the deadline, local government will be urged to adopt a local (enforceable) program in lieu of the State program. The curtailment program would apply to woodstoves, fireplaces and other woodheating devices. The State, or locally enforced, curtailment program must include at a minimum:

- ◆ A provision for a two stage curtailment program based on the severity of the projected air quality conditions;
- ◆ A provision to exempt all Oregon certified woodstoves from the first stage of curtailment;
- ◆ A provision for low income exemptions;
- ◆ A provisional exemption for sole source woodburning households;
- ◆ An exemption for pelletstoves;
- ◆ A provision for the Department to defer the operation and enforcement of the curtailment program at such time as the local government or regional authority has adopted and is adequately implementing the required curtailment program.

Woodstove Removal Upon Home Sale

The 1991 Oregon Legislature authorized by statute the removal of uncertified woodstoves upon home sale for any area that fails to meet the PM₁₀ standard(s) attainment deadline (December 31, 1984). After December 31, 1994 all uncertified woodstoves, except antiques and cookstoves, would be required to be removed and destroyed upon sale of a home in any PM₁₀ nonattainment area. The Department views this program as a primary contingency measure for the overall PM₁₀ control strategies required by EPA.

The requirements of the statute are immediately enforceable through civil penalties by amending OAR Chapter 340, Division 12. Between now and December 1994, the Department will also develop an advisory committee comprised of representatives from Oregon Title Companies, the Oregon Association of Realtors and the State Real Estate Agency in Salem. The goal of the advisory group will be to outline the most efficient means to disseminate information about the sale requirements to all home sellers in the nonattainment areas and to ensure that the stove removal and destruction requirement is carried out.

The Department would propose to the advisory group that current real estate documentation protocol be revised, with the desire to add stove tracking requirements to the State Real Estate Division's administrative rules. This cooperative relationship between the Department and Oregon's realty professionals will help ensure awareness of the law, disclosure of uncertified used stoves and compliance with the stove removal and destruction requirement.

Industrial RACT Requirements

The industrial contingency plan is adopted as OAR 340-21-200 through 340-21-240. The 1990 Clean Air Act requires RACT in the control strategy if it is needed to demonstrate attainment, and otherwise requires RACT in the contingency plan. The industrial contingency elements in Division 21 satisfy Reasonably Available Control Technology (RACT) requirements for industrial sources of PM₁₀ emissions which are not otherwise subject to RACT under state-wide standards. If the contingency plan is triggered by failure to meet the Clean Air Act deadline for attainment, affected sources will be required to submit detailed plans to the Department within three months and demonstrate compliance within 30 months. This schedule is consistent with requirements under the Clean Air Act to implement contingency measures as expeditiously as practicable to continue progress toward attainment while a revised control strategy is under development.

Larger air conveying systems, principally wood dust handling systems, operating in the Grants Pass nonattainment area would be subject to reduced emission rates (OAR 340-21-005 through OAR 340-21-240). Air conveying systems emitting greater than 10 tons per

year of particulate matter (none of the existing industrial facilities in Grants Pass currently emit at this rate) would be required to meet an emission standard of 0.005 grains per standard cubic foot. This would necessitate, in most cases, bag filter systems. The tightened emission standard and its application would meet Clean Air Act RACT requirements.

Open Burning Ban During November through February

By administrative rule (OAR 340-23-090), if either the Medford-Ashland AQMA, or the Grants Pass PM₁₀ nonattainment area fails to meet the PM₁₀ standard(s) by December 31, 1994, then all open burning would be banned in the Rogue Basin Open Burning Control Area during November, December, January and February.

Emission Reductions From Contingency Measures

The attainment plan is projected to reduce PM₁₀ emissions by approximately 275 tons per year between 1986 and the 1992-1994 projected attainment period. The emission reduction required to just meet the standard would be 240 tons per year, assuming that the needed percentage reduction (20% at the highest) were applied on a year-round basis. Therefore, for the period from 1986 to 1994, the combination of the control strategy and the mill dismantlement (100% credited to the air shed) yields a "surplus" emission reduction of 35 tons per year. Additionally, some control measures in the attainment plan will continue to provide emission reductions after 1994. The contingency plan, if triggered, would also provide additional emission reductions after 1994.

The woodstove certification program will provide a 20 tons per year net reduction (accounting for increased firewood use due to population growth) in residential woodburning emissions between the years 1994 and 2000. The net surplus in emission reduction, after taking into account growth, would be 13 tons per year. Woodstove emissions would be reduced an additional 34 tons per year by the year 2000 due to the requirement in the contingency plan for the removal and destruction of uncertified woodstoves upon home sale. Some additional reductions would be achieved through seasonal open burning restrictions. Although not quantified, the mandatory woodburning curtailment program contingency element would also provide some additional emission reductions on an annual basis.

Industrial emissions will be reduced an unquantified amount as a result of the increased source testing and continuous emission monitoring (CEM) requirements in the attainment plan; the actual emission reductions may be quantifiable after the CEM program is fully implemented. The existing industrial plants in Grants Pass will not have to install additional controls to meet the contingency plan RACT requirements, so no additional emission reductions are anticipated from these sources. However, the

November 1994 implementation of industrial emission fees (\$25 per actual ton of emissions) to meet the Clean Air Act Title V requirements will provide a market incentive for voluntary additional (but unquantifiable at this time) industrial emission reductions.

The additional PM₁₀ emission reduction provided by the woodstove contingency and other control measures would be more than 82 tons per year. This represents at least a 30% reduction compared to the 275 tons per year emission reduction in the attainment plan.

4.13.6.6 Resource Commitments

Residential woodburning programs are being implemented by local and State governments. During the 1990 through 1991 heating season, the Department (DEQ) provided assistance to the Josephine County Environmental Health Department toward the operation of the Grants Pass voluntary woodburning curtailment program. The DEQ provided resources which included a telephone announcement machine, operational expenses and a computer, for a total of \$2,970.

For the 1991 through 1992 heating season, the DEQ plans to increase the level of assistance to Josephine County and provide \$12,700 toward the implementation and operation of the voluntary woodburning curtailment program. This assistance will allow for an expanded effort in the areas of air quality monitoring, public information announcements and tracking and follow-up reporting.

No additional funds have been earmarked beyond the 1991-1992 heating season. For future operation of the local woodburning curtailment program, the Department will seek federal funding and will also consider returning to the 1993 legislative session to establish a permanent funding base.

The DEQ operates the air monitoring network used by Josephine County for the daily woodburning advisory, provides public information assistance and administers the woodstove certification program. These services are part of the statewide DEQ base program identified in the State/EPA Agreement (SEA).

Industrial compliance assurance programs are implemented by the DEQ as part of the statewide base program; resources are identified in the SEA. Open burning control programs are implemented by local fire departments and the DEQ as part of base programs.

Forestry slash burning programs are administered by the Oregon Department of Forestry as part of base programs.

4.13.6.7 Additional Rules and Regulations

The following rules and regulations are in addition to those adopted in November 1990 by the Environmental Quality Commission (refer to Section 4.13.4.2 of the Oregon State Implementation Plan). The statutory ban on the installation of used, uncertified woodstoves is to be codified into State rules by the Building Codes Agency.

Oregon Administrative Rules

Subject

340-34-010	Ban on sale of used, uncertified woodstoves
340-34-150	Backup authority for operation of a mandatory woodburning curtailment program (contingency)
340-34-200	Removal of woodstove upon home sale (contingency)
340-23-043 (revised)	Revised Ventilation Index Criteria
629-43-043	Slash Burning Restrictions
340-20-047	Oregon Visibility Protection
340-21-005 to 240	Industrial Contingencies
340-23-090	Seasonal Ban on Open Burning

4.13.6.8 Emergency Action Plan

Authority for the Department to regulate air pollution sources, including woodstoves, during emergency episodes is provided under ORS 468. OAR 340 Division 27 describes Oregon's Emergency Action Plan. The rule is intended to prevent excessive accumulation of air contaminants during periods of air stagnation which, if unchecked, could cause significant harm to the public health. The rule establishes criteria for identifying and declaring air pollution episodes below the significant harm level and was adopted pursuant to requirements of the Clean Air Act. The action levels in the Plan were established by the EPA and subsequently adopted by the Department.

The statutory authority for emergency episodes and the new woodstove rules (OAR 340-34-150 through -175) allow the Department to regulate woodstoves under emergency episode conditions. 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.

4.13.6.9 Lead Agency Designation

Governor Barbara Roberts has designated the Department of Environmental Quality as the lead agency to implement, maintain and enforce the requirements of the Clean Air Act in regards to PM₁₀ pollution.

4.13.6.10 Plan Revision Provisions

In the event that the Grants Pass area fails to meet Reasonable Further Progress milestones, or the applicable PM₁₀ attainment deadline, then the Department, as the designated lead agency, will first notify in writing the affected local governments and industrial organizations. Within 30 days of notification, the Department will complete a written analysis of control strategy commitments, evaluating the adequacy of implementation. Any deficiencies in implementation will be corrected through rulemaking, if necessary, within six months of the original deficiency notification. The six month time frame will accommodate the State's normal rulemaking process. Additionally, affected parties will be notified of the requirement to expeditiously implement the contingency measures, if necessary. As the lead agency, the Department will submit a plan revision that meets all relevant Clean Air Act and EPA requirements within 18 months of a notification from EPA that the area has failed to meet the attainment deadline and has been reclassified to "Serious." The revision will include provisions to ensure that the Best Available Control Measures (BACM/BACT) for the control of PM₁₀ shall be implemented no later than 4 years after the date the area is reclassified as a "Serious" area.

4.13.6.11 Reasonable Further Progress Reporting

Part D of Title I of the Clean Air Act Amendments of 1990 (Section 171) requires that State Implementation Plans for PM₁₀ make Reasonable Further Progress (RFP) toward attainment of the National Ambient Air Quality Standards (NAAQS). The Act further specifies that RFP means those annual incremental reductions of PM₁₀ emissions necessary to attain the NAAQS by the attainment date. The Department believes that the scheduled implementation of the provisions of the Grants Pass PM₁₀ SIP and attainment of the NAAQS within the Grants Pass nonattainment area fulfills the RFP requirement of the Act.

4.13.6.12 New Source Review

The New Source Review rules (OAR 340-20-220 to -276) and Air Contaminant Discharge Permit rules (OAR 340-20-140 to -185) identify the procedures for reviewing and permitting new sources. The significant emission rate for PM₁₀ emissions in the Grants Pass Nonattainment Area is fifteen tons per year (OAR 340-20-225). The New Source Review rule (OAR 340-20-240) identifies requirements for sources in nonattainment areas, including applying the lowest achievable emission rate (LAER) and a 1:1 offset ratio required in the Grants Pass nonattainment area.

4.13.6.13 Public Involvement Update

Public hearings were held on the Grants Pass PM₁₀ SIP in Grants Pass on August 2 and September 13, 1990. Notices were published in the Secretary of State Bulletin on July 1, 1990, in the local newspaper on August 11, 1990. The State Clearinghouse initiated the intergovernmental review process on August 6, 1990. The Grants Pass PM₁₀ SIP was adopted by the Environmental Quality Commission on November 2, 1990.

A public hearing on this addendum was held in Grants Pass on September 27, 1991. The public hearing notice was published in the Grants Pass Daily Courier on August 27, 1991 and in the Secretary of State Bulletin on September 1, 1991. The public hearing notice was also distributed for local and State agency review through the A-95 State Clearinghouse on August 15, 1991.

Amendments to the Grants Pass PM₁₀ Control Strategy Adopted on November 2, 1991

The PM₁₀ control strategy document for Grants Pass that was originally adopted on November 2, 1990, is being amended to change obsolescent language related to woodstoves and to make other changes required by the Clean Air Act of 1990. The amended, or deleted text from the original SIP document, adopted on November 2, 1990, is shown or referenced below, with the replacement text immediately following.

The State Implementation Plan for Particulate Matter, Grants Pass, Oregon, Nonattainment Area, A Plan for Attaining and Maintaining the National Ambient Air Quality Standard for PM₁₀, State of Oregon, Department of Environmental Quality, Air Quality Division, November 1990, is amended as follows:

4.13.3 Emission Reduction Analysis (p. A-37) is amended as follows:

This section describes the emission reductions necessary to attain the 24-hour PM₁₀ standard (4.13.3.1); reviews potential control measures that could be applied in Grants Pass (4.13.3.2); and presents a technical assessment of the adequacy of the control measures to attain the standard within the time limits specified by Section ~~[110(a)]~~ 188(c)(1) of the Clean Air Act (4.13.3.3).

###

Woodstove Certification Program (p. A-43): The following text replaces all the formerly adopted text under this subheading:

In 1983, the Oregon Legislature directed the Department to require that all new woodstoves sold in the State be laboratory tested for emissions and efficiency prior to sale to assure compliance with established emission standards. As a result, stoves sold after July, 1986 were required to emit 50% less smoke than conventional woodstoves. After July, 1988 new woodstoves were required to emit 70% less smoke.

Subsequent to the adoption of Oregon's emission standards, the Environmental Protection Agency (EPA) adopted a slightly more restrictive national certification program which became effective July, 1990. In March, 1990 the Department completed rule making to modify the Oregon woodstove certification rules (OAR 340 Division 21) to assure consistency with EPA's national program.

In-home studies of first generation certified woodstoves have indicated that they actually reduce emissions by about 30%. Second generation certified stoves have been shown to

reduce emissions by about 50%. The majority of stoves certified by the Department and sold in Oregon have been second generation stoves.

Second generation catalytic stove designs have incorporated new advancements in combustor technology which in part accounts for the stoves increased effectiveness. First generation catalytic stoves incorporated less effective catalytic elements which are currently reaching the end of their useful life. When replaced with new generation catalysts, the first generation catalytic stoves will provide effective emission reductions approaching that of second generation stoves. These improved first generation stoves will make up part of the stove population in 1994.

Additionally, sales of pelletstoves in nonattainment areas, and in other areas of the state, are reported to have significantly increased and are expected to accelerate in the foreseeable future. Pelletstoves provide a 90% reduction in emissions and are expected to become a significant segment of the woodstove population in nonattainment areas where they have typically been exempted from curtailment programs. Therefore, the Department is conservatively using a 50% emission reduction credit overall for the woodstove population in 1994.

###

Long-Term Wood Heating Control Strategy (p. A-47): The following text replaces all the formerly adopted text under this subheading:

Woodheating curtailment is viewed as a short-range control strategy to allow rapid attainment of the short-term (24 hour) PM₁₀ air quality standard. The Department of Environmental Quality is committed to pursue permanent reductions in woodheating emissions as a long-range strategy to reduce and eliminate the reliance on curtailment and to provide significant improvement in annual PM₁₀ air quality.

At a minimum, the following measures will be pursued to permanently reduce woodheating emissions:

- Public education activities will include more specific information on the true cost of woodheating in relation to other alternative cleaner heat sources. The major goal of this effort is to persuade those households that are spending more money to heat with wood in uncertified stoves than with conventional fuels, such as natural gas, or certified stoves.
- Further information and studies on the toxicity, health effects and other detrimental effects of woodstoves will be pursued and heavily publicized in a continuing effort

to convince more people that they should reduce their woodheating smoke.

- Funding sources will be pursued to implement the programs authorized by the 1991 Oregon legislature for loans and grants to accelerate the replacement of uncertified woodstoves.

###

4.13.3.3 Demonstration of Attainment (p. A-48) is amended as follows:

This section describes the application of emission reduction credits described in Section 4.13.3.2 for demonstrating attainment with the NAAQS. The methodology used is based on a proportional rollback of 1992 emission estimates.

24 Hour Worst Case Day Strategy

Based on the Emission Inventory approach, attainment of the 24 hour NAAQS in [~~1992~~1994] will require a 17% or 1785 pounds of reduction in worst case day emissions. The necessary reduction is achieved through the strategy elements listed below.

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HWH:a
RPT\AH20072
(10/24/91)

**RULEMAKING STATEMENTS FOR PROPOSED GRANTS PASS
PM₁₀ CONTROL STRATEGY AS A REVISION TO THE
STATE OF OREGON CLEAN AIR ACT IMPLEMENTATION PLAN**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-20-047. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

The Grants Pass area (City Urban Growth Boundary) violates federal and state PM₁₀ health standards. PM₁₀ refers to particulate matter ten micrometers or smaller in diameter. PM₁₀ particles are considered a risk to human health due to the body's inability to effectively filter out particles of this size.

The Federal Clean Air Act requires that states develop and adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ standards are brought into attainment with those standards within prescribed time frames. A contingency plan is also required to be developed and automatically implemented if the area fails to meet the deadline. The proposed control strategy document describes the State of Oregon plan to attain and maintain the annual and 24-hour PM₁₀ standards within the Grants Pass Urban Growth Boundary (UGB).

The principal means of achieving the necessary air quality improvements is through PM₁₀ emission reductions from woodstoves and fireplaces, the wood products industries, open burning of debris, slash burning and road dust.

(3) Principal Documents Relied Upon

The Clean Air Act Amendments of 1990, Title I. 42 U.S.C. 7401 et seq., as amended. November 15, 1990.

PM₁₀ SIP Development Guideline, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park NC, June 1987, EPA-450/2-86-001.

Guidance Document for Residential Wood Combustion Emission Control Measures, U.S. Environmental Protection Agency, Office of Air Quality

Planning and Standards, Research Triangle Park NC, September 1989, EPA-450/2-89-015.

PM₁₀ Guidance: Final Staff Work Product, U.S. Environmental Protection Agency, April 2, 1991.

Agenda Item E, November 2, 1990, EQC Meeting, Proposed Adoption of Rules for PM₁₀ Control Strategy for Grants Pass.

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

HWH:a
RPT\AH20073
(10/24/91)

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED GRANTS PASS PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN**

PROPOSAL SUMMARY

The implementation of the PM₁₀ control strategy involves residents, industries, local governments, and state and federal agencies. The two groups most affected by the proposed PM₁₀ control strategy for the Grants Pass area are the owners/operators of wood products industries and residents with woodstoves or fireplaces.

No adverse impact on small businesses (less than 50 employees) is anticipated. Heating system dealerships may benefit from the woodstove-removal-upon-sale contingency element.

COSTS TO WOOD PRODUCTS INDUSTRIES

The contingency plan would require additional controls on certain sized air conveying systems (more than 3 tons/year), principally wood dust handling systems. This would involve adding bag filter systems, or equivalent emission control to an estimated five existing cyclones. Additional control of fugitive emissions would also be required. The approximate costs of these additional controls are estimated to be:

Capital Cost	\$450,000
Annual Operation & Maintenance	\$100,000.

No small businesses (less than 50 employees) would be affected by the industrial contingencies. Details are discussed in the proposed Industrial RACT/BACT Rule, fiscal impact statement (OAR 340-21-005 to 250).

COSTS TO RESIDENTS WITH WOODSTOVES OR FIREPLACES

As an additional control plan element, the Grants Pass PM₁₀ control strategy includes a provision, authorized by State legislation, to ban the sale, or installation of used, non-certified woodstoves. The associated costs of this plan element are discussed in the proposed Residential Woodheating Rule Amendments, fiscal impact statement (OAR 340-34-010).

Although a key control strategy element continues to be an area wide local voluntary woodburning curtailment program, the contingency plan includes a mandatory curtailment program which would entail a greater number of households curtailing woodburning than under the voluntary program. The typical cost of woodburning curtailment is estimated at \$2-5 per curtailment day per

woodburning home, depending primarily on the type of alternative heat, amount of weatherization and size of home. Approximately 4,200 homes in the critical PM₁₀ control area would be affected on the 3-5 days of red calls and 13 days of yellow calls during the heating season. The expected compliance rate for a mandatory program is estimated at 70%, based on experience in other areas. Using these estimates, the total homeowner cost associated with this contingency would range between \$105,000 and \$265,000 per year.

Costs associated with the contingency plan element requiring the removal and destruction of non-certified woodstoves upon home sale are discussed in the fiscal impact statement for the proposed rule (OAR 340-34-200).

COSTS OF REVISED VENTILATION INDEX CRITERIA

As an additional control strategy element, the revised Grants Pass PM₁₀ plan incorporates a revision of the existing ventilation index of 200 to a more restrictive level of 400 for open burning in the Rogue Basin. This would only affect persons or areas outside the City Limits of Grants Pass, where open burning is banned year-round. This would increase the number of "no burn" days from 73 to 149 on an annual basis. The associated costs of this plan element are provided in the proposed Amendments for the Rogue Basin Open Burning Control Area, fiscal impact statement.

COSTS OF A SEASONAL BAN ON OPEN BURNING

The contingency plan includes a four-month (November through February) ban on open burning in the Rogue Basin Open Burning Control Area. This would be a new restriction for those residences outside the City Limits of Grants Pass, where a year-round ban on open burning is in effect. For most affected residences, the seasonal ban on open burning would be a matter of shifting the time of burning, with no material financial costs imposed. The associated costs of this plan element are provided in the proposed Amendments for the Rogue Basin Open Burning Control Area (OAR 340-23-090), fiscal impact statement.

COSTS TO STATE AND LOCAL GOVERNMENT AGENCIES

The new industrial emission controls on air conveying systems in the contingency plan would require additional plan reviews, inspections, monitoring report reviews and other compliance assurance activities by Department of Environmental Quality staff. This additional work could be handled within existing resources.

The State would first look to local government to implement a mandatory woodburning curtailment program, if this contingency appeared imminent. The annual cost to local government of such a program would probably be in the range of \$12,000 to \$15,000. If a mandatory woodburning curtailment program were implemented by

the State under the backup legislative authority, additional staff resources would be needed, and the Department would seek EPA funding.

The ban on the sale, or installation of used, non-certified woodstoves would not have a fiscal impact on local government, since this would be State-enforced. The required surveillance and enforcement would be accomplished within the existing resources of the Department.

The contingency plan element requiring the removal and destruction of used, non-certified woodstoves would have negligible impact on local government. Existing resources in the Department's woodheating program would probably be adequate to carry out the necessary enforcement. EPA funding would be sought if there were additional staffing needs.

Costs to the Oregon Department of Forestry (ODOF) associated with operation of the voluntary forestry smoke management program are about \$ 23,000 per year for forecasting and program coordination services. Costs to the US Forest Service and private land owners to reschedule slash burning to days with favorable smoke dispersion capacity have been estimated by ODOF at \$23,000 per year.

HWH:a
RPT\AH15020
(8/14/91)

NOTICE OF PUBLIC HEARING

Hearing Dates: September 26,
27, 30 & October
1, 1991

Comments Due: October 2, 1991

WHO IS AFFECTED:

Individuals, especially those with woodstoves, and board product industries statewide, local governments, agricultural operations and industries in or near the Medford-Ashland, Klamath Falls, Grants Pass and La Grande PM₁₀ Nonattainment Areas.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the State of Oregon Clean Air Act Implementation Plan to:

- o Revise fine particulate (PM₁₀) Pollution Control Strategies for the Medford, Grants Pass and Klamath Falls areas;
- o Add a new PM₁₀ Control Strategy for the La Grande area;
- o Add new regulations for woodstoves, OAR Chapter 340, Division 34;
- o Add new contingency industrial particulate emission standards for PM₁₀ nonattainment areas, OAR Chapter 340, Division 21;
- o Revise the Medford/Grants Pass Particulate Standard Rules, OAR Chapter 340, Division 30;
- o Revise Board Products Particulate Emission Standard Rules, OAR Chapter 340, Division 25;
- o Revise Ambient Air Standard Rules, OAR Chapter 340, Division 31;
- o Revise Rogue Basin Open Burning Control Area rules, OAR Chapter 340, Division 23.

WHAT ARE THE HIGHLIGHTS:

The federal Clean Air Act requires states to submit PM₁₀ attainment Control Strategies for PM₁₀ Nonattainment Areas to the U.S. Environmental Protection Agency (EPA) by November 15, 1991. The Control Strategies specify how federal PM₁₀ air quality standards will be attained by the Act's deadline of December 31, 1994. They primarily rely on controlling PM₁₀ emissions from residential woodheating, industry and open burning.

ATTACHMENT D

The proposed rules which would implement PM₁₀ Control Strategies will:

- o Regulate residential woodheating according to new legislative authority including:
 - > Banning the sale of used, uncertified woodstoves statewide;
 - > allowing DEQ to prohibit woodheating on poor air quality days if local governments fail to adopt or implement such programs where needed;
 - > Requiring the destruction of uncertified woodstoves upon the sale of a home as a contingency measure if an area fails to attain compliance with the PM₁₀ standard by December 31, 1994.
- o Require industries in PM₁₀ nonattainment areas to meet Reasonably Available and Best Available Control Technology requirements of the Clean Air Act as a contingency measure if areas fail to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Require tighter meteorological criteria for allowing open burning in the Rogue Basin Open Burning Control Area, and ban open burning from November through February in this area as a contingency if it fails to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Address housekeeping/enforceability issues raised by EPA with respect to existing state regulations covering the Board Products Industry, Medford/Grants Pass Industrial Particulate Emission and Ambient Air Standards.

HOW TO COMMENT:

Copies of the complete proposed rule packages may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact:

Merlyn Hough at (503) 229-6446 (Medford-Ashland)
John Core at (503) 229-5380 (Klamath Falls)
Howard Harris at (503) 229-6086 (Grants Pass)
Brian Finneran at (503) 229-6278 (La Grande)
Andy Ginsburg at (503) 229-5581 (Industry)
David Collier at (503) 229-5177 (Woodstoves)

ATTACHMENT D

Public hearings will be held before a hearings officer at:

7:00 pm
September 26, 1991
Commission Hearing Room
Courthouse Annex
Klamath Falls, Oregon

7:00 pm
September 30, 1991
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
September 27, 1991
City Council Chambers
101 NW "A" Street
Grants Pass, Oregon

7:00 pm
October 1, 1991
City Hall
1000 Adams Avenue
La Grande, Oregon

3:00 pm
October 1, 1991
DEQ Offices
811 SW Sixth Avenue
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received no later than 5 pm, October 2, 1991.

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments and Control Strategies identical to the proposed amendments, adopt modified rule amendments and Control Strategies on the same subject matter, or decline to act. The adopted rules and Control Strategies will be submitted to the EPA as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on November 7, 1991, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

YM:a
RPT\AH15041
(8/14/91)

168.300

PUBLIC HEALTH AND SAFETY

(2) in determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(l) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.785]

468.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.825]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.782]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register

**Summary of Proposed PM₁₀ Control Strategy
Grants Pass Urban Growth Boundary (UGB)**

Who? When? Key: L=Local Government, S=State Agency,
E=Existing Strategies, N=New Strategies,
C=New Contingency Plan

Residential Woodburning Controls:

L/S	E	Woodburning public education program;
L	E	Voluntary woodburning curtailment to achieve 25% compliance during air stagnation episodes in the PM ₁₀ Critical Control Area;
S	E	EPA\DEQ certification program for new woodstoves;
S	N	Backup authority from 1991 Legislature for DEQ to adopt mandatory curtailment programs in the event that local governments fail to adopt, implement or enforce local ordinances that are necessary to meet air quality standards (DEQ does not expect that a mandatory curtailment program will be needed to meet standards in Grants Pass, and air monitoring data from 1988-90 further supports this position);
S	N	Statewide ban from 1991 Legislature on the sale and installation of used, non-certified woodstoves;
S	C	State authority from the 1991 Legislature to require removal of non-certified woodstoves upon sale of property.

Open Burning Controls:

L	E	Year-round ban on open burning in the City of Grants Pass;
L	E	Ban on open burning within the Rogue Basin Open Burning Special Control Area when the ventilation index is less than 200;
S	E	Ban on commercial, industrial and land-clearing open burning within the Rogue Basin Open Burning Special Control Area;

Who? When? Key: L=Local Government, S=State Agency,
E=Existing Strategies, N=New Strategies,
C=New Contingency Plan

Open Burning Controls (continued):

- | | | |
|---|---|--|
| S | E | Mandatory forestry smoke management program in the Restricted Area (area west of crest of Cascades plus the Deschutes National Forest) limiting slash burning to times and locations that smoke is not expected to impact designated areas such as the Medford-Ashland AQMA; |
| S | N | Revision of the ventilation criteria for the Rogue Basin Open Burning Special Control Area from the current 200 index to the more restrictive 400 index; |
| S | C | Ban on open burning within the Rogue Basin Open Burning Control Area during November, December, January, and February. |

Industrial Controls:

- | | | |
|---|---|---|
| S | E | New industrial rules adopted in 1989 to require additional air pollution controls on veneer dryers and large wood fired-boilers; |
| S | E | Additional continuous emission monitoring and periodic source testing requirements on industrial sources to maximize performance of control equipment and minimize emissions; |
| S | C | Slight tightening of certain industrial rules to insure meeting RACT or better emission control; |

HWH:a
RPT\AH20074
(10/24/91)

DEQ LAND USE EVALUATION STATEMENT
FOR RULEMAKING

PROPOSED GRANTS PASS PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN

(1) Explain the purpose of the proposed rules.

The purpose of the proposed revision to the State Implementation Plan (SIP) is to assure that the Grants Pass area attains the PM₁₀ standards within the time frames prescribed by the federal Clean Air Act Amendments of 1990. The control strategy includes a compilation of existing and proposed state and local rules and commitments which become federally enforceable upon adoption of the SIP revisions by the Environmental Quality Commission and approval of the SIP revisions by the U.S. Environmental Protection Agency.

(2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes No

(a) If yes, identify existing program/rule/activity:

The control strategy includes concurrently proposed new industrial PM₁₀ emission standard rules and other related house-keeping measures which affect a land use program identified as "Issuance of Air Contaminant Discharge Permits (ACDP)".

No other concurrently proposed new provisions of the control strategy are:

- (1) Specifically referenced in the statewide planning goals; or
- (2) Reasonably expected to have significant effects on:
 - (a) resources, objectives or areas identified in the statewide planning goals, or
 - (b) present or future land uses identified in acknowledged comprehensive plans.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes No

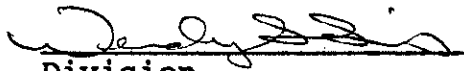
If no, explain: Not Applicable.

(c) If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

Not Applicable.

- (3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not Applicable.


Division


Intergovernmental Coord.

10-21-91
Date

ADG:a
MISC\AH19057
(9/9/91)

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 24, 1991

TO: Environmental Quality Commission
FROM: Linda Wishart, Hearings Officer *LW*
SUBJECT: Hearings Report for Grants Pass PM₁₀ Control Strategy

Five hearings were held to accept testimony on four PM₁₀ Control Strategies and three packages of supporting rules required to meet the Clean Air Act November 15, 1991 deadline for PM₁₀ State Implementation Plan revisions. These hearings were authorized by the Environmental Quality Commission at an August 22, 1991, telephone conference.

On September 26, 1991 a public hearing, held in the Commission Hearing Room of the Courthouse Annex, Klamath Falls, Oregon, was attended by 24 persons; 15 gave oral comments and 7 submitted written comments.

On September 27, 1991, a public hearing was held at the City Council Chambers, 101 NW "A" Street, Grants Pass, Oregon. There were nine persons in attendance, one gave oral testimony and two submitted written comments.

On September 30, 1991, a public hearing was held at the Smullin Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 34 persons present, 15 gave oral testimony and 13 submitted written comments.

On October 1, 1991, a public hearing, held in Zabel Hall, room 110, Eastern Oregon State College, La Grande, Oregon, was attended by 21 persons; five gave oral comments, four submitted written comments.

On October 1, 1991, a public hearing was held at the conference room of the Oregon Operations office of the U.S. Environmental Protection Agency (EPA), 811 SW Sixth Avenue, Portland, Oregon. Four people attended. Three gave oral testimony. No written testimony was received.

Additional testimony was received prior to the October 2, 1991 deadline. Copies of written comments have been provided to the Environmental Quality Commission. The following is a summary of all comments received, both oral and written.

Grants Pass Control Strategy

No.	Testimony Summary/Issues	Whose Comment
1.	The City of Grants Pass endorses the Proposed Control Strategy and Contingency Plan. The financial assistance is appreciated for woodstove curtailment and education programs. City requests that DEQ refine and implement the Grants Pass Urban Growth Boundary Woodheating Survey. This is needed to refine the curtailment and education procedures.	G3, G4
2.	EPA recommends the contingency measure reductions equal 25% of the total reduction in the control strategy and otherwise is pleased with the quality of the proposal.	P5
3.	The Sierra Club supports woodstove curtailment provisions. The smoke management plan should include designation of restricted areas in the control plan, not the contingency plan. There should be no slash burning on yellow or red days within a 50 mile zone of nonattainment boundaries. Otherwise supports the plan.	P6
4.	Wood Heating Alliance and Wood Energy Institute found objections to assigned "credits", inclusion of the term "durable" and the woodstove replacement program priorities.	P8, P9
	a. The Control Strategies reference studies that show 50% cleaner-burning woodstoves. These studies pertain to stoves no longer on the market. EPA Phase II stoves tested out at 90% and 70% reductions in the Klamath Falls and Crested Butte studies.	
	b. Reference to 'durable' woodstoves should be withdrawn. Durability will be addressed by market and EPA compliance testing, and is preempted by HB 2175 until after December 1994.	
	c. Programs to encourage replacement of uncertified woodstoves are biased against replacements with certified woodstoves and are unacceptable.	

Testimony References

Public Testimony Given in La Grande

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
L1.	A	Grant Darrow, Chimney Sweep
L2.	B	Francis Mohr, Acting Air Resource Manager Wallowa-Whitman National Forest
L3.	B	R.M. Richmond, Forest Supervisor, Wallowa-Whitman National Forest
L4.	C	Jeff Blackwood, Forest Supervisor, Umatilla National Forest
L5.	D	Larry Dalrymple, City Manager, La Grande
L6.	no	Jim Brown, Air Quality Committee, Citizens
L7.	no	Roberta Bates, Resident, La Grande

Public Testimony Given in Klamath Falls

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
K1.	no	Doss Decker, Resident, Klamath Falls
K2.	no	Nancy Roeder, Resident, Klamath Falls
K3.	no	Harry Fredricks, County Commissioner
K4.	E	Stan Meyers, Vice President Engineering, JELD-WEN, INC.
K5.	F	Joseph Riker, Community Development Director, City of Klamath Falls
K6.	G	John D. Monfore, Land Use Manager, Weyerhaeuser

K7.	no	Leo Dunn, Resident, Klamath Falls
K8.	H	Drew Honzel, Columbia Plywood Corp.
K9.	I	Ron Loveness, Resident, Klamath Falls
K10.	no	Del Parks, State Representative, Klamath County
K11.	J	James Keller, City Manager, Klamath Falls
K12.	K	Kurt Schmidt, Employee, Modoc Lumber Co.
K13.	no	Roy Ford, Resident, Klamath Falls
K14.	L	Steve Kandra, President Klamath County Chamber of Commerce
K15.	no	Bob Flowers, Farmer, Klamath Falls
K16.	M	Nina Pence, President, League of Women Voters, Klamath County
K17.	N	Carol Yarbrough, President, Citizens for Quality Living

Public Testimony Given in Grants Pass

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
G1.	no	Paul Brandon, Resident, Grants Pass
G2.	O	Dennis Spencer, Regional General Manager, Stone Forest Industries
G3.	P	Candace Bartow, Mayor, Grants Pass
G4	Q	Josephine County Board of Commissioners

Public Testimony Given in Medford

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
M1.	R	Wallace Skyrman, Resident, Central Point
M2.	S	Anna Hirst, League of Women Voters
M3.	T	Frank Hirst, Audubon Society
M4.	U	Robert Palzer, PhD., Coalition to Improve AQ
M5.	no	James Dodson, Resident, Medford
M6.	no	Gary Stevens, Environmental Health Department, Jackson County
M7.	V	Vera Morrell, Chairperson, Coalition to Improve Air Quality
M8.	W	Paul Wyntergreen Regional Director, Oregon Environmental Council
M9.	X	Neil Robbins, Resident, Medford
M10.	Y	Patricia Kuhn, Resident, Medford
M11.	no	Ronald Meyer, Farmer, Talent
M12.	no	Myra Erwin, Chairperson, Rogue Group Sierra Club
M13.	Z	William Barbour, Farmer, Medford
M14.	Z	Victoria Montgomery, Resident, Medford.
M15.	AA	Jan Young, Pulmonary Rehabilitation Coordinator, Medford
M16.	BB	Greg Miller, Executive Vice President, Southern Oregon Timber Association

M17. BB Bob Morris,
Environmental Affairs Committee Chair,
Southern Oregon Timber Association

M18. CC Kathleen Muir, Resident, Ashland

M19. DD Phyllis Hughes,
Rogue Group Sierra Club

M20. EE Garl Grigsby, Double Dee Lumber Company

M21. FF Anne & Bob Gottschalk,
Residents, Talent

M22. GG Robert Owens, Co-Executive Council
American Indian Cultural Center

M23. HH C. Herschel King, MD
Retired Anesthesiologist, Ashland

Public Testimony Given in Portland and Misc. Letters Submitted

<u>NO.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
P1.	no	Joe Weller, Lung Association
P2.	no	Jim Britton, Executive Director, Asphalt Paving Association
P3.	no	Harry Fredricks, Klamath County Commissioner
P4.	II	David Kircher, Chief Air Programs Development Section
P5.	JJ	David Kircher, Chief Air Programs Development Section
P6.	KK	Bob Palzer, Air Quality Coordinator, Sierra Club
P7.	LL	James Whitty, Legislative Counsel, Associated Oregon Industries
P8.	MM	Tim Nissen, President, Wood Energy Institute
P9.	NN	John Crouch, Emissions Specialist, Wood Heating Alliance

LLW:a
RPT\AH20075
(10/24/91)

RESPONSE TO PUBLIC HEARING TESTIMONY DIRECTLY RELATED TO THE PROPOSED PM₁₀ CONTROL STRATEGY ADDENDUM FOR THE GRANTS PASS NONATTAINMENT AREA

Four issues from the public hearing testimony (Attachment H) on the proposed package of PM₁₀-related, Environmental Quality Commission action items bear directly on the proposed revised PM₁₀ control strategy for Grants Pass. The four issues are summarized below, followed by the Department's response. Other industrial-related issues that were raised at the public hearing held in Grants Pass are summarized with the Department's response in the report for the Industrial Rules (Agenda Item I, Attachment I).

Issue No. 1: The City of Grants Pass endorses the Proposed Control Strategy and Contingency Plan. The financial assistance is appreciated for woodstove curtailment and education programs. The City requests that DEQ refine and implement the Grants Pass Urban Growth Boundary Woodheating Survey. This is needed to refine the curtailment and education procedures.

Response: The woodheating survey for the Grants Pass Urban Growth Boundary (UGB) was finalized after local review and mailed out during the late summer of 1991 to a random sample of 3,000 households residing within the UGB. The return percentage was approximately 30%. The Department is in the process of tabulating results. A final summary of survey results is expected to be completed in the first quarter of 1992.

Issue No. 2: EPA recommends the contingency measure reductions equal 25% of the total reduction in the control strategy and otherwise is pleased with the quality of the proposal.

Response: Comment acknowledged. The Department has changed the discussion under Emission Reductions from Contingency Measures on page A-15 of the Addendum to give the calculated percentage reduction (approximately 30% of the total reduction attributable to the strategy).

Issue No. 3: The Sierra Club supports woodstove curtailment provisions. The smoke management plan should include designation of restricted areas in the control plan, not in the contingency plan. There should be no slash burning on yellow or red days within a 50 mile zone of nonattainment boundaries.

Response: The current forestry Smoke Management Plan set aside the Medford-Ashland and Eugene-Springfield nonattainment areas as mandatory, designated areas to be protected from slash burning smoke impacts. These provisions of the Plan are proposed to be strengthened by establishing

mandatory, Special Protection Zones (SPZs) surrounding Medford-Ashland, Grants Pass, Eugene-Springfield and Oakridge. The SPZs provide a higher level of protection than that afforded designated areas and are being incorporated as an element of the attainment strategy. Slash burning within these SPZs may be prohibited between December and mid-February on Red days if an analysis of past burning shows significant impacts. Each SPZ extends approximately 20 miles from the nonattainment area boundary.

The Department believes that the additional protection provided through the SPZ program will represent a significant step in assuring that forestry slash burning does not contribute to PM₁₀ exceedances. Proposed revisions to the Plan are generally consistent with the recommendations of the joint DEQ-Department of Forestry Smoke Management Plan Advisory Committee. When adopted by the Department of Forestry and DEQ, the revised Plan will be incorporated as a revision to the PM₁₀ nonattainment area SIPs.

Issue No. 4: The Wood Heating Alliance and Wood Energy Institute found objections to assigned "credits", inclusion of the term "durable" and the woodstove replacement program priorities.

Response: Comments acknowledged. The Department has revised the appropriate sections of the original Grants Pass control strategy document (refer to Attachment A).

HWH:a
RPT\AH20076
(10/24/91)

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: N
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption of Revised PM₁₀ Control Strategy for the Klamath Falls Nonattainment Area.

PURPOSE:

To meet new Clean Air Act requirements.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment A
 - Rulemaking Statements Attachment B
 - Land Use Compatibility Statement Attachment G
 - Fiscal and Economic Impact Statement Attachment C
 - Public Notice Attachment D

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment _____



- | | |
|--|-------------------------------------|
| <input type="checkbox"/> Approve Department Recommendation | |
| <input type="checkbox"/> Variance Request | Attachment <input type="checkbox"/> |
| <input type="checkbox"/> Exception to Rule | Attachment <input type="checkbox"/> |
| <input type="checkbox"/> Informational Report | Attachment <input type="checkbox"/> |
| <input type="checkbox"/> Other: (specify) | Attachment <input type="checkbox"/> |

DESCRIPTION OF REQUESTED ACTION:

A revised control strategy for PM₁₀ (small particulate air pollution) is proposed for the Klamath Falls Nonattainment Area to ensure attainment of federal ambient air quality standards. This revised control strategy must be submitted to the U.S. Environmental Protection Agency by November 15, 1991 under the new Clean Air Act requirements.

The revised strategy for Klamath Falls includes specific Reasonably Available Control Measures (RACMs) and a contingency plan. RACM provisions of the recently adopted Klamath County Clean Air Ordinance have been incorporated into the control strategy and include a mandatory curtailment program, a year around 20% visible emissions requirement for woodstoves and a ban on the installation of used uncertified woodstoves (also covered by Department rules).

The contingency plans which would automatically go into effect if the area fails to attain the PM₁₀ standard by the Act deadline of Dec. 31, 1994, include: a) removal and destruction of uncertified woodstoves upon home sale, b) a mandatory fuelwood seasoning requirement, c) expansion of Klamath County's air quality control area, d) a prohibition on installation of more than one woodstove in a new dwelling, e) additional dust control measures, and f) a mandatory forestry and agricultural smoke management programs within Klamath County. Industry within the nonattainment area (the Urban Growth Boundary) would also be required to install new control systems that meet the Act's requirements for Reasonable Available Control Technology (RACT). Industry located near the nonattainment area would be required to install RACT controls if their emissions are found to have a significant impact on the nonattainment area.

The control strategy has been designed to assure attainment of the air quality standards and meet the requirements of the Clean Air Act.

AUTHORITY/NEED FOR ACTION:

Required by Statute: _____ Attachment _____
 Enactment Date: _____
 Statutory Authority: ORS 468.305 Attachment E
 Pursuant to Rule: _____ Attachment _____

Pursuant to Federal Law/Rule:

 Federal Clean Air Act Amendments of 1990. Attachment _____

Other: Attachment _____

Time Constraints:

- The 1990 Clean Air Act requires states to:
- o Submit revised PM₁₀ control strategies (including contingency plans) by November 15, 1991;
 - o Fully implement the attainment strategies by December 10, 1993;
 - o Attain PM₁₀ standards by December 31, 1994; and
 - o Implement contingency plan by July 1, 1995, if PM₁₀ standards are not met by December 31, 1994.

DEVELOPMENTAL BACKGROUND:

Advisory Committee Report/Recommendation Attachment _____
 Hearing Officer's Report/Recommendations Attachment H

In June, 1990, the Commission approved public hearings on the initial draft of the Klamath Falls PM₁₀ State Implementation Plan (SIP). The first hearing was held in Klamath Falls on September 18, 1990 and, on January 31, 1991, the initial Plan was adopted. At this time, the plan did not contain enforceable provisions for the woodstove curtailment program. Subsequent to adoption, the Environmental Protection Agency issued new guidance on the PM₁₀ requirements of the 1990 Clean Air Act Amendments. Klamath County also adopted the Klamath County Clean Air Ordinance on August 7, 1991 establishing a mandatory curtailment program, open burning and fugitive dust restrictions and a contingency plan with numerous new control strategy elements. In addition, HB2175 was adopted by the Oregon Legislature which provides additional woodheating control strategies. All of these events require revisions to the Klamath Falls PM₁₀ SIP.

On August 22, 1991, the Commission approved public hearings on the revised Klamath Falls PM₁₀ SIP and, on September 26, 1991 a public hearing was held in Klamath Falls. The major issues raised during the public hearing process were:

1. The majority of the testimony focused on opposition to including Reasonably or Best Available Control Technology (RACT/BACT) industrial requirements in the contingency plan and indicated that the federal Clean Air Act only requires Reasonable Available Control Technology (RACT). Related testimony focused on the small industrial contribution to the PM₁₀ nonattainment problem, the high cost of additional control systems and the economic impact of additional control requirements on the industries within the Klamath Basin.
2. Some of the testimony questioned the inclusion of agricultural field burning and woodstove restrictions in the control strategy.
3. The Environmental Protection Agency identified several issues of a technical nature regarding the emission and attainment demonstration calculations.

X Response to Testimony/Comments

Attachment I

The following statements correspond to the major public hearing issues and summarize the Department's responses:

1. In response to testimony, the Department has revised the proposed industrial rules to separate the RACT and BACT requirements. See the discussion in the Agenda Item I regarding industrial rule revisions. These requirements are included in the strategy's contingency plan in response to a requirement of the Clean Air Act. In establishing RACT emission rates, the economic impact on industry is considered on a case-by-case basis. At the time the industrial contingency measures may be activated, industry will contribute 36% of the PM₁₀ emissions in the nonattainment area. Industry would be the only major source of PM₁₀ emissions at that time which has not applied RACT.
2. The control strategy elements banning agricultural burning within the Klamath Falls nonattainment area and establishing a smoke management program was

adopted as part of the Klamath County Clean Air Ordinance. They were included in the control strategy to take credit for the emission reductions and air quality improvements that will occur as a result of the County program. On an annual basis, agricultural burning is a significant PM₁₀ source estimated at 156 tons per year. Restrictions on woodstove use are an essential element of the control strategy which must be included to assure that the SIP is approved by the Environmental Protection Agency.

3. Revisions to the demonstration of attainment calculations (including the woodstove certification credits) have been completed and incorporated into the SIP. Additional documentation of the emission inventory, growth rate calculations and Klamath County's enforcement policy have been either provided to EPA or included in the SIP. Revisions to the strategy effectiveness calculations have not resulted in any substantive change to the control strategy.

X Prior EQC Agenda Items:

Agenda Item D, January 31, 1991
Agenda Item B, August 22, 1991

Klamath Falls PM₁₀ Plan
Hearings Authorization

Summary of Control Strategy
& Contingency Plan

Attachment F

Other Related Reports/Rules/Statutes:
 Supplemental Background Information

Attachment
Attachment

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Implementation of the PM₁₀ air pollution control strategy involves residents, industries, local governments, and state and federal agencies. Residents with woodstoves and fireplaces and owners/operators of wood products industries are the two groups most affected by the proposed PM₁₀ attainment strategy and contingency plan. In the event that a PM₁₀ control strategy for Klamath Falls is not adopted as a revision to the State Implementation Plan, the Clean Air Act requires economic sanctions which include restrictions on federal highway funds, increased emission offset

requirements for new or expanding industry, and ultimately a Federal Implementation Plan to be implemented by EPA. The economic impacts of the proposed strategy are outlined in Attachment C.

PROGRAM CONSIDERATIONS:

The Department is concerned about long-term local and state government resources to implement critical residential woodheating elements of the PM₁₀ control strategy, particularly the operation of curtailment and public information programs as well as financial incentives for replacement of existing woodstoves with cleaner burning units. The Department will continue to explore funding options and may propose new legislation to address this need.

The contingency plan, if required due to failure to meet PM₁₀ standards by the December 1994 deadline, would also require new Department work. New industrial work should be able to be integrated into the industrial permitting program activities and emission fee structure as modified to meet Title V requirements. New woodheating work may require additional resources as discussed above.

Considerations related to the attainment plan were addressed at the time of the initial control strategy adoption (January, 1991).

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Defer action to EPA. If a state fails to meet the Clean Air Act PM₁₀ requirements, EPA is required to impose sanctions and ultimately prepare a Federal Implementation Plan (FIP) to address the PM₁₀ problems.
2. Remove the industrial RACT requirements from the contingency plan. EPA guidance specifies that RACT should be included as an element of the contingency plan. A decision to remove the RACT requirement may jeopardize EPA approval of the control strategy.
3. Adopt the proposed revisions to the Klamath Falls PM₁₀ State Implementation Plan, including changes made in response to public testimony.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the third alternative, specifically that the Commission adopt the proposed amendments to the control strategy for the Klamath Falls PM₁₀ Nonattainment Area (Attachment A) as a revision to the Oregon Clean Air Act Implementation Plan, replacing the control strategy adopted in January, 1991. Adoption is required for the Department to submit a fully approvable PM₁₀ control strategy to the Environmental Protection Agency within the time frame required by the Clean Air Act.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed PM₁₀ control strategies are consistent with Goals 2, 3, 4, and 5 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy. The proposed strategy and supporting rules are consistent with the Oregon Benchmarks goal of increasing the percentage of Oregonians living in area which meet ambient air quality standards.

ISSUES FOR COMMISSION TO RESOLVE:

Does the EQC concur with the Department's proposal to include RACT and separate RACT/BACT control requirements in the contingency plan? Does the EQC concur with the overall balance of the attainment and contingency measures ?

INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan revision to the Environmental Protection Agency for approval;
2. Implement the Klamath Falls PM₁₀ air pollution control strategy (including industrial, woodheating, fugitive dust and open burning measures) and enforce all mandatory control measures in the strategy in coordination with other local, state and federal agencies.
3. Conduct PM₁₀ impact studies of major industrial sources outside of the nonattainment area boundary.

Meeting Date: November 8, 1991
Agenda Item: N
Page 8

4. Monitor emission reductions and progress toward attainment of the PM₁₀ air quality standards. If PM₁₀ air quality standards are not met by December 31, 1994, deadline:
 - a. Immediately implement the contingency plan;
 - b. Revise the PM₁₀ control strategy within 18 months to include Best Available Control Technology (BACT) for industrial sources and Best Available Control Measures (BACM) for any area sources (residential woodheating, slash burning, open burning, etc.) not already meeting BACM; and
 - c. Seek long-term funding assistance for local and state residential woodburning emission control programs.

Approved:

Section:

John F. Kavalaygi

Division:

Wendy D. Dier

Director:

Jul Hansen

Report Prepared By: John Core (229-5380)

Date Prepared: October 25, 1991

JEC:e
RPT\AH20077
(10/25/91)

Attachment A

PM-10 Control Strategy for Particulate Matter

**Klamath Falls, Oregon
Nonattainment Area**

**A Plan for Attaining and
Maintaining the National Ambient
Air Quality Standard for PM-10**

**State of Oregon
Department of Environmental Quality
Air Quality Division**

October 1991

State of Oregon
Department of Environmental Quality
Air Quality Division

State Implementation Plan For
PM₁₀ in Klamath Falls

A Plan for Attaining and Maintaining
Compliance with National
Ambient Air Quality Standards
For PM₁₀

October, 1991

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Executive Summary

The US Environmental Protection Agency (EPA) adopted a new particulate National Ambient Air Quality Standard (NAAQS) for PM₁₀ on July 1, 1987. PM₁₀ particulate is less than 10 micrometers in aerodynamic diameter or about one-tenth of the diameter of a human hair. The NAAQS adopted by the US Environmental Protection Agency were established to protect public health and welfare. The Environmental Quality Commission adopted a Klamath Falls PM₁₀ control strategy in January of 1991. The Clean Air Act as amended in November, 1990 contains further requirements for PM₁₀ control strategies that include the necessity to demonstrate attainment by December 31, 1994 and include a contingency plan to be implemented if attainment is not reached by the deadline. This document describes the State of Oregon's revised plan to attain the PM₁₀ standard in Klamath Falls.

High exposure to particulate matter is of concern because of human health effects such as changes in lung functions and increased respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alteration in the body's defense system against foreign materials, damage to lung tissue, increased risk of cancer and, in extreme cases, premature death. Most sensitive to the effects of particulate matter are people with chronic obstructive pulmonary cardiovascular disease and those with influenza, asthmatics, the elderly, children and mouth-breathers.

Air quality measurements taken in Klamath Falls have indicated that the 24-hour PM₁₀ health NAAQS was exceeded on average 47 days per year during the winter months during the period of mid-1986 to mid-1989. The annual average concentration of PM₁₀ during the years 1986-1989 of 75 $\mu\text{g}/\text{m}^3$ also exceeds the annual average PM₁₀ NAAQS of 50 $\mu\text{g}/\text{m}^3$.

The 24-hour PM₁₀ NAAQS is 150 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$), not to be exceeded more than three times averaged over three calendar years. Winter 24-hour concentrations of PM₁₀ in Klamath Falls are among the highest recorded anywhere in the nation with maximum concentrations reaching as high as 792 $\mu\text{g}/\text{m}^3$ on January 25, 1988.

An inventory of PM₁₀ emissions developed for the Klamath Falls Urban Growth Boundary indicates that the major sources of particulate emissions during 1986 winter periods of worst-case 24-hour PM₁₀ concentrations are residential wood combustion (80%), industrial emissions (7%) and soil dust (9%). On an annual basis, these sources contribute 61%, 11% and 10%, respectively. Emission inventory information representative of worst-case 24-hour conditions has been verified through receptor modeling techniques which actually measure source contributions to ambient air quality on the basis of their chemical "fingerprints."

Extensive air monitoring surveys have been completed which clearly demonstrate that the south suburban area of Klamath Falls, which comprises about 54% of the population within the UGB, has the highest winter PM_{10} concentrations within the airshed. Based on these surveys, ambient air monitoring conducted at Peterson School have been shown to generally represent the highest PM_{10} levels within the Urban Growth Boundary. Development of a SIP which assures attainment and maintenance of the NAAQS at the Peterson School site should therefore be adequate to demonstrate attainment of the NAAQS anywhere within the airshed.

PM_{10} design values are those representative 24-hour worst case and annual average concentrations from which reductions must be made to achieve the NAAQS. Analysis of all of the available PM_{10} air quality data over the period of mid-1986 to mid-1989 (the largest available database) indicates 1986 24-hour and annual design values of $550 \mu\text{g}/\text{m}^3$ and $75 \mu\text{g}/\text{m}^3$, respectively. The design values adjusted for expected or potential emission changes (assuming no emission strategy elements are applied) during the 1986-1994 period are $600 \mu\text{g}/\text{m}^3$ and $81 \mu\text{g}/\text{m}^3$, respectively. Control strategies included in this plan have been designed to reduce projected 24-hour concentrations of PM_{10} by $450 \mu\text{g}/\text{m}^3$ ($600 - 150 \mu\text{g}/\text{m}^3$) and the annual average by $31 \mu\text{g}/\text{m}^3$ ($81 - 50 \mu\text{g}/\text{m}^3$). To achieve these 24 hour and annual average air quality improvements will require a 76% reduction in 24-hour worst case day emissions and a 47% reduction in annual emissions within the Urban Growth Boundary.

CONTROL STRATEGY OVERVIEW

The control strategies needed to assure attainment of the PM_{10} National Ambient Air Quality Standards focus on control of residential wood combustion, fugitive dust and open burning emissions. Other strategies include stringent management of future growth in industrial emissions. The strategies are implemented through a comprehensive and stringent program and ordinance adopted by the Klamath County Board of Commissioners on July 31, 1991 and through the Department's rules. The City of Klamath Falls, in a resolution adopted in August, 1991, authorized Klamath County to implement and enforce all of the provisions of the Klamath County ordinance within the city limits of Klamath Falls.

The Clean Air Act requires that PM_{10} control strategies include Reasonably Available Control Measures (RACM). EPA guidance indicates listed RACM measures must be included in the attainment plan if needed to demonstrate attainment. Otherwise, RACM is to be included in the contingency plan for all significant source categories contributing to PM_{10} violations. RACM for industrial point sources is referred to as Reasonably Available Control Technology (RACT).

For an area that fails to meet PM_{10} standards by December 31, 1994, the Clean Air Act requires that the area be redesignated as

a "serious" nonattainment area and that a revised PM₁₀ control strategy include additional control measures. EPA guidance indicates Best Available Control Measures (BACM) must be included for all significant source categories contributing to PM₁₀ violations. BACM for industrial point sources is referred to as Best Available Control Technology (BACT).

The Klamath Falls PM₁₀ control strategy (the combination of the attainment strategy and contingency plan) satisfies the RACM requirements for area sources, and should satisfy the RACT and BACT requirements for industrial point sources. EPA is scheduled to provide BACM guidance on residential woodburning, fugitive dust and prescribed burning by May 15, 1992. It is anticipated that the Klamath Falls PM₁₀ control strategy should satisfy BACM requirements for area sources.

Residential Wood Combustion Strategies

The principal means of achieving the needed reductions is through a stringent woodburning curtailment and emission reduction program. At least a 86% reduction in wood smoke emissions is needed on poor ventilation days to attain the 24-hour NAAQS. This reduction will have to come from most of Klamath Falls' estimated 10,000 woodburning households which will have to forego use of their woodstoves during air stagnation episodes. Additional reductions throughout the heating season from the phase in of certified woodstoves will help achieve attainment of the annual standard. A strong public education program is an essential element of the strategy.

The Klamath County program also includes a year around, 20% woodstove plume opacity regulation (stove startup and shutdown periods exempted) and phase-out of woodheating curtailment exemptions: sole source nonowner occupied dwellings by 1993 and owner occupied, low income sole source by 1998. All households that are solely heated with wood (except tenant occupied and low income) must have secondary heat sources by 1996. Also adopted was a ban on the sale of used, uncertified woodstoves within the county.

A home weatherization and woodstove replacement program for low income homeowners funded at \$1.44 million has further reduced woodstove emissions by removing uncertified stoves from about 325 homes resulting in a 507 pound per day woodstove emission reduction. In addition, results from the Klamath Falls 1991 Woodheating Survey indicate that 30% of the households that burned wood as their main source of heat in 1987 have voluntarily switched to other fuels (principally natural gas). Voluntary fuel switching by the public and reductions in the amount of wood each household burns has resulted in a reduction of worst case day emission by 36% relative to 1986 levels, exclusive of all other control strategies.

The strategy is implemented through the Klamath County Air Quality Air Quality Program and the Department's rules regulating woodstoves.

Fugitive Dust Control Strategies

A 60% reduction in winter road sanding emissions through the use of liquid road deicing techniques in lieu of rock aggregate, application of less road sanding material and rapid cleanup of used road sanding aggregate will achieve fugitive dust emissions reductions needed to assure attainment of the annual standard. The road sanding strategy is implemented through a Memorandum of Understanding with the Oregon Department of Transportation Highway Division. Other dust control measures include mandatory cleanup of trackout from unpaved areas onto State highway right-of-ways enforced through Oregon Department of Transportation Administrative Rules.

Open Burning Control Strategies

The Klamath County program includes a year around prohibition on agricultural open burning within the nonattainment area and within one-quarter mile of the nonattainment area boundary; a prohibition on highway right-of-way burning within the county, a prohibition on residential open burning on woodburning curtailment days, a voluntary agricultural smoke management program on farm lands within Klamath County and a voluntary forestry smoke management program on forest lands within approximately 20 miles of the nonattainment area. Additional restrictions under discussion with the Oregon Department of Forestry on slash burning may be included.

Industrial Control Strategies

Additional enforceable strategies include new rules designed to tightly manage industrial emission growth through reduction in the significant emission rate increase that triggers emission offset requirements for new or modified sources. The significant emission rate was reduced from 15 to 5 tons per year. The rule was adopted to assure that industrial emission growth beyond the current permit limits (Plant Site Emission Limit) does not jeopardize emission reductions gained through other strategy elements.

Contingency Measures

Measures to be implemented upon failure to attain the air quality standards by the December 31, 1994 Clean Air Act deadline include:

A. Woodburning Controls: State backup authority from the 1991 Legislature to require removal of uncertified

woodstoves upon sale of a home; measures in the Klamath County ordinance including mandatory fuelwood seasoning requirements on all firewood sold within the county; expansion of the Klamath County Air Quality Control Area to include the Keno - Midland area south to the California border; a prohibition on the installation of more than one woodstove in a new dwelling and removal of uncertified woodstoves upon sale of property.

Open Burning Measures: As a contingency, the County ordinance requires establishment of a mandatory agricultural open burning smoke management program. In addition, a mandatory forestry smoke management program implemented within Klamath County and surrounding forest lands is under discussion with the Oregon Department of Forestry. The mandatory forestry program would be implemented if slash burning smoke is found to be a significant contributor to PM₁₀ nonattainment.

Industrial Emission Control Measures: Industrial contingency measures proposed for adoption by the Department include requirements for the installation of new control systems which will meet the Clean Air Act RACT/BACT requirements. These will include bag filters on significant wood dust handling systems. Industrial sources located outside of the nonattainment area but within Klamath County's Air Quality Control Area will also be required to install RACT/BACT controls if their emissions have a significant impact on the nonattainment area.

Strategy Emission Reduction - 24-Hour Worst Case Day

Attainment of the 24-hour NAAQS in 1994 will require a 76% reduction in worst case day emissions equalling a reduction of 18,484 pounds per day. The needed reduction is achieved through the strategy elements listed below.

Summary of 24-Hour Emission Reductions To Be Achieved by 1994

<u>Strategy Element</u>	<u>Credit</u>	<u>Emission Reduction</u>
New Road Deicing Practices	60%	1,344 Pounds/Day
Woodburning Strategies:		
- Woodburning Curtailment	86%	16,624 Pounds/Day
- Certification of Woodstoves	24%	582 Pounds/Day
- Woodstove Removal Program	27%	507 Pounds/Day
Woodstove Strategies, Total		<u>17,713 Pounds/Day</u>

Total reduction from all strategies....19,057 Pounds/Day
 Required emission reduction18,922 Pounds/Day

(Note: Because emission reductions are calculated on a declining balance basis, the product of percentage credits and total reduction (19,057 pounds/day) will not yield the individual element emission reductions shown. See Appendix 5)

EPA guidance specifies that no credits can be taken for the Klamath County public education programs nor have credits been taken for residential open burning restrictions since there are no accurate worst case day emission inventory estimates for these sources. The 36% reduction (from 1987 levels) in winter worst case day PM₁₀ emissions has resulted from major reductions in both the amount of woodburned within the airshed and the number of households that rely on wood as their main source of heat but these credits have not been included since they are not enforceable. The above emission reduction credits are therefore very conservative.

Strategy Emission Reduction - Annual Average Case

Attainment of the annual average NAAQS in 1994 will require a 47% reduction in annual emissions or a reduction of 1008 tons per year. Although the entire needed emission reduction is achieved through the woodburning curtailment program, emission reductions obtained from the road deicing and other elements of the woodburning emission reduction programs are also included since they will occur as a result of implementing the 24-hour strategy and elements of the Klamath County Ordinance. The needed reductions are achieved through the strategy elements listed below.

**Summary of Annual Average Emission Reductions
 To be Achieved by 1994**

<u>Strategy Element</u>	<u>Credit</u>	<u>Emission Reduction</u>
Highway Road Sanding Program	60%	18 Tons/Year
Eliminate Agricultural Burning	100%	156 Tons/Year
Woodburning Strategies:		
- Woodburning Curtailment	74%	841 Tons/Year
- Woodstove Certification	24%	78 Tons/Year
- Woodstove 20% Opacity	5%	12 Tons/Year
		931 Tons/Year
Woodstove Strategies, Total		931 Tons/Year
Total reduction from all strategies.....	1203	Tons/Year *
Total required emission reduction.....	1020	Tons/Year

* Note: On an annual basis, the woodburning curtailment program will result in a 18% reduction in annual wood smoke emissions. This, however, is not reflective of annual air quality benefits of the program since the restricted ventilation during the curtailment periods compounds the benefits of the emission reductions. The effective or equivalent reduction is calculated based on a 86% curtailment program operating on 47 days per year indicating a reduction of the annual average PM₁₀ concentration from 75 to 50.2 $\mu\text{g}/\text{m}^3$. As a result, the woodburning curtailment program alone, implemented on 47 days per year, will provide sufficient benefits to assure that the annual NAAQS is achieved. Additional strategy elements are claimed as a result of reductions achieved through the 24-hour strategy. See Section 4.12.3.3.

Air Quality Standard Maintenance

During the six year period following attainment of the NAAQS, a net decrease in emissions is projected to occur as a result of attainment strategies and the replacement of older conventional stoves with certified cordwood and pelletstoves, offsetting increases in fugitive dust and transportation emissions. Both the 24-hour and annual NAAQS are projected to be maintained to the year 2000 at which time worst case day and the annual average PM₁₀ air quality is projected to be 145 and 44 $\mu\text{g}/\text{m}^3$, respectively.

Enforceability

The Clean Air Act requires SIP control strategies to be enforceable. Based on EPA guidance, a woodstove curtailment program requiring more than a 30% credit must be based on enforceable measures in order for the SIP to be approved by EPA. Klamath County has adopted a mandatory curtailment program with an objective of achieving an 86% compliance rate in the 1991-92 heating season. The program and penalty provisions of the ordinance is enforced by the Klamath County Department of Health Service. Violations of the provisions of the Ordinance are cumulative over multiple years. In the event that local governments fail to implement a mandatory curtailment program, the Department has statutory backup authority to implement the program.

The highway road sanding program is implemented through commitments provided by the Oregon Department of Transportation; residential, highway right-of-way and agricultural open burning restrictions are implemented through the Klamath County ordinance. The voluntary forestry smoke management program is coordinated by the Oregon Department of Forestry.

4.12.0 State Implementation Plan for Klamath Falls PM₁₀ Nonattainment Area

4.12.0.1 Introduction

On July 1, 1987, the Environmental Protection Agency promulgated new 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 Klamath Falls as a Group I PM₁₀ nonattainment area (52 FR 29383). The Clean Air Act Amendments of 1990 initially classified all PM₁₀ nonattainment areas (including Klamath Falls) as Moderate Nonattainment Areas. Air monitoring has shown that air quality within the Klamath Falls Urban Growth Boundary far exceeds the PM₁₀ National Ambient Air Quality Standards (NAAQS).

Section 110 of the Clean Air Act Amendments of 1990 requires states to adopt and submit plans (State Implementation Plans or SIPs) to EPA by not later than November 15, 1991. The Act allows EPA twelve months to approve or disapprove the plan. The plan must provide for attainment of the standard as expeditiously as practicable but no later than December 31, 1994.

The plan has been developed in consultation with officials of the City and County of Klamath Falls, the Oregon Department of Transportation, the Oregon Department of Forestry and the US EPA. The plan was prepared in accordance with the regulations and requirements of the Clean Air Act of 1990 and the US EPA. The Department believes that the PM₁₀ plan can achieve attainment of the NAAQS within the time frame required by the Act.

4.12.0.2 SIP Overview

This revision to the State Implementation Plan (SIP) has six sections. The first (4.12.1) provides a description of PM₁₀ ambient air quality in Klamath Falls; Section 4.12.2 describes the PM₁₀ air quality problem within the Klamath Falls Nonattainment Area; Section 4.12.3 describes emission reductions needed to attain NAAQS; Section 4.12.4 describes implementation of the control strategies, Section 5 described resource commitments and Section 6 discusses public involvement.

¹A micrometer (μm) 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.

4.12.0.3 Area Description

Klamath Falls is located in south central Oregon at an elevation of 4,105 feet. The area is typified by its semi-arid, high desert climate where annual rainfall is only 14.3 inches. The population of south suburban Klamath Falls within which the highest PM₁₀ concentrations are found is about 19,300 (1980 census) while the population within the Klamath Falls urban area is 36,500. About 13,600 households are located within the Urban Growth Boundary.

The Klamath basin is a relatively flat area of some several thousand square miles of old lake bed which is drained by the Klamath River. Upper Klamath Lake covers 132 square miles and has a surface elevation of 4140 ft above sea level. The Lower Klamath Lake area is a very large, flat, somewhat marshy region with an elevation of about 4100 ft above sea level. The region is punctuated by occasional hills and a system of elongated ridges aligned with a northwest-southeast orientation. These ridges may rise up to 2,000 ft above the basin floor. Two such ridges form a narrow opening at the outfall of Upper Klamath Lake.

The central business district of Klamath Falls is situated in this narrow opening at the southern end of Upper Klamath Lake where the elevation changes between the Upper and Lower Klamath Lake areas. Most of the Klamath Falls residential area, especially the south suburban area, is located on the lower elevation area. Thus it may be seen that the Klamath Falls area is confined by high terrain to the east and west. To the north is large expanse of Upper Klamath Lake and the flat terrain stretches for a number of miles to the south.

Figure 4.12.0-1 shows the boundaries of the Klamath Falls Urban Growth Boundary which was adopted as the nonattainment area boundary by the Environmental Quality Commission on June 2, 1989 (OAR 340-20-225 (22)). The criteria for selection of the UGB as the nonattainment area are as follows:

1. The nonattainment boundary must include the geographical area within which national ambient air quality standards are currently being exceeded. Air sampling studies completed in November, 1985, March, 1988 and January, 1989 have consistently show that minor day-to-day variations in the pattern of PM₁₀ levels exist depending on wind direction and the time of day of the survey. All surveys indicate a consistent pattern of maximum concentrations near Peterson School extending outward toward the downtown district, south toward Kingsley Field and westerly toward Green Springs Junction. The PM₁₀ levels appear to follow local topography with concentrations decreasing with increases in elevation. They also appear to follow the emission density of homes (woodstoves) in the area.

2. The nonattainment boundary must include the area within which

air standards may be exceeded in the future. EPA requires that SIP control strategies consider future population, transportation, housing and industrial growth to assure that air standards will be attained and maintained. Development of a strategy to assure maintenance of air standards therefore requires that the nonattainment area boundary be consistent with the regional planning boundary for which community growth projections are available.

3. The nonattainment area must be a legally defined boundary recognized by local governments. A legal definition is required for rulemaking purposes. Additionally, some component of the control strategy may need to be implemented through county land use planning ordinances tied to the Urban Growth Boundary.

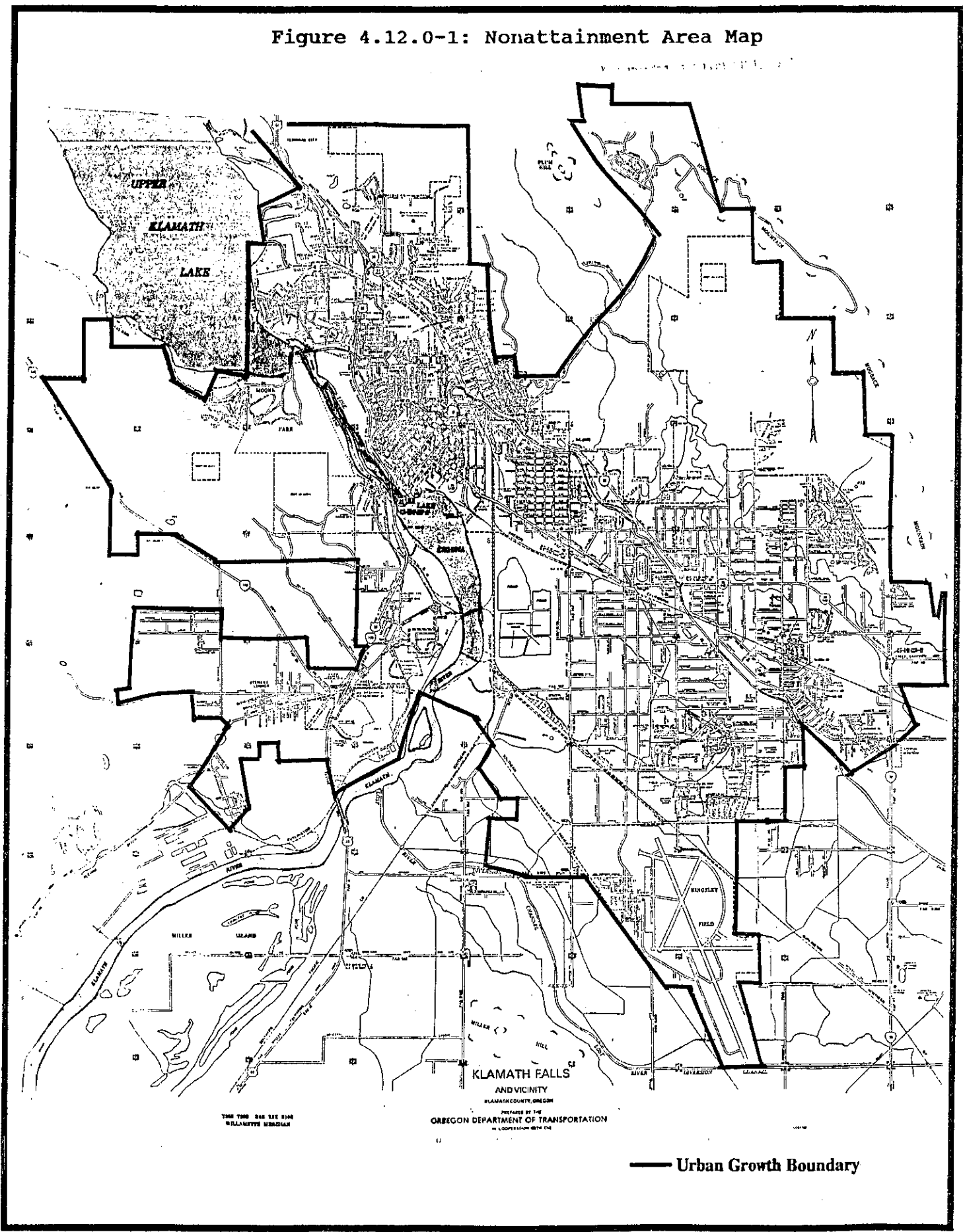
Designation of the Urban Growth Boundary as the nonattainment area is the only legally defined boundary that meets all of the above criteria. For purposes of wider control of woodburning emission within Klamath County, the Klamath County Clean Air Ordinance regulates woodheating emissions and open burning within and beyond the Growth Boundary.

4.12.0.4 Klamath Falls Meteorology

Because of its elevation, dry climate and low frequency of cloud cover, Klamath Falls experiences very strong and shallow night time winter radiation inversions which break up with day time solar heating. In winter time, frigid arctic air masses frequently invade the Klamath Basin. Temperatures can remain well below freezing for several weeks at a time. Upper Klamath Lake often freezes over and 6 to 10 inches or more of snow may cover the ground.

Winter nights are commonly clear and cool in the Klamath Basin. Under these conditions, strong nocturnal radiation inversions occur as a result of the snow covered surface and frozen lake, creating extreme inversions over the south suburban area of Klamath Falls. These inversions are confined and maintained by the surrounding terrain. Inversions of as much as 10 °F have been observed within 60 feet of the surface, creating an impenetrable barrier to smoke from woodstoves and fireplaces. The highest smoke concentrations of any place in the State have been recorded in the Klamath Falls residential areas under these intense, shallow inversions.

Figure 4.12.0-1: Nonattainment Area Map



4.12.0.5 Health Effects of PM₁₀ and Wood Smoke

Particulate matter measuring less than or equal to 10 micrometers is considered a risk to human health due to the body's inability to effectively filter out particles of this size. These particles deeply penetrate and become lodged in the alveolar regions of the respiratory system for days, weeks or even years where they trigger biochemical and morphological changes in the lungs².

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 which 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.³ Episodic exposure can also cause changes in the activity of the lung's mucous secretions and accelerates the mucociliary action to sweep the particles out of the lungs. This results in increased symptoms of cough, phlegm, and dyspnea (difficulty in breathing). Continuous exposure can inhibit this defense mechanism by introducing new particles into the lungs and redistributing those being swept out. This slows the clearance of the bronchial system 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.⁴ Another group that falls into the high risk category are people who breathe through their mouths.⁴ This group includes a wide range of people from chronic mouth-breathers to anyone involved in outdoor exercise and heavy labor. During mouth-breathing, particulate matter is breathed more directly into the lungs since it bypasses the filtering systems of the nasal passages.

Among the sources of PM₁₀ emissions, wood smoke is of particular concern in Klamath County because it accounts for a majority of the small particulate matter measured in the

²J. 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.

³U.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.

nonattainment area. A description of emission sources is found in Section 4.12.2.2. These 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 which are transported deep into the respiratory system. Some of these toxics are then absorbed into the bloodstream.

Wood smoke contains at least fourteen carcinogenic compounds including benzo(a)pyrene, benzo(a)anthracene, and other polycyclic organic materials.⁴ Additionally, wood smoke 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.³ Many of the components of wood smoke are also found in cigarette smoke and coke oven emissions and can affect the cilia in a similar manner making it difficult for the body to expel the particulate matter. Because wood smoke concentrations are highest in residential areas, a large segment of the population is routinely exposed to wood smoke pollution in the winter months. Additionally, it is those people who are most sensitive, children, the elderly, and the ill, who spend the most time in their homes, thereby increasing their risk.⁵

A study of lung function in 600 grade school children in Klamath Falls was conducted by the Oregon Department of Health and the Klamath County Department of Health Services just before, during and immediately following the 1990-91 woodheating season.⁵ Results from the study demonstrated that impaired lung function was associated with elevated levels of PM_{10} that occurred during the woodheating emissions. Studies conducted by the Department demonstrate that these high particulate levels are caused by wood smoke emissions.

4.12.1 Ambient Air Quality

Particulate ambient air quality monitoring for Total Suspended Particulate (TSP) began in Klamath Falls in November of 1969 at the Broad and Wall Street Fire Station. During the period of 1970 to 1986, annual average TSP concentrations averaged $66 \mu\text{g}/\text{m}^3$ with maximum 24-hour TSP concentrations (which have occurred exclusively within the winter months) reaching $295 \mu\text{g}/\text{m}^3$ in 1973. While these

⁴P.G. Jenkins, Washington Wood Smoke: Emissions, Impacts and Reduction Strategies, Washington Department of Ecology, Olympia, Washington. December, 1986.

⁵Klamath Falls Lung Function Health Study. State of Oregon Department of Health. June, 1991.

levels were over the TSP NAAQS, it was thought that rural fugitive dust (considered uncontrollable and not a health hazard by EPA) was the principal contributing source. To determine those areas that had a high probability of exceeding the PM₁₀ NAAQS, the US Environmental Protection Agency completed an analysis of historical Klamath Falls TSP data. The results of the analysis indicated a better than 95% probability that Klamath Falls PM₁₀ levels would exceed the NAAQS. Based on these findings, EPA has classified Klamath Falls as a Moderate Nonattainment Area. EPA regulations requires that daily PM₁₀ air quality monitoring must be conducted in such areas.

PM₁₀ air quality monitoring began in November, 1985 following completion of an area-wide survey designed to characterize the spacial distribution of PM₁₀ concentrations.⁶ Results from the study demonstrated that the Broad and Wall Street monitoring site was not representative of the highest levels of PM₁₀ in the airshed and that levels recorded at the Peterson School site in south suburban Klamath Falls better represented worst case levels within the area. The PM₁₀ concentration contours shown in Figure 4.12.1-1 were developed from the survey. The Figure also shows the location of the Peterson School site. A review of the area encompassed by the 150 $\mu\text{g}/\text{m}^3$ (the 24-hour NAAQS) contour shows that it best approximates the Urban Growth Boundary.

In February of 1987, monitoring at the Broad and Wall Street site was discontinued. PM₁₀ monitoring at the Peterson School site began in February, 1986. Additional PM₁₀ data was gathered during the November 1988 to April, 1989 period at Sixth and Hope Streets as additional verification of the extent of the high levels measured in the south suburban area.

In March of 1988 and February, 1989, the Department conducted evening mobile nephelometer surveys to further verify the spacial distribution of PM₁₀ concentrations. Figure 4.12.1-1 shows a typical distribution of concentrations measured during these surveys. Although the distributions of particulate mass vary slightly from day to day depending on wind directions and mixing height, the surveys are basically consistent with the findings of the February, 1985 particulate survey that identified the Peterson School area as the location of the highest concentrations. The surveys also provide evidence that the major sources of PM₁₀ are found within the residential area of south suburban Klamath Falls where the woodstove emission density is greatest.

⁶Special Study Report: Klamath Falls Particulate Survey. Report 87-7. Program Planning & Development Section, Air Quality Division, State of Oregon Department of Environmental Quality. June, 1987.

4.12.1.1 Air Monitoring Methods

Several sampling methods have been used to measure PM_{10} concentrations in Klamath Falls:

Integrating Nephelometer measurements of light scattering (a surrogate for PM_{10}) have been conducted during the winter months of highest PM_{10} concentrations at the Peterson School site. This method provides hourly light scattering averages which are highly correlated to PM_{10} concentrations measured using the high volume samplers equipped with size selective inlets (HV-SSI).

The PM_{10} Medium-Vol. sampler collects PM_{10} 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 PM_{10} cut point. A dual-port system capable simultaneously collecting aerosol on both Teflon and quartz filter substrate is used to allow complete chemical analysis for Chemical Mass Balance receptor modeling purposes. Because of the excellent agreement between PM_{10} concentrations measured by the Medium-Vol and the HV-SSI reference method, EPA has designated the Medium-Vol sampler as an acceptable equivalent method.

The PM_{10} High Volume Size Selective Inlet (HV-SSI) is a High Volume air sampler equipped with a Sierra-Anderson SA321A, SA321B or SA1200 PM_{10} cut-point inlet. This method has been designated by EPA as a reference method to be used to judge attainment with the NAAQS. Sampling occurs every 6th day.

The High Volume air sampler collects samples of Total Suspended Particulate (TSP). The method uses pre-weighted 8" X 10" filters through which air is drawn at 50 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 PM_{10} NAAQS, this method was the standard reference method for measurement of airborne particulate matter at the Broad & Wall Street site but has now been discontinued.

All of the data discussed herein was collected at the Peterson School site in south suburban Klamath Falls. Table 4.12.1-1 lists monitoring data collection periods by measurement method.

**Table 4.12.1-1: Data Collection Periods by Method
Peterson School**

Measurement Method	Began	Terminated
Integrating Nephelometer (Light Scattering or Bscat)	Jan. 30, 1985	Apr. 24, 1986
	Jan. 23, 1986	Apr. 15, 1986
	Oct. 23, 1986	Apr. 7, 1987
	Nov. 3, 1987	Apr. 20, 1988
	Nov. 1, 1988	Current
PM ₁₀ Medium-Vol. (MV) * (Daily Sampling)	Jan. 2, 1987	Apr. 3, 1987
	Nov. 30, 1987	Current
PM ₁₀ HV-SSI (SSI) (Every 6th Day)	Jan. 3, 1987	Current
High-Volume TSP (TSP)	Jan. 24, 1986	Oct. 6, 1987

* Both Teflon and quartz filter substrate are used.

4.12.1.2 PM₁₀ Air Quality in Klamath Falls

Figure 4.12.1-2 illustrates the hourly and seasonal variations in PM₁₀ concentrations in Klamath Falls. As seen in the Figure, the highest 24-hour concentrations occur during the winter space heating season when PM₁₀ concentrations have reached levels as high as 792 µg/m³. This exceeds the EPA Significant Harm level (the level at which an imminent and substantial risk to public health exists) of 600 µg/m³. Peak 24-hour concentrations decrease dramatically during the spring months and reach a low of about 50 µg/m³ during the summer months. Concentrations then raise again in the fall months as woodstove use increases and atmospheric dispersion decreases.

Review of PM₁₀ Concentrations

The four highest concentrations of PM₁₀ mass measured in Klamath Falls during the past 3 years are listed in Table 4.12.1-2, below.

Table 4.12.1-2: PM₁₀ Maximum Concentrations, 24-hour Averages

	µg/m ³	Date	Method
Highest Value	792	880125	Medium-Vol.
Second High	723	880203	SA321B HV-SSI
Third High	507	880122	SA321B HV-SSI
Fourth High	502	890120	Nephelometer Est.

Table 4.12.1-3 summarizes PM₁₀ monitoring data for the mid-1986 to mid-1989 period over which the design values were calculated. Appendix 1 contains a tabulation of daily PM₁₀ concentrations over the period of July 1, 1986 to June 30, 1989.

**Table 4.12.1-3: Summary PM₁₀ Data
($\mu\text{g}/\text{m}^3$)**

	All Data	1986*	1987	1988	1989	1990
No. Days Sampled	1414	343	365	303	195	208
Arithmetic Mean **	--	77	73	71	68	46
Maximum Value	792 (880125)	--	330	792	417	258
Second High	723 (880203)	--	298	723	400	236
No. Days > 150	155	40	38	29	27	21

* For period January 23 to December 31, 1986.

** Annual average values computed as prescribed in 40CFR52 Appendix K.

Hourly Variability

Hourly variations in PM₁₀ levels on worst-case winter days can be seen in the diurnal variations of light scattering measurements from the Peterson School site (Figure 4.12.1-2). Particulate concentrations begin increasing from a mid-day low, peak during the 11 PM to 1 AM period and then steadily decrease until 8-9 AM at which time the levels again reach mid-day concentrations. The early morning peak at 6 AM is believed to be associated with early morning woodstove start up by Klamath Falls residents.

Worst Case Day Characteristics

During the mid-1986 to mid-1989 period, the 24-hour NAAQS was exceeded an average of 47 days per year, exclusively during the months of late October to April. During these periods, residential woodheating reaches its peak and atmospheric dispersion is at its poorest. Worst case winter days typically have daily average temperatures of 10 °F (55 degree heating days), snow cover, intense, extremely shallow temperature inversions as low as 50 feet and extended periods of calm winds. These conditions occur during periods when snow producing storm systems are followed by stable high pressure systems. The spatial distribution of PM₁₀ concentrations during worst case day conditions is shown in Figure 4.12.1-1.⁷

⁷J.E. Core, "Distribution of PM₁₀ Within the Klamath Falls Nonattainment Area: Mobil Nephelometer Surveys of January, 1989," State of Oregon Department of Environmental Quality, Air Quality Division. Report 89-1. February, 1989.

Impacts from Sources External to the Urban Growth Boundary

The largest industrial sources within Klamath County located outside of the UGB is the Weyerhaeuser Compawny plant which emits a total of 631 tons of PM_{10} per year, largely from hog fuel boilers used to generate steam for the plant. In spite of the magnitude of these emissions and the proximity of the plant to the Urban Growth Boundary, the Department does not believe that emissions from the plant have a significant impact on the nonattainment area. This is based on findings from two field measurement programs and receptor modeling analysis.

The spatial distribution of PM_{10} levels measured during the mobil nephelometer surveys of January, 1989 indicated that concentration fell as the distance from the plant increased. These findings were confirmed by the saturation survey conducted in the Fall of 1985. If the plant had a major impact on the nonattainment area, concentrations should have increased as the distance from the plant decreased.

Receptor modeling analysis of source impacts at the Peterson School site confirm that hog fuel boiler impacts are small. This is based on studies indicating that the Chemical Mass Balance receptor model is able to quantify hog fuel boiler impacts at levels of $2 \mu\text{g}/\text{m}^3$ or greater impact with relative uncertainties of $\pm 20\%$.⁸

These findings are consistent with the hypothesis that emissions from Weyerhaeuser's hog fuel boiler are emitted, on worst case winter days, above the very shallow inversions that form within the Klamath Basin. As a result, their ground level impacts would be expected to be small.

Background Air Quality

PM_{10} aerosols from sources external to the UGB collectively contribute to background air quality or the concentration of PM_{10} in the air mass as it is transported into the Klamath Falls Basin. The closest background monitoring site is located in the Quartz Creek Valley (elevation 5,390 ft) at the Quartz Mountain Gold Project 50 miles east of Klamath Falls.⁹

The Quartz Mountain data was collected by a Air Sciences, Inc. of Lakewood, Colorado under contract to the Quartz Mountain mining

⁸Pacific Northwest Source Profile Library: Volume 2 Final Project Report. J. Core, Editor. Department of Environmental Quality. September, 1989.

⁹Quartz Mountain Gold Project Environmental Impact Statement. Prepared for the Fremont National Forest by Air Sciences, Inc. Lakewood, Colorado. February, 1989.

project. The data was collected pursuant to Federal EIS requirements imposed by the US Forest Service, Bly District. The data was collected pursuant to standard EPA quality assurance requirements.

The Quartz Mountain background data during worst case winter days is representative of the Klamath Falls UGB for the following reasons:

1. The site is located in a remote area not influenced by sources within the Klamath Falls UGB yet not located at such distance that it would clearly not be representative of the regional air mass. Even if the site were located at the edge of the Growth Boundary, little change in the data would be expected because of the fact that lands immediately beyond the UGB are sparsely inhabited and largely of a wilderness nature.
2. A worst case winter day background of $7 \mu\text{g}/\text{m}^3$ is reasonable considering that the Quartz Mountain site is above the very shallow mixing height found in the nonattainment area, that snow cover eliminates windblown fugitive dust emissions and that there are no wildfires or slash burning emissions during the winter months. It is common to encounter long range visibility conditions at elevations of only a few hundred feet above the basin floor where the highest PM_{10} concentrations are found.

On an annual basis, there is little differences between the background levels at Medford's Dodge Road site ($12 \mu\text{g}/\text{m}^3$) and Quartz Mountain ($13 \mu\text{g}/\text{m}^3$), supporting the Department's belief that neither site is being unduly impacted by nearby sources; that the annual distribution of the data is not being unduly bias by high winter worst case concentrations and that both sites are representative of regional background.

PM_{10} monitoring at the Quartz Mountain site was based on GMW 2310 samplers with GMW 321-B inlets was conducted during the November, 1987 to November, 1988 period (108 observations) on a 6th day schedule. The annual arithmetic average was $12 \mu\text{g}/\text{m}^3$ while the worst case winter (November-March) observation was $7 \mu\text{g}/\text{m}^3$. The maximum observed value ($86 \mu\text{g}/\text{m}^3$) occurred on September 4th, 1988 when several forest fires were active in the area. The sources contributing to background PM_{10} concentrations are regional and global in nature.

The Quartz Mountain background air quality values used in the annual and 24-hour winter worst case control strategy calculations are $15 \mu\text{g}/\text{m}^3$ annual arithmetic average and $7 \mu\text{g}/\text{m}^3$ 24-hour average, respectively.

Aerosol Chemistry

Chemically, Klamath Falls winter-season PM_{10} aerosol is composed of organic carbon (37%), elemental carbon or soot (6%), crustal elements (5%), other trace elements (2%) and secondary sulfate and nitrates (3%). The balance is associated oxygen, hydrogen, water and ammonium. While the winter season aerosol is chemically very similar to the composition of woodsmoke with small amounts of soil elements, the composition of the aerosol during the summer months is quite different and is largely composed of crustal elements (Al, Si, Ca and Fe). Lead concentrations are very low, averaging $0.1 \mu\text{g}/\text{m}^3$, 24-hour average. The aerosol composition cannot be used to directly infer source contributions.

4.12.2 Nonattainment Area Analysis

This section describes the Department's analysis of PM_{10} air quality in Klamath Falls as it related to the National Ambient Air Quality Standards. Source contributions to the airshed's PM_{10} air quality are discussed both in terms of emission strengths and source contributions to air quality as measured at the Peterson School site.

4.12.2.1 Design Values Determination

Attainment of the annual NAAQS requires that a control strategy be adopted which will reduce ambient concentrations from the 1994 design value to below the NAAQS; specifically that the expected number of exceedances of the 24-hour NAAQS not exceed $150 \mu\text{g}/\text{m}^3$ more than once per year averaged over three years.

The EPA PM_{10} Development Guidelines specify that the preferred approach for estimating a design value is through the use of an applicable dispersion model corroborated by receptor models.¹⁰ If there is no applicable dispersion model and at least one complete year of PM_{10} data is available, then the PM_{10} data should be used to estimate the design value. This is the case for Klamath Falls.

Dispersion modeling was not used to estimate the design values or in the attainment/maintenance demonstration for the following reasons:

- The only historical meteorological data available for the air basin is that collected by the Department. Surface wind speed and direction data collection began in

¹⁰ PM_{10} SIP Development Guidelines. US Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. June, 1987. EPA-450/2-86-001.

the fall of 1988. Although upper air data is available from Medford, temperature lapse rates near the surface (a very important factor that determines atmospheric dispersion in Klamath Falls) is much different than Medford. No other upper air data is available. Delays caused by the necessity to collect the several years of met data needed to support a dispersion modeling effort (and the factor listed below) have forced the Department to rely on receptor modeling/proportional rollback modeling.

- The spatially resolved emission inventory data needed for modeling has only recently become available;
- The intense and extremely shallow inversions with their associated calm winds that typify Klamath Falls winter worst case day conditions are not conducive to dispersion modeling;
- On winter days when worst case air quality conditions occur the airshed is heavily dominated by emissions from woodstove, fireplace and road sanding. The relatively simple nature of the airshed, the dominance of area source emissions that are easily resolved by receptor models and the difficulty of applying dispersion modeling methods under stagnate air mass conditions have led the Department to apply receptor modeling and proportional rollback models.

EPA specifies that the annual design value should be calculated as arithmetic average of 3 years of PM_{10} monitoring data and that the 24-hour design concentration should be estimated using the empirical frequency distribution for the largest available data base. Both the annual and 24-hour design concentrations must then be adjusted to compensate for emission changes that will occur as a result of emission growth and control strategy affects likely to occur by 1994, the year in which attainment must be demonstrated.

The current design values are based on PM_{10} data collected between mid-1986 and mid-1989. The information used to calculate design values is a composite of data collected over the year using a number of different PM_{10} measurement methods in accordance with agreements reached with EPA Region X staff in December, 1989. As a result, a hierarchy of daily measurements has been used to build a composite data set. Reference method Medium-Vol. samples were selected first. Where these measurements were not available, reference method SSI data was used. If neither were available, non-reference method Medium Vol. data was used and if none of the above data was available, non-reference SSI data adjusted to a Medium-Vol. sampler equivalent value was used. If only integrating nephelometer scattering coefficient measurements were available, they were adjusted to medium-vol. equivalent values. This approach

(1) greatly expands the database available for analysis; (2) provides a design value that is consistent with the measurement method that the Department will be using to determine NAAQS attainment and (3) assures that future receptor modeling analysis of PM₁₀ source contributions are consistent with control strategy design considerations. This approach is described further in Appendix 2.

Table 4.12.2-1: Design Values Summary

24-Hour Design Value, Graphical Procedure	550 $\mu\text{g}/\text{m}^3$
Annual Design Value	75 $\mu\text{g}/\text{m}^3$

4.12.2.2 Emission Inventory

Introduction

Emission inventories provide information on the relative strength of sources within an airshed and provide a basis for control strategy evaluation. In addition, emission inventories provide a basis for tracking emission reductions and growth. PM₁₀ emissions (usually expressed in tons of particulate per year or TPY) are calculated from emission factors and source activity records. Emission factors are the weight of pollutant emitted per unit weight of material processed such as grams of PM₁₀ emitted per pound of cordwood burned; pounds of road dust emitted per vehicle mile driven or pounds of particulate emitted per unit area of plywood veneer processed. Emission factors used in this analysis are principally from the Environmental Protection Agency's compilation of emission factors AP-42.¹¹

Source activity information on the amount of cordwood burned by residents, vehicle miles driven or veneer production volumes are obtained from a variety of sources including industrial air contaminant discharge permits, public mail surveys and data gathered from other government agencies.

Estimation of seasonal or worst-case day PM₁₀ emissions requires the development of a source operating schedule which describes the percent of annual emission that occur during specific seasons, months or 24-hour periods.

¹¹Compilation of Emission Factors, U.S. Environmental Protection Agency AP-42 Fourth Edition and subsequent supplements. US EPA Office of Air Quality Planning and Standards. Research Triangle Park, N.C. 27711.

Base Year Emission Inventory

PM₁₀ emissions for the 1986 base year within the Urban Growth Boundary (UGB) were estimated for industrial sources, residential heating (gas, oil and wood), commercial space heating, residential open burning, agricultural field burning, paved and unpaved roads, construction and agricultural dust as well as transportation sources (cars, trucks railroads and aircraft). The basis of the emission estimates for the most significant sources are described below:

Industrial Sources: 209 TPY PM₁₀. These emissions are principally from the wood products industry wood-fired boilers and material handling. Twelve point sources, principally wood products, are included in the inventory. The largest source emits 100 tons per year of PM₁₀. The 1986 annual emissions are those that actually occurred during the year.

Residential Woodheating: 1,202 TPY PM₁₀. Information obtained from the Department's 1987 woodheating survey¹² and the County of Klamath Falls indicates that 13,600¹³ single family housing units are located within the UGB and that 73% of the housing units use woodburning devices. Approximately 75% of the devices are woodstoves while the remainder are fireplaces.

The survey indicates that, on average, residents burn 4.1 cords/year of firewood in their woodstoves and 2.7 cords/year in fireplaces. At 39.9 pounds of PM₁₀ emitted per ton of wood burned in a woodstove, 1,076 tons of PM₁₀ are emitted per year. An emission factor of 39.9 pounds of PM₁₀ per ton of wood burned is more appropriate for use in Oregon (rather than the AP-42 factor of 30 pounds/ton national value) because of the higher stove burn rates typical of Oregon stove use. In-home studies of stove operation in Oregon communities has confirmed the higher emission factor. Fireplace emissions at 26.6 pounds per ton of wood burned total 126 TPY for a total 1202 tons per year. Based on the survey, about 12% of the woodstoves are DEQ-certified models. Forty six percent of those surveyed indicated that wood was the main source of heat in their home. Wood is the only source of heat in 4-5% of Klamath Falls homes.

¹²Oregon Wood Heating Survey for 1987: Klamath Falls Area. State of Oregon Department of Environmental Quality, Air Quality Division. February, 1987.

¹³Klamath County Planning Department Correspondence of May 4, 1990.

Figure 4.12.1-1: Klamath Falls PM₁₀ Distribution

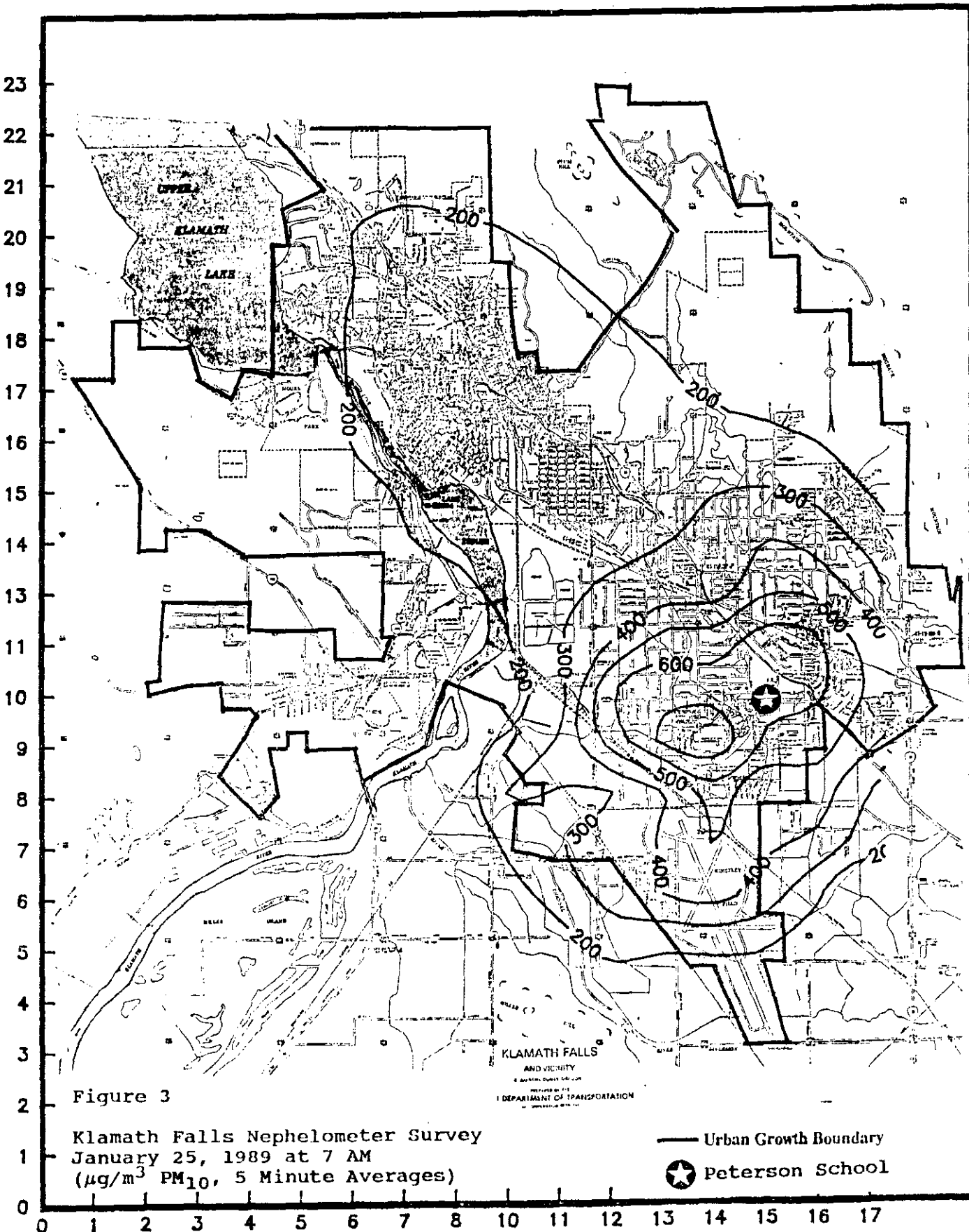
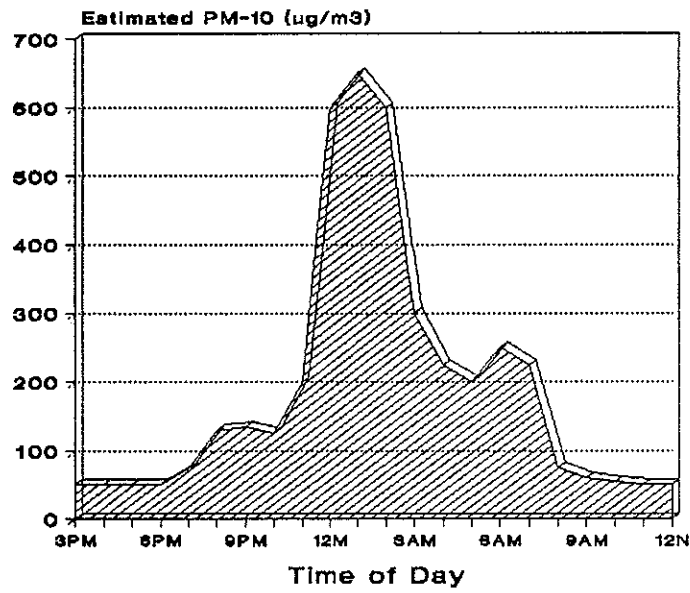


Figure 3

Klamath Falls Nephelometer Survey
 January 25, 1989 at 7 AM
 ($\mu\text{g}/\text{m}^3$ PM₁₀, 5 Minute Averages)

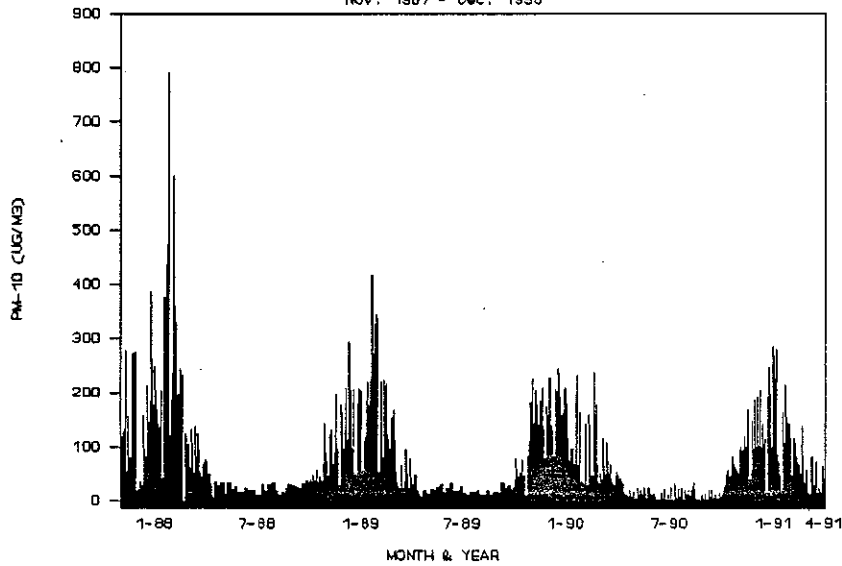
— Urban Growth Boundary
 ★ Peterson School

**Figure 4.12.1-2
Diurnal & Seasonal PM-10 Variations**



KLAMATH FALLS PM-10 Levels

Nov. 1987 - Dec. 1990



The Department's 1991 woodheating survey (Appendix 6) indicates that worst-case day emissions have decreased by 36% because 23% fewer Klamath Falls residents are using wood as their main source of heat. The total number of cords burned has decreased by 53% since the 1987 survey¹⁴. As a result, annual and worst - case day PM₁₀ emissions have been reduced by 36% to 771 tons per year and 11,800 pounds per day, respectively. Since the emission reduction reflected in the 1991 survey are not based on legally enforceable measures, these emission reduction credits have not been included in the demonstration of attainment.

Backyard and Agricultural Burning: 173 TPY PM₁₀. Approximately 3,380 tons of backyard debris is burned each year generating 26 TPY of PM₁₀. This estimate assumes that 183 pounds of combustible material (principally yard debris) is burned per person each year during the months of March through November. Each ton of debris burned is assumed to emit 15.3 pounds of PM₁₀ particulate. Although (for purposes of the emission inventory) no backyard burning is assumed to occur during the months of December through February, local observations have confirmed that some backyard burning is occurring on woodstove curtailment days. Agricultural burning also occurs within the UGB and, in early November, 1989 was occurring during woodheating curtailment periods. Agricultural Extension Service estimates that about 30% of the 8,000 acres of cereal grain fields within the UGB are burned annually. Assuming 3.8 tons of straw per acre, approximately 146 TPY of PM₁₀ would be generated by this source during the late summer and early fall. Other agricultural burning is known to occur outside of the UGB, but no reliable information is available to estimate emissions.

Fugitive Dust Emissions: 192 TPY PM₁₀. The principal sources of dust within the UGB on an annual basis are paved and unpaved road dust (112 and 53 TPY, respectively) and emissions from winter road sanding (27 TPY). Paved and unpaved road dust estimates are based on a 1985 estimate of 414,800 vehicles miles per day and an assumed PM₁₀/TSP ratio of 24%. There are 127 miles of dirt road and 68 miles of gravel road within the UGB.

¹⁴Klamath Falls Wood Heating Survey, 1991. Klamath County Department of Health Services and the Oregon Department of Environmental Quality, Air Quality Division. July, 1991.

Transportation Sources: 131 TPY PM₁₀. Highway vehicles (autos and trucks) emit 97 TPY PM₁₀ in tailpipe and tire wear particulate; off highway vehicles 12 TPY and railroad diesel engines, 19 TPY. Aircraft emissions are 3 TPY.

Table 4.12.2-2 and Figure 4.12.2-1 summarize annual PM₁₀ emissions within the UGB.

Table 4.12.2-2: 1986 UGB Annual Emission Inventory

Source	Tons/Year PM ₁₀	Percent
Industry	209	11 %
Residential Woodburning	1202	55 %
Solid Waste Disposal	173	9 %
Fugitive Dust	192	10 %
Transportation	131	7 %
Other Sources	54	3 %
Totals	1961	100 %

24-Hour Worst Case Day Inventory

Development of an inventory representative of emissions during 24-hour periods when PM₁₀ ambient air concentrations reach their highest levels is important to understanding the sources that cause winter season episodes. The relative proportion of emissions during these periods is expected to be quite different than those reflected in the annual emission inventory because some sources (such as agricultural burning) are not active while others (such as residential woodheating) are much stronger.

The 24-hour worst case inventory for the UGB is based on the following information and assumptions:

Industrial and Transportation Source. The 1986 worst case day industrial emissions are based on 1986 annual emissions increased by the ratio of the 1994 daily Plant Site Emission Limit (PSEL) (pounds/hour PSEL over 24-hours) to the 1994 annual PSEL emissions. The 1994 PSELs are applied to 1994. The annual transportation emissions are assumed to be evenly distributed throughout the year.

Residential Woodburning emissions are assumed to be proportional to the coolness of the weather as reflected in the degree heating days statistic tabulated by the National Weather Service. During the period of October, 1986 to October, 1987, the coldest day (January 9, 1986)

had 47 degree heating days. Since the total degree heating days for this period was 6,109, this represents 0.76% of the annual total or 9.2 tons of PM₁₀ emission.

Winter Road Sanding emissions peak during periods when several inches of snow covers the area. During these periods, as much as 70 cubic yards per day of aggregate are spread on roads within the UGB. Because snow covers the roadways and landscape, essentially all of the fugitive dust emissions are assumed to originate from road sanding. Chemical analysis of PM₁₀ samples collected on days exceeding the 24-hour NAAQS indicated that 9% of the PM₁₀ mass was soil dust. Road sanding emission were therefore estimated to be of similar magnitude in the inventory or about 2,000 lbs/day during the 27 days per year when road sanding occurs. The worst case day emission estimates provide the basis for the annual emission estimate for road sanding.

As noted, road sanding emissions were based on chemical mass balance analysis of PM₁₀ samples, not on the basis of emission factors. This was done for several reasons:

(1) the CMB model can very accurately apportion soil dust impacts on actual worst case days. Even with the best possible emission factors, estimates of fugitive emissions are highly uncertain;

(2) Paved road dust emission factors are not appropriate since road surfaces are covered with packed snow;

(3) Initial calculations of emissions assuming unpaved road dust emission factors and the silt content of the aggregate used in road sanding resulted in unrealistic emission estimates far greater than the sum of all other air shed sources.

A draft report prepared by an EPA contractor (MRI, Inc.) describing fugitive dust emissions in Klamath Falls failed to quantify winter road sanding emissions under the winter worst-case day conditions described herein for two reasons; (a) in-field samples were not collected during the winter so no data could be developed to describe road surface silt loadings and (b) emission factors appropriate to conditions of roadways covered with packed snow are not available. Final dust emission estimates are not available from MRI as of this writing.

**Table 4.12.2-3: 24-Hour Worst Case Emission Inventory
1986 Base Year Period.**

Source	Pounds PM₁₀	Percent
Industry	1630	7 %
Residential Woodburning	18326	80 %
Fugitive Dust	2000	9 %
Transportation	768	3 %
Other Sources	123	1 %
Totals	22847	100 %

Appendix 3 provides a detailed annual and worst case 24-hour emission inventory listing.

Growth Factors

PM₁₀ emission growth factors are used to estimate future year emission inventories and source category impacts. Key indicators used to estimate future emissions include population growth, increases in transportation (vehicle miles traveled) and Plant Site Emission Limits (PSEs) for industrial sources.

Transportation Growth, estimated at 1.5% per year is used to estimate increases in vehicular and road dust emissions.¹⁵

Population Growth data indicates that the number of people living within the Klamath Falls Urban Growth Boundary will increase by 1% per year from 37,000 to 39,500 by the year 1994.¹⁶ Population growth is used to proportionally increase residential open burning emission and woodstove use. The population growth rate used herein is consistent with those used by the Klamath County Planning Department.

Woodburning Emission Growth from woodstoves is expected to increase by 1% per year (8% total) by the year 1994 as a result of an increased amount of firewood burned and fireplace emissions are expected to decrease by 2% per year. The one percent growth rate is based on energy projections and fuel cost modeling performed to estimate future woodburning emission growth in the Pacific

¹⁵State of Oregon Department of Transportation Highway Division Planning Section estimate. February 22, 1989.

¹⁶Klamath Basin Wastewater Facilities Plan Update for the North Suburban Area of the City of Klamath Falls, Klamath County, Oregon. June, 1987.

Northwest.¹⁷ These projections do not account for emission reductions that will occur as a result of woodstove certification programs as these reductions are explicitly accounted for in the Section 4.12.3.2, Evaluation of Potential Control Measures.

Industrial Emission Growth has been projected to increase to the maximum permitted within their current Plant Site Emission Limits (PSELS). The 24-hour worst case growth factor is calculated as the increase from the 1986 actual hourly emissions to their hourly maximum PSEL emission rate over a 24-hour period.

Projected Emissions, 1986 to 1994

The 1986 annual and 24-hour emission and design value estimates must be adjusted to account for emission growth or decreases that may occur within the airshed during the eight year period of 1986-1994. Estimates are based on the emission growth factors described above. The information presented in Table 4.12.2-4 provides a basis for the future year source impact estimates (Section 4.12.3.1) which, in turn, provide the basis for the control strategy analysis.

Table 4.12.2-4: 1994 Estimated Emissions

Source Category	-Annual- 1994		-24-Hr Worst Case- 1994	
	Tons	%	Pounds	%
Industry	289	13 %	2375	10%
Residential Woodburning	1268	59 %	19330	77 %
Fugitive Dust	214	10 %	2240	9 %
Solid Waste Disposal	187	9 %	0	0 %
Transportation	147	7 %	860	3 %
Other	58	3 %	132	1 %
Totals	2164	100 %	24939	100 %

Projected Emissions Beyond 1994

Analysis of the ability of the attainment strategies to maintain the NAAQS during the period 1994 to the year 2000 requires development of a third set of emission estimates. The growth rates assumed for the maintenance analysis are based on the 1994 inventory adjusted to reflect the attainment strategy emission reductions:

¹⁷U.S. Environmental Protection Agency, Region X "Residential Wood Combustion Study, Task 3, Fuel Wood Use Projections", EPA 910/9-82-089 (1984).

- Population growth rate of 1% per year to residential oil, gas and wood combustion emissions; solid waste incineration emissions and structural fires;
- Transportation growth rate of 1.5% per year to transportation sources and paved, unpaved and construction dust as well as street sanding emissions;
- Industrial emissions are held constant at the annual and 24-hour PSEL emission rates shown in the 1994 emission inventory;

The projected residential wood combustion emissions, following application of a 1% per year growth rate, were adjusted to reflect emission reduction credits associated with the woodstove certification program. Information from the Klamath County Building Department indicates that approximately 100% of the new woodstoves being installed in new construction homes are certified and 20% of these are pelletstoves.¹⁸ Additional information from manufacturers suggests that certified pelletstoves sales should expand to a larger share of the market in future years. This may be, in part, supported by the fact that pellet stove owners have not been asked to curtail burning during cordwood stove curtailment periods.¹⁹ Therefore, during the period 1994 to 1996, it is assumed that 80% of newly installed stoves are cordwood and 20% are pelletstoves. During the period 1996 to 2000, it is assumed that 50% are cordwood and 50% are pelletstoves.

Actual and projected annual emissions during 1994 to the year 2000 (assuming that all control strategy elements are implemented) are listed in Table 4.12.2-5. Similar projected 24-hour worst case emissions are summarized in Table 4.12.2-6. Figure 4.12.2-2 shows changes in emission inventories during the period 1986 to the year 2000. If all of the strategy elements are applied, the year 2000 annual and 24-hour projected emissions were reduced from 1986 levels by 1,379 tons per year and 17,252 pounds per day, respectively, through the implementation of mandatory curtailment; the woodstove certification and woodstove replacement programs, opacity regulations, open burning controls and fugitive dust control programs.

¹⁸Correspondence from Klamath County Building Department of February 14, 1990.

¹⁹Personal communications with the Chairman, Association of Pellet Fuel Industries, Sparks, Nevada. February 22, 1990.

**Table 4.12.2-5: 1994 to Year 2000 Annual Emissions
With All Strategies Implemented
(Tons Per Year)**

Source Category	1994	1996	1998	2000
Industry	289	289	289	289
Residential Woodburning	239	230	225	219
Fugitive Dust	197	203	209	215
Solid Waste Disposal	31	31	32	33
Transportation	147	151	156	160
Other	58	59	61	62
Totals	961	964	971	979

**Table 4.12.2-6: 1994 to Year 2000 24-Hour Worst Case Emissions
With All Strategies Implemented
(Pounds Per Day)**

Source Category	1994	1996	1998	2000
Industry	2375	2375	2375	2375
Residential Woodburning	1731	1596	1526	1459
Fugitive Dust	896	923	951	979
Solid Waste Disposal	0	0	0	0
Transportation	860	886	913	940
Other	132	133	134	136
Totals	5995	5914	5899	5889

4.12.2.3 Source Contributions to PM₁₀

Development of strategies designed to attain and maintain the PM₁₀ NAAQS requires an accurate knowledge of contributions that sources make to the measured PM₁₀ aerosol mass. Two approaches are commonly used to estimate source contributions (1) atmospheric dispersion modeling and (2) receptor model analysis based on the properties of the aerosol measured at the receptor.

The Environmental Protection Agency PM₁₀ SIP Development Guidelines Section 4.4 describes procedures to be used by the states for using receptor models to estimate source contributions to PM₁₀ concentrations. These guidelines support the use of receptor models as an important element of the SIP strategy development process. Receptor modeling (specifically Chemical Mass Balance or CMB) is especially appropriate in Klamath Falls where severe air stagnation and complex terrain conditions likely make dispersion modeling inappropriate. The specific application of the CMB Receptor Model to PM₁₀ source apportionment in Oregon's Group 1

areas is described elsewhere.²⁰

Chemical Mass Balance (CMB) is a form of receptor modeling based upon regression analysis of aerosol features such as trace element concentrations. The model attempts to find the most likely combination of source contribution estimates (SCE's) by minimizing the difference between the measured and model-predicted concentration of aerosol features. Values for the ambient aerosol matrix are obtained through chemical analysis of PM₁₀ filters taken at the Peterson School sites while the source "fingerprint" values are obtained through analysis of stack emissions. The CMB modeling protocol applied follows EPA guidance.²¹ All of the CMB modelling has been conducted using EPA's Version 7.0 CMB program.²²

Ambient Aerosol & Source Emission Analysis

Thirty eight PM₁₀ samples from the Peterson School site have been chemically analyzed for CMB analysis. Fourteen of the samples exceeded 150 $\mu\text{g}/\text{m}^3$, all of which were collected during the winter months. The highest sample analyzed was 417 $\mu\text{g}/\text{m}^3$ on January 19, 1989. Chemical characterization of the samples includes 19 trace elements analyzed by x-ray fluorescence, 3 anions and elemental/organic carbon, providing a data set that is compatible with the source emission profiles. Analytical uncertainties for each values are routinely reported and included in the CMB calculations. PM₁₀ source profiles representing all major emission groups within the airshed were used in the modeling. All of the profiles were obtained from the Pacific Northwest Source Profile Project.²³ A list of the sources included in the analysis is presented below:

²⁰PM₁₀ Receptor Modeling for Oregon's Group I Areas: Medford, Grants Pass and Klamath Falls. State of Oregon Department of Environmental Quality, Air Quality Division. February, 1990.

²¹Protocol for Reconciling Differences Among Receptor and Dispersion Models. US EPA 450/4-87-008. March, 1987.

²²Receptor Model Technical Series, Volume III (Revised): CMB User's Manual (Version 6.0) US EPA 450/4-83-014R. May, 1987.

²³Pacific Northwest Source Profile Library Project, Final Report Prepared by the State of Oregon Department of Environmental Quality, Air Quality Division. J. Core, Ed. September, 1989.

Table 4.12.2-7: Source Profiles

No.	Acronym	Description
1	KFSOIL	Resuspended soil dust from Klamath Falls
2	SLASH	Forestry slash broadcast burning (Also may be vegetative burning such as yard debris)
3	RWC MED	Residential wood combustion profile for Medford
4	LD AUTO	Light duty autos (leaded gasoline)
5	HOGFUEL	Hogfuel boiler burning plywood trim in the fuel
6	WOOD	Wood fiber including sander dust
7	HDDIESEL	Diesel exhaust (Federal Test Cycle)
8	SECSO4	Secondary sulfate estimated as ammonium sulfate
9	SECNO3	Secondary nitrate estimated as ammonium nitrate
10	SECNH4	Secondary Ammonium ion
11	SALT	Road salt applied during the winter months
12	CONST	Construction dust - Medford Aerosol Study
13	VENEER	Steam heated veneer drier emissions

**Receptor Model Source Contribution Estimates
24-Hour Exceedance Days**

Table 4.12.2-8 is a summary of the source contribution obtained for the 14 samples that exceeded the 24-hour NAAQS. All samples were collected during the winter months. Figure 4.12.2-3 illustrates the results in graphical form.

**Table 4.12.2-8: Average Winter Exceedance Day PM₁₀
Source Contribution Estimates**

Source	PM ₁₀ (μg/m ³)	% PM ₁₀
Soil Dust	27.4	10.9 %
Wood Smoke	219.0	82.0 %
Transportation	0.2	0.1 %
Sec. Aerosol	10.7	3.2 %
Others	11.7	4.3 %
	269 μg/m ³	100 %

Other sources noted in Table 4.12.2-8 include water associated with the aerosol; minor contributions and uncertainties in the apportionment. Studies recently conducted in Los Angeles suggest that as much as 7% of the PM₁₀ mass is water.²⁴

No contribution from hogged fuel boilers was detected on these exceedance days. US EPA Chemical Mass Balance guidance specifies

²⁴S. Witz, R. Eden, C. Liu and M. Wadley, "Water Content of Collected Aerosols in the Los Angeles Basin," Presented at the Pacific Conference on Chemistry and Spectroscopy, Irvine, CA. October, 1987.

that the apportionment should account for at least 80% of the measured aerosol mass. Ninety-six percent of the mass has been apportioned in the above table. Average source contribution uncertainties (relative percent of mass) are 18% for wood smoke, 11% for hog fuel boilers and 8% for soil dust.

Annual Average Contributions

The annual average source contribution estimates noted in Table 4.12.2-9 were estimated from CMB analysis of PM₁₀ samples with mass loadings that approximate monthly average mass loadings. No data was available for September or November. The average mass loading of the analyzed filters is 77 $\mu\text{g}/\text{m}^3$ as compared to an actual annual arithmetic mean of 75 $\mu\text{g}/\text{m}^3$. Since the source contributions shown are based on a limited number of samples, the annual averages shown are only approximations of the true annual source contributions.

Table 4.12.2-9: Annual Average PM₁₀ SCE's

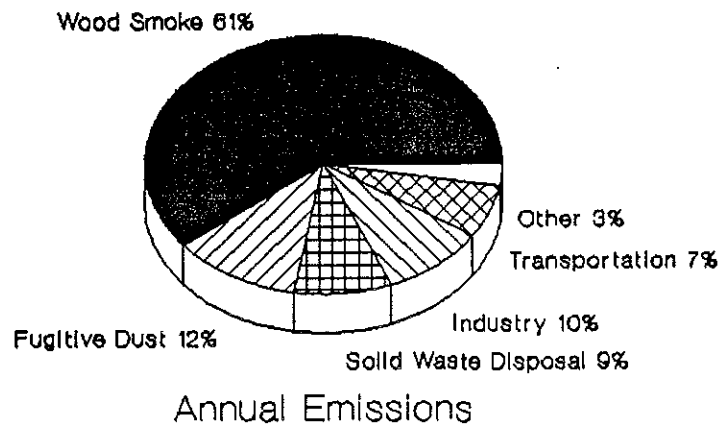
Source	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	% PM ₁₀
Soil Dust	12.9	17.0 %
Wood Smoke	55.4	72.9 %
Industry	0.9	1.1 %
Burning *	1.4	1.8 %
Transportation	0.1	0.1 %
Sec. Aerosol	1.5	1.9 %
Others	3.8	5.0 %
	76 $\mu\text{g}/\text{m}^3$	100 %

* Burning includes slash and field burning, land clearing and residential open burning.

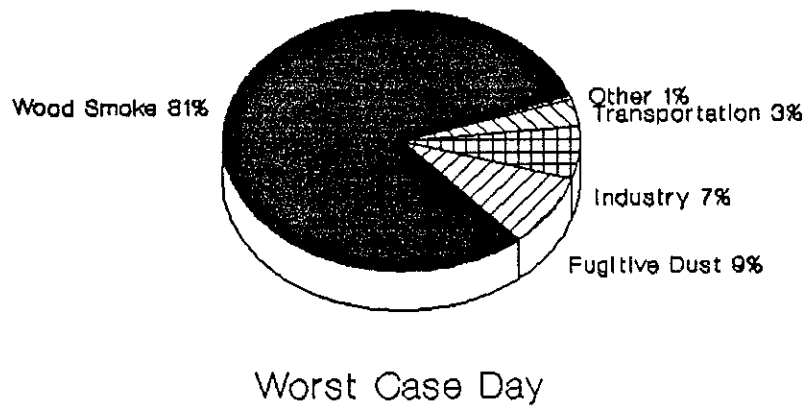
Multiple Linear Regression Analysis

A second receptor modeling method of apportioning source contributions is multiple linear regression wherein the source contributions are estimated from variability in the aerosol chemistry. The MLR analysis was completed to determine the degree to which PM₁₀ mass concentrations could be predicted from the aerosol chemistry and as a second independent check on the CMB source apportionment. Based on 49 observations, 90% (R-Sq = 0.95) of the PM₁₀ mass variability can be accounted for on the basis of the aluminum (a tracer for soil dust), sulfate (a secondary aerosol) and organic and elemental carbon (from woodburning). The relative standard errors for the coefficients are 53%, 45%, 5% and 40%, respectively.

**Figure 4.12.2-1: Klamath Falls
Emission Inventories**

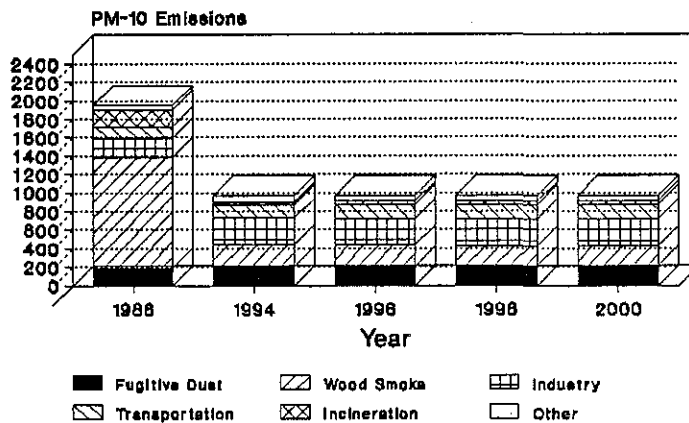


Calendar Year 1986

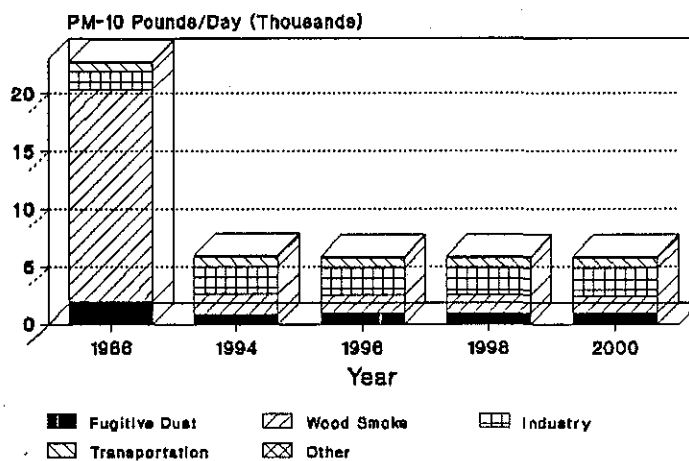


Based on 1986 Emissions

Figure 4.12.2-2: Projected Emissions
Annual Emissions



Worst Case Day Emissions



The results indicating that the PM₁₀ mass can reasonably be estimated from organic carbon, aluminum, sulfate and elemental carbon measurements. The regression equation is:

$$PM_{10} (\mu g/m^3) = 7.3(Al) + 6.4(SO_4) + 1.9(OC) + 1.0(EC) + 26$$

Source apportionment based on MLR analysis indicate that on typical winter days exceeding the 24-hour NAAQS 5.3% of the mass is soil dust, 7.7% is sulfate and 67% is wood smoke. These findings support the emission inventory and receptor modeling conclusions that soil dust and woodburning are significant contributors to Klamath Falls PM₁₀ levels during winter 24-hour worst case episodes. Since industrial emissions cannot be identified by any single aerosol component, industry contributions cannot be reliably estimated using this approach.

Analysis of Impacts by Source Categories

Receptor modeling of samples collected on days exceeding the NAAQS clearly show that residential wood smoke is the predominant source; that wood smoke varies from 69% to nearly all of the PM₁₀ mass and that these impacts are consistent with the aerosol chemistry observed within the airshed. These findings are also generally consistent with diurnal and seasonal variations in Klamath Falls PM₁₀ concentrations (Figure 4.12.1-2).

Comparisons between emission inventory and receptor modeling results has been used to provide a qualitative assessment of the relative significance of source categories. The source contribution estimates by these two methods for the winter 24-hour worst case and annual average periods are shown in Tables 4.12.2-11 and -12. They illustrate the generally close agreement between the source categories. The wood products industry contributions as estimated by emission inventory are higher than that estimated by receptor modeling because dispersion of the emissions is not considered. Transportation emissions are also somewhat higher than indicated by receptor modeling.

Background PM₁₀ Air Quality

Annual average background PM₁₀ air quality being transported into the Klamath Basin is estimated to be similar to background levels at the Medford Dodge Road monitoring site, about 15 $\mu g/m^3$ (see Section 4.12.1.2). This is similar to annual average background of 12 $\mu g/m^3$ measured at the Quartz Mountain PM₁₀ site southeast of Klamath Falls. The 24-hour average exceedance day background of 7 $\mu g/m^3$ apportionment is based on the percentage contributions found at the Peterson School site with very low PM₁₀ concentrations (11 $\mu g/m^3$) likely to reflect background sources.

Table 4.12.2-10: Background PM₁₀ Source Contributions

Source	Annual Ave. PM ₁₀ (µg/m ³)		24-Hr Ave. Exceedance Day	
Soil Dust	4.6	30.6 %	4.3	62 %
Industry	0.7	4.5 %	0.0	0 %
Wood Smoke	7.2	48.0 %	1.9	27 %
Sec. Aerosol	1.4	9.3 %	0.6	8 %
Others	1.0	6.6 %	0.2	3 %
	15 µg/m ³		7 µg/m ³	

Estimation of "Local" Air Quality Impacts

Estimation of the impact of emission sources within the UGB requires that background components listed in Table 4.12.2-10 be subtracted from the source contributions listed in Table 4.12.2-8 and 9. The difference between these two sets of estimates is the contribution of "local" sources identified in the emission inventories. Table 4.12.2-11 and 12 lists the "local" source contribution estimates (SCEs) to PM₁₀ mass average winter days which exceed the NAAQS and annual PM₁₀ mass loading, respectively.

Table 4.12.2-11: Average Exceedance Day "Local" PM₁₀ SCE's

Source	PM ₁₀ (µg/m ³)	% PM ₁₀	Emission Inventory
Soil Dust	23.1	8.8 %	9 %
Industry	0.0	0.0 %	7 %
Wood Smoke	217.1	82.8 %	81 %
Sec. Aerosol	10.1	3.8 %	----
Others	11.5	4.3 %	3 %
	262 µg/m ³	100 %	100 %

Table 4.12.2-12: Annual Average "Local" PM₁₀ SCE's

Source	PM ₁₀ (µg/m ³)	% PM ₁₀	Emission Inventory
Soil Dust	8.3	13.6 %	10 %
Industry	0.9	1.4 %	11 %
Wood Smoke	48.2	79.0 %	70 % **
Burning *	1.4	2.2 %	----
Sec. Aerosol	0.1	0.1 %	----
Transportation	0.1	0.1 %	7 %
Others	2.0	3.2 %	2 %
	61 µg/m ³	100 %	100 %

Table 4.12.2-12 Notes:

* Includes smoke from open burning occurring outside of the winter space heating season.

** Includes residential woodburning and solid waste disposal open burning.

The above analysis demonstrates that the 1986 emission inventory and receptor modeling analysis results are reasonably comparable. The validated emission inventories support the use of the 1994 emission inventory projection as the basis for the emission rollback calculations used in the attainment demonstration.

4.12.3 Emission Reduction Analysis

This section describes the emission reductions necessary to attain the NAAQS (4.12.3.1), a review of potential control measures that may be applied in Klamath Falls (4.12.3.2) and an assessment of the adequacy of the control measures to attain the NAAQS within the time limits specified by Section 110 (a) of the Clean Air Act (4.12.3.3).

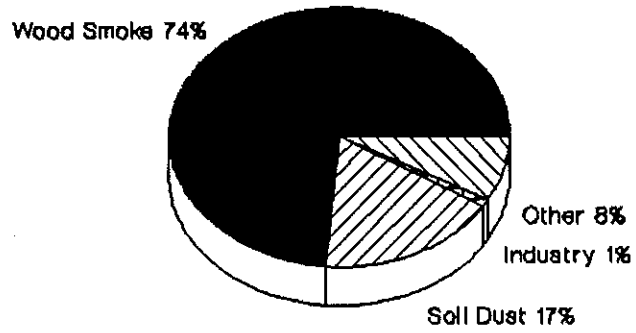
4.12.3.1 Emission Reduction Necessary for Attainment

The EPA PM₁₀ SIP Development Guidelines specify that a proportional modeling method can be used to estimate the control strategy requirements of the SIP. In the analysis below, the contribution of emission sources to the 1994 design values have been apportioned based on the 1994 annual and 24-hour worst case emission inventory estimates. Emission growth rates between 1986 and 1994 were first applied to each emission inventory source category. The sum of the 1994 source impacts plus background provide the 1994 24-hour worst case design value. A similar approach is taken to estimate 1994 annual emission reduction requirements. Appendix 5 contains the Demonstration of Attainment rollback calculations.

Projected 24-Hour Source Impacts in Future Years

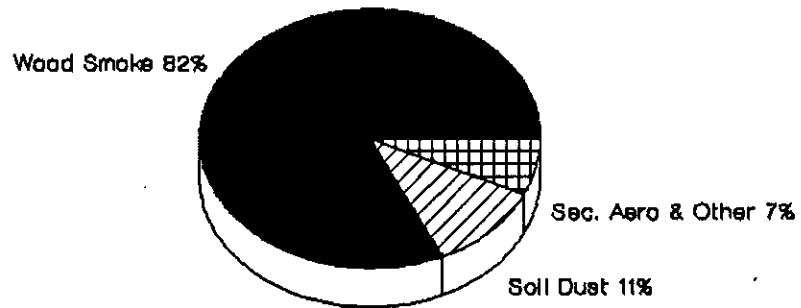
Table 4.12.3-1 lists 1994 source contribution estimates for the 24-hour worst case scenario. Source contributions at the 1994 design level were apportioned using the 1986 24-hour worst case day emission inventory percentages applied to the "local" PM₁₀ air quality level of 543 $\mu\text{g}/\text{m}^3$ (550 $\mu\text{g}/\text{m}^3$ design value less the 7 $\mu\text{g}/\text{m}^3$ background).

**Figure 4.12.2-3
Klamath Falls PM-10 Source Impacts**



Annual Estimate by CMB

Dec. 1987 - Jan. 1988



Typical Winter Worst Case Day

Peterson School

**Table 4.12.3-1: Projected Future Source Category Impacts
(24-Hr Worst Case)**

Source	1986 Worst Day EI	"Local" Design ($\mu\text{g}/\text{m}^3$)	1986-94 Growth (%)	1994 $\mu\text{g}/\text{m}^3$	1994 % "Local" PM ₁₀
Woodstoves	72 %	389	8.0 %	421	70.2 %
Fireplaces	8 %	46	-16.0 %	38	6.4 %
Industry	7 %	36	45.7 %	56	9.4 %
Fugitive Dust	9 %	48	12.0 %	53	8.9 %
Transportation	3 %	18	12.0 %	20	3.4 %
Other Sources	1 %	3	8.0 %	3	0.5 %
Subtotals		543		593 $\mu\text{g}/\text{m}^3$	
Background				7 $\mu\text{g}/\text{m}^3$	
Total				600 $\mu\text{g}/\text{m}^3$	

Air quality improvement needed = $450 \mu\text{g}/\text{m}^3$ ($600 - 150 \mu\text{g}/\text{m}^3$)
 or a 75.9% [$450 / (600 - 7 \text{ bkgnd})$] in worst case day emissions
 equivalent to 18,922 pounds per day.

The control strategy must be comprised of a mix of individual source reduction measures such that the sum of the reductions equal or exceed the total reduction requirement. Adopted control strategies must be shown through a demonstration of attainment (Section 4.12.3.3) to attain and maintain the NAAQS by reducing emissions such that an overall reduction in PM₁₀ 24-hour worst case concentrations is at least $450 \mu\text{g}/\text{m}^3$.

Projected Annual Source Impacts in 1994

Table 4.12.3-2 lists 1994 source contribution estimates for the annual scenario. Source contributions at the 1994 annual design level were apportioned using the 1994 annual emission inventory percentages applied to the "local" PM₁₀ air quality level of $60 \mu\text{g}/\text{m}^3$ ($75 \mu\text{g}/\text{m}^3$ design value less the $15 \mu\text{g}/\text{m}^3$ background).

Table 4.12.3-2: Projected Annual Source Category Impacts

Source	1986 Annual EI	"Local" Design ($\mu\text{g}/\text{m}^3$)	1986-94 Annual Growth	1994 Annual $\mu\text{g}/\text{m}^3$	1994 %"Local" PM ₁₀
Woodstoves	55 %	33	8 %	36	48 %
Fireplaces	6 %	4	-16 %	3	7 %
Industry	11 %	6	38 %	9	14 %
Fugitive Dust	10 %	6	12 %	2	10 %
Transportation	7 %	4	12 %	4	7 %
Open Burning	9 %	5	8 %	6	10 %
Other Sources	3 %	2	8 %	2	3 %
Sub Totals		60		66 $\mu\text{g}/\text{m}^3$	
Background				15 $\mu\text{g}/\text{m}^3$	
Total				81 $\mu\text{g}/\text{m}^3$	

Air quality improvement needed = 31 $\mu\text{g}/\text{m}^3$ (81-50 $\mu\text{g}/\text{m}^3$) or a 47% [31/(81-15 bkgnd)] reduction in 1994 emissions. This is equivalent to a reduction of 1020 tons per year.

4.12.3.2 Evaluation of Potential Control Measures

The PM₁₀ control strategy for the Klamath Falls UGB focuses on residential woodburning and winter road sanding fugitive emission dust control measures as well as public education programs, on-going restrictions on open burning, forest slash burning emissions reductions and management of industrial point source emission growth.

PM₁₀ Control Strategy Elements

The following control strategy elements have been adopted to assure attainment of the annual and 24-hour PM₁₀ NAAQS. Emission reduction credits associated with each element are listed and discussed. A PM₁₀ emission reduction credit is a measure of the reduction in PM₁₀ emissions that would be accomplished through adoption and implementation of the program element. The strategy elements and credits are further described in Section 4.12.3.3.

The emission projections listed in the following tables reflect estimated 1994 emissions.

Table 4.12.3-3 PM₁₀ Control Strategies Elements

Element	Strategy	Emission Reduction Credits by 1994 24-Hr. Annual	
Attainment Strategies			
1	Woodstove Certification Program	24 %	24 %
2	Woodstove Curtailment Programs	86 %	74 % *
3	Winter Road Sanding Controls	60 %	60 %
4	Woodstove 20% Opacity Program	--	5 %
5	Woodstove Removal Program	27 %	--
6	Public Education Programs	No Credit Taken	
7	Industrial Significant Emission Rate Offset Restrictions	No Credit Taken	
8	Forestry Slash Burning Emission Reductions & Restrictions	No Credit Taken	
* Equivalent Emission Reduction Credit - See Text			

Residential Wood Smoke Control Elements

There are two basic approaches to reducing woodsmoke from stoves and fireplaces: (1) improving the performance of the woodheating systems such as through a certified woodstove program; and (2) burning less wood through woodstove curtailment programs. Some strategies have multiple advantages. Certified woodstoves, for example, improve emission performance by reducing the amount of woodsmoke per cord of wood burned while improving energy efficiency, thus reducing the amount of wood burned. Other examples are well designed public information, energy conservation, or firewood seasoning programs that result in better combustion (lower emissions) and better energy efficiency (less fuel burned). The key elements of the residential wood smoke control program are described below.

The Woodstove Certification Program

In 1983, the Oregon Legislature directed the Department to require that all new woodstoves sold in the State be laboratory tested for emissions and efficiency prior to sale to assure compliance with established emission standards. As a result, stoves sold after July, 1986 were required to emit 50% less smoke than conventional woodstoves. After July, 1988 new woodstoves were required to emit 70% less smoke.

Subsequent to the adoption of Oregon's emission standards, the Environmental Protection Agency (EPA) adopted a slightly more restrictive national certification program which became effective July, 1990. In March, 1990 the Department completed rulemaking to modify the Oregon woodstove certification rules (OAR 340 Division 21) to assure consistency with EPA's national program.

In-home studies of first generation certified woodstoves have indicated that they actually reduce emissions by about 30%. Second generation certified stoves have been shown to reduce emission by about 50%. The majority of stove certified by the Department and sold in Oregon have been second generation stoves.

Second generation catalytic stove designs have incorporated new advancements in combustor technology which in part accounts for the stoves increased effectiveness. First generation catalytic stoves incorporated less effective catalytic elements which are currently reaching the end of their useful life. When replaced with new generation catalysts, the first generation catalytic stoves will provide effective emission reductions approaching that of second generation stoves. These improved first generation stove will make up part of the stove population in 1994.

RESIDENTIAL WOODBURNING

WOODSTOVES:

Residential woodstove emissions constitute 89.5% (1076 tons) of the total 1986 woodburning baseline emission inventory. Growth of residential woodstove use was estimated by comparing a study of projected firewood use, conducted by Del Green Associates, and actual woodheating surveys conducted by the department from 1981 through 1987. The Del Green projections can be used to estimate wood use growth from 1986 to 1994 at a 1% per year increase. This projection is conservative compared to the actual firewood use trends projected from the 1981 and 1987 woodheating surveys and represent a worst-case assumption considering the substantial (53%) reduction from 1987 levels in wood use reported in the Klamath Falls 1991 woodheating survey.

FIREPLACES:

Fireplace emissions in Klamath Falls represent 10.5% (126 tons) of the total 1986 baseline woodburning emission inventory. The emission impact from fireplaces has been separated from woodstove use in calculating the emission reduction benefit derived from the woodstove certification program. The Del Green projections for wood use trends in fireplaces estimates a 2% per year decrease in fireplace use from 1986 through 1994. This estimate is also conservative when compared to the actual firewood use trends for fireplaces from the 1981 and 1987 woodheating surveys.

Pelletstoves:

Residential pelletstoves are included as part of the 1986 baseline woodstove EI, and are expected to grow at a significantly accelerated rate in the near future. A conservative estimate of pelletstove growth is to assume a growth rate equivalent to cordwood stoves.

The following calculations are included in Appendix 5. Note that since the following calculation do not include emission reductions associated with woodburning curtailment program, the following tables cannot be directly compared to those found in Appendix 5, Tables 6 and 7 which report emission inventory changes associated with all strategies.

RESIDENTIAL WOODSTOVES

Basis for a 24% Woodstove Certification Program Credit

As noted above, firewood use in residential woodstoves is projected to increase by 1% per year over the 8 year period from 1986 to 1994. This is the basis of the growth factor used in calculating projected 1994 wood smoke emissions. Therefore, in the absence of any certification program, emission would increase by:

$$1\% \text{ per year} \times 8 \text{ years} = + 8\%$$

Building permit authorities in Klamath County indicate that essentially all permitted installations are certified stoves and that about 20% of these are pelletstoves. The 5% per year replacement rate for removal of conventional stoves and installation of certified stoves was confirmed in the 1991 Klamath Falls Woodheating Survey which found a replacement rate of 7%.

(1) For new certified cordwood stoves emitting 50% of conventional stoves, emissions would be expected to decrease over the period 1986-1994 by :

(a) Assuming 80% are new or replacement cordwood stoves:

$$80\% \times \{ [8\% \times (100\% - 50\%)] \times \text{BL86} + [5\%/Yr. \times 8 \text{ Yrs} \times (100 - 50\%)] \times \text{BL86} \} = 18.4\%(\text{BL86})[\text{tons}]; \text{ Where BL86} = \text{Baseline emissions in 1986}$$

(2) For new certified pelletstoves emitting 10% of conventional stove, emissions would be expected to decrease over the period 1986-1994 by :

(a) Assuming 20% are new or replacement pelletstoves:

$$20\% \times \{ [8\% \times (100\% - 10\%)] \times \text{BL86} + [5\%/Yr. \times 8 \text{ Yrs} \times (100 - 10\%)] \times \text{BL86} \} = 7.88\%(\text{BL86})[\text{tons}]$$

(3) The total emission reduction as a function of the 1994 uncontrolled woodstove emissions is:

$$\begin{aligned} \{ 18.4(\text{BL86}) + 7.88(\text{BL86}) \} / \text{BL94} &= \underline{26.28(\text{BL86})} \\ &= 24.3\% \\ &1.08(\text{BL86}) \end{aligned}$$

Where: $\text{BL94} = 1.08 \times \text{BL86}$

Therefore, the woodstove certification program alone provides a 24.3% credit by 1994.

RESIDENTIAL FIREPLACE EMISSION PROJECTION

Emissions from residential fireplaces are expected to decrease 2% per year from 1986 to 1994.

NET BENEFIT OF CERTIFICATION PROGRAM AND FIREPLACE TRENDS

Woodstove and Pelletstove Replacement:

Assuming 80% of replacement stoves to be certified cordwood stoves, and 20% pelletstoves; the net emission reduction from the 1986 base line will be 31.2 tons per year. This yearly reduction is applied consistently (not compounded) each year from 1986 to 1994.

$$[80\% \times (5\%/yr \times .5)] + [20\% \times (5\%/yr \times .9)] = 2.9\%/yr \text{ reduction.}$$

$$1986 \text{ woodstove baseline } [1076] \times .029 = 31.2 \text{ tons/yr.}$$

New Woodstoves and New Pelletstoves:

Assuming 80% of new certified stoves to be cordwood stoves, and 20% to be pelletstoves; the net emission increase due to growth will be 4.5 tons/yr. This yearly increase is applied consistently (not compounded) from 1986 to 1994.

$$[80\% \times (1\%/yr \times .5)] + [20\% \times (1\%/yr \times .1)] = 0.42\%/yr \text{ increase.}$$

$$1986 \text{ woodstove baseline } [1076] \times .0042 = 4.5 \text{ tons/yr.}$$

Residential Fireplace Trend:

Residential fireplace use is projected to decrease by 2% each year. This means a constant reduction of 2.5 tons per year, (not compounded) from the 1986 fireplace emission baseline.

$$[126 \text{ t/yr} \times .02] = 2.5 \text{ tons/yr.}$$

Source Category	ANNUAL EMISSIONS BY YEAR (Tons)						
	1986	1987	1988	1989	1990	1992	1994
Existing Stoves	1076	1044	1012	982	953	896	843
New Stoves	0	5	9	14	18	27	36
Old & New Fireplaces	126	124	121	119	116	112	107
TOTAL	1202	1174	1142	1115	1087	1035	987

The net reduction due to the woodstove certification program, and fireplace usage trends (from the projected 1994 uncontrolled RWC emissions of 1268 tons) becomes 22% :

$$1 - \frac{[1994 \text{ controlled}] 987 \text{ tons}}{[1994 \text{ uncontrolled}] 1268 \text{ tons}} = 22 \% \text{ reduction}$$

Maintenance Credits Beyond 1994

The credits claimed for the certification program beyond 1994 follow the same approach but are based on the fact that pelletstoves are likely to be an increasing proportion of the new stoves being installed. During the period 1994-1996, an 80%/20% cordwood/pellet stove mix is assumed increasing to a 50%/50% mix during the period 1996 to year 2000. Growth in new stoves is expected to increase to 1.1% per year, reflecting the projected population growth rate.

The stove replacement is expected to remain 5% per year, and fireplace use trends will continue at a 2.0% per year reduction. The calculated net benefits adjusted for emission growth provide a 98 ton reduction during the 1994-96 period, and an additional 113 ton reduction during the period of 1996 to 2000.

Maintenance Period 1994 through 1996

Replacement: Woodstoves and Pelletstoves

$$[80\% \times (5\%/yr \times .5)] + [20\% \times (5\%/yr \times .9)] = 2.9\%/yr$$

$$BL1994 [850 \text{ tons}] \times .029/yr = 24.6 \text{ ton/yr reduction.}$$

New: Woodstoves and Pelletstoves:

$$[80\% \times (1.1\%/yr \times .5)] + [20\% \times (1.1\% \times .1)] = 0.46\%/yr$$

$$BL1994 [850 \text{ tons}] \times .0046/yr = 3.9 \text{ tons/yr increase.}$$

Fireplace: continue at -2%/yr. from the 1994BL.[109] x .02/yr] = 2.18 tons/yr decrease.

	1994	1995	1996
Existing Stoves	843	823	803
New Stoves	36	41	45
Fireplaces	107	105	103
TOTAL	987	969	951

Net Emission Benefit for 1994- 1996:
[987 - 951] = 36.0 ton reduction

Maintenance Period 1996 through 2000

Replacement: Woodstoves and Pelletstoves

$[50\% \times (5\%/yr \times .5)] + [50\% \times (5\%/yr \times .9)] = 3.5\%/yr$
BL1996 [811tons] x .035/yr = 28.4 ton/yr reduction.

New: Woodstoves and Pelletstoves:

$[50\% \times (1.1\%/yr \times .5)] + [50\% \times (1.1\% \times .1)] = 0.33\%/yr$
BL1996 [811 tons] x .0033/yr = 2.7 ton/yr increase.

Fireplace: continues at -2%/yr. from the 1996BL. {[109] x .02/yr} = 2.18 tons/yr decrease.

	1996	1997	1998	1999	2000
Existing Stoves	803	786	768	751	735
New Stoves	45	50	54	59	63
Fireplaces	103	101	99	97	95
TOTAL	951	936	921	907	893
Net Emission Benefit for 1996 - 2000:					

[951 - 893] = 58 ton reduction.

The Klamath County Air Quality Program

Resolution 89-116, adopted August 31, 1988 by the Klamath County Board of Commissions established Klamath County's Air Quality Program under the direction of the County Health Department. The program was established to implement the Klamath County Air Quality Compliance Development Plan for the Klamath Falls City and Urban Growth Boundary which was adopted as Resolution 89-148 on April 19, 1989. On July 31, 1991, the Commission adopted a new ordinance establishing a mandatory woodburning curtailment program as well as enforced restrictions on open burning and other restrictions on airshed emissions. The City of Klamath Falls adopted Ordinance No. 6630 on September 16, 1991 implementing the County air quality program within the city boundaries.

The program is funded by Klamath County at a level of \$112,600 per year (FY 91) and employs one full time Air Quality Coordinator and two administrative assistants. Effective in the Fall of 1991, two full time seasonal field inspectors will be added to implement and enforce the mandatory provisions of the Klamath County ordinance. Additional special project funds are provided by the Department to support major capital outlay and other one-time program needs. The Klamath County Program is found in Appendix 4.

Key elements of the County program are described below.

1. Public Information Programs.

A comprehensive, professional, and well-financed public information program is essential for public cooperation and support in reducing woodsmoke emissions. The program clearly describes the need for the public's cooperation, the health-safety-energy-economic benefits to individuals and the community, and precisely what individuals can do to help. Key elements include: home weatherization, firewood seasoning, cleaner burning practices, proper stove installation and sizing, maintenance of woodburning systems and most importantly curtailment of woodburning during poor ventilation episodes. Although no emission reduction credits are taken for the public information program, it is critical to the success of all of the other woodsmoke reduction elements.

The Klamath Falls Air Quality education program fulfills all of these criteria. Key element of this aggressive program include:

- Television and radio public service announcements;
- Billboards, posters, brochures and road side signs;
- Neighborhood and house-to-house meetings promoting clean air and proper woodheating practices;
- Newspaper articles on clean air issues, Air Pollution Index (API) trends and woodburning curtailment calls;
- Advertising in newspapers and on radio;
- Wood smoke health effects studies and symposiums;
- Public classes and forums on proper burning methods;
- A voluntary firewood moisture certification program for fuel wood dealers;
- Coordination with advisory committees, woodstove dealers environmental and governmental groups;
- Operation of the Klamath County Burning Advisory telephone system which, during the 1990-91 heating season, answered 122,000 public calls. An additional 5,000 calls were handled by the Klamath County Air Quality staff.

EPA's Guidance Document for Residential Wood Combustion Emission Control Measures recognizes public education programs as an essential element of any residential woodburning control strategy. The highest level education program described by EPA is a comprehensive, aggressive program that includes all of the elements

found in the Klamath County program described above. Although EPA recognizes public education programs as an essential element of woodburning control programs, no emission reduction credits can be assigned to the program without further technical justification.²⁵

2. Home Weatherization and Stove Replacement Program

In May, 1990 and in June of 1991, the City and County of Klamath Falls received awards totalling \$1.44 million from the State of Oregon Community Block Grant funds for a home weatherization and woodstove replacement program similar to the Medford CLEAR Project. Woodstoves in 325 low income, sole source homes have been replaced by natural gas, electrical furnaces, certified woodstoves and pelletstoves with grant funds administered under Klamath County's PURE project. The program has reduced woodheating emission by 32.9 tons per year and 506.9 pounds/day. These reductions are based on Klamath County information indicating that 90% of the conversions are natural gas/electric and 10% are certified woodstoves.

3. Curtailment During Poor Ventilation Episodes.

A mandatory woodburning curtailment program was adopted by the Klamath County Board of Commissioners on July 31, 1991 following three years of a voluntary program. The program has been operated by Klamath County since 1988. The program has been designed to limit the use of woodstoves and fireplaces during periods likely to exceed the 24-hour NAAQS.

Woodburning curtailment forecasts are made twice daily at 7 AM and 4 PM during the woodheating season by the County Health Department. The forecasts are made daily between November 1st and April 1st. A "Yellow" forecast is issued if the 6 AM to 6 PM levels are forecast to be greater than 4.0 but less than 7.0 Bscat (equivalent to 81-150 $\mu\text{g}/\text{m}^3$ PM_{10}).²⁶ A "Red" forecast is issued if the 6AM-6PM forecast is for Bscat levels greater than 7.0 or 150 $\mu\text{g}/\text{m}^3$. The curtailment calls are based on criteria provided by the Department and are based on a forecast algorithm using National Weather Service upper air and barometric pressure data, forecasts of synoptic meteorology; surface temperatures and wind speed/direction. Nephelometer measurements of hourly light scattering and local observations of air quality conditions are also used. A detailed discussion of the curtailment methodology is found in Appendix 7.

Woodburning curtailment advisories are issued at three levels:

²⁵US EPA, "Guidance Document for Residential Wood Combustion Emission Control Measures," EPA-450/2-89-015 (1989).

²⁶Bscat measured by integrating nephelometer in units of 10^{-4}M^{-1} .

"Green" advisories are issued for periods during which NAAQS violations are unlikely. Woodburning is unrestricted during these periods but the public is asked to follow good woodburning practices. "Green" advisories are issued when PM₁₀ levels are expected to be less than 80 µg/m³, 12-hour average from 6 AM to 6 PM.

"Yellow" advisories are issued for periods approaching exceedance of the NAAQS. Under a "Yellow" curtailment, the public is asked to curtail all unnecessary woodburning, excepting only pelletstoves, certified woodstoves and those that use wood as their sole source of heat

"Red" advisories are issued for periods of severely restricted ventilation during which PM₁₀ levels are expected to exceed the NAAQS. Only households in which woodburning is the sole source of heat are permitted to burn during these periods.

Based on the past three years of air monitoring data, about 47 curtailment days are expected to occur during the space heating season. Compliance with the advisories is determined through evening surveys of woodburning activity during "Green", "Yellow" and "Red" curtailment periods.

The goal of the Klamath Falls Woodburning Advisory Program is to achieve an 86% compliance rate on the 40 to 50 days per year on which violations of the PM₁₀ health standards would be expected. The Klamath Falls compliance rate during the first year of the mandatory program is expected to be similar to that reported for other mandatory curtailment programs such as the Medford, Oregon program which achieved an 85% compliance rate during the first months of the program.

4. Opacity, Phase Out of Exemptions & Enforcement

The Klamath County ordinance provides for a year around, 20% woodstove plume opacity (stove startup and shutdown periods exempted). The 5% emission reduction credit claimed for this program is based on EPA guidance.²⁷ Other elements include a phase-out of curtailment exemptions: sole source nonowner occupied dwellings by 1993 and owner occupied, low income sole source by 1998. All sole source households (except tenant occupied and low income) must have secondary heat sources by 1996. A ban on the sale of used, uncertified woodstove is also included in the ordinance.

²⁷US EPA, OAQPS, Guidance Document for Residential Wood Combustion Emission Control Measures. Appendix F. EPA 450/2-89-015. September, 1989.

The County Ordinance, Section 170.500, provides for penalties for violation of the conditions of the ordinance. First offenses are subject to a \$25 fine; second offenses by a fine of \$100 and subsequent violations of \$250 per occurrence. The County's enforcement policy is that violations of the Ordinance are cumulative over time and not limited to the heating season or calendar year. This policy significantly strengthens the stringency of the Ordinance.

Long Term Woodheating Control Strategy

Woodheating curtailment is viewed as a short-range control strategy to allow rapid attainment of the short term (24 hour) PM10 air quality standard. The department of Environmental Quality is committed to pursue permanent reductions in woodheating emissions as a long-range strategy to reduce and eliminate the reliance on curtailment and to provide significant improvement in annual PM10 air quality.

At a minimum, the following measures will be pursued to permanently reduce woodheating emissions:

- Public education activities will include more specific information on the true cost of woodheating in relation to other alternative cleaner heat sources. The major goal of this effort is to persuade those households that are spending more money to heat with wood in uncertified stoves than with conventional fuels, such as natural gas, or certified stoves.
- Further information and studies on the toxicity, health effects and other detrimental effects of woodstoves will be pursued and heavily publicized in a continuing effort to convince more people that they should reduce their woodheating smoke.
- Funding sources will be perused to implement the programs authorized by the 1991 Oregon legislature for loans and grants to accelerate the replacement of uncertified woodstoves.

Basis for Woodburning Curtailment Credits (Worst Case Day)

The highest reported compliance rates have been for mandatory curtailment programs in Washoe County, Nevada (90%), Juneau, Alaska (80-90%), Yakima, Washington (80%), and Missoula, Montana (70%). In the Medford area a 80% to 85% compliance rate was achieved in the first year of mandatory curtailment. The 90% emission reduction credit for Klamath Falls attainment is based on the above compliance rates.

Basis for Woodburning Curtailment Credits (Annual Emissions)

Annual emission credits taken for reductions made on the 47 curtailment days that occur, on average, each year have been

estimated by two methods:

Reductions Based on Degree Heating Days were calculated by summing the product of the number of degree heating days that occurred on the 47 coldest days (most of which exceeded the 24-hour NAAQS) during the winter months, generally curtailment days (December, 1987 to March, 1989) and the total number of degree heating days per year to obtain the fraction of annual degree days that occurred on the 47 coldest days of the winter. This fraction (0.31) was then applied to the 1994 annual woodburning emission estimate of 1268 tons per year to obtain the total tons of emissions on curtailment days (393 tons). If emissions are reduced by 86% on curtailment days, than emissions should be reduced by 338 tons (86% of 393 tons) which represents 27% of the 1994 annual emissions. The curtailment program will therefore provide, at minimum, a 27% credit on an annual basis. However if the fact that reductions occur during poor ventilation conditions is considered, much greater benefits are apparent.

Annual Air Quality Improvements of Curtailment are believed to be much greater than the above emission reduction credit would estimate because the emission reductions are occurring during the worst atmospheric ventilation periods of the year. To estimate the true annual air quality benefits of curtailment, actual PM_{10} concentrations on winter days with PM_{10} levels greater than $150 \mu g/m^3$ (mid-1986 to mid-1989) were used to estimate daily PM_{10} concentrations that would occur on curtailment days given the following: (1) a background PM_{10} level of $7 \mu g/m^3$; (2) 83% of non-background PM_{10} is wood smoke and (3) the curtailment program will reduce woodsmoke concentrations by 86%. These PM_{10} estimates were then used to recalculate the three year, annual average. Given these assumptions, the design value annual average of $75 \mu g/m^3$ was reduced to $50.2 \mu g/m^3$. Since the proportional rollback model estimates that a 938 ton per year emission reduction in woodsmoke is needed to attain the annual NAAQS and given that the curtailment program alone will attain the annual NAAQS, the curtailment program will provide a minimum equivalent emission reduction credit of 74% (938 TPY/1268 TPY of total woodsmoke). This is the basis for the 74% "comparable" emission reduction credit noted in Table 4.12.3-3. If it is assumed that the curtailment program will provide all of the 1020 ton/year reduction needed for attainment, a credit of 80% (1020/1268) could be justified.

State of Oregon Statute

The 1991 Oregon Legislature passed several measures in HB2175 which will be available as either as control strategies or contingency measures for the control of PM₁₀ emission from residential woodheating. These measures are outlined below:

Residential Woodheating Controls

I. WOODSTOVE CHANGEOUT PROGRAM (OAR 340 Division 34)

- A. The Residential Woodheating Air Quality Improvement Fund created under Section 10 of HB2175 provides for a two faceted program that offers both low, or no interest loans, as well as total subsidies for the replacement of uncertified woodstoves with alternate heat sources. The low/no interest loan program, available to woodheating households within the western interior valleys or any PM₁₀ nonattainment area, provides criteria under which a uncertified stove may be removed and destroyed, and a high efficiency, low polluting heating system installed to building code and manufacturers specifications.
- B. The subsidy program would fund local governments or regional authorities in PM₁₀ nonattainment areas to provide subsidies for the replacement of uncertified stoves. In order to receive funding a local government or control authority must meet eligibility criteria, among which is the adoption of an ordinance that limits visible emissions from woodstoves and fireplaces during periods of air stagnation. This provision does not restrict the establishment of a woodstove curtailment program if deemed necessary.

Both programs include eligibility requirements for individual applicant households.

Funding and Resources:

Although the Residential Woodheating Air Quality Improvement Fund was established to provide resources for the Low/No Interest Loan, and Stove Subsidy programs the legislature did not authorize an emission fee on the sale of cordwood which would have provided funding.

The Department intends to fully pursue the funding of these programs through federal assistance grants and other grant sources. The Department will also consider returning to the 1993 legislative session and try to establish a permanent source of funding for these programs.

At such time as funding is provided the Department will provide staff resources to administer both program, and to fully analyze the most efficient and effective means of

concentrating efforts on emission reduction in the most critical areas.

Emission Reduction:

Emission reduction benefits vary considerably depending upon the number of participants, and the type of replacement heating system selected. Stove replacement subsidy programs with a high degree of participation that are focused within a limited geographical area will see the most immediate benefit in improved air quality.

If a community were to participate in a local stove replacement subsidy program it would be possible for each household to achieve a reduction in PM₁₀ emissions of approximately 50% if uncertified stoves were replaced with EPA phase II certified stoves. If each household were to replace their uncertified stove with a gas furnace the emission reduction would be approximately 99%.

II. REMOVAL OF UNCERTIFIED STOVE UPON SALE OF HOME IN PM₁₀ NONATTAINMENT AREA EFFECTIVE DECEMBER 31, 1994 (OAR 340 Division 34)

The 1990 Clean Air Act requires states to revise PM₁₀ control strategies for problem areas to include contingency plans and other provisions to insure that PM₁₀ health standards will be achieved by specified dates. HB2175 requires that after December 31, 1994 all uncertified woodstoves, except antique and cookstoves, be removed and destroyed upon sale of a home. The Department views this program as a primary contingency measure for the overall PM₁₀ control strategies required by EPA.

The requirements of the statute are immediately enforceable through civil penalties by amending OAR Chapter 340, Division 12. By December 1994, the Department will also develop an advisory committee comprised of representatives from Oregon Title Companies, the Oregon Association of Realtors, and the State Real Estate Agency in Salem. The goal of the advisory group will be to outline the most efficient means to disseminate information about the sale requirements to all home sellers in the nonattainment areas, and to ensure that the stove removal and destruction requirement is carried out.

FUNDING AND RESOURCES:

The Department will commit staff resources to the enforcement of the statute where necessary. The Department will also coordinate the advisory group efforts to enhance the development and implementation of a comprehensive education and enforcement effort in each

PM₁₀ nonattainment area.

EMISSION REDUCTION:

The long term emission reduction potential of the stove removal contingency strategy will vary depending upon the turn over rate of homes with uncertified stoves, and the choice of replacement heat. An evaluation of census information and surveys of real estate transactions estimates an average annual home turn over rate of approximately 3% per year, with the average home being owned for 20 years.

A random home replacement distribution over 20 years, at 3% per year would increase the replacement rate of uncertified stoves from 5% to 8%. The expected emission reduction from both stove replacement strategies may range from 50% cleaner in the case of a certified woodstove being chosen as the replacement heating device, to 99% cleaner if a gas heater is chosen.

III. STATEWIDE WOODSTOVE CURTAILMENT (OAR 340 Division 34)

The 1991 Oregon legislature authorized the following program to be put in place in any area of the State where such a program is required under the Clean Air Act: If a local government or regional authority has not adopted or is not adequately implementing the Clean Air Act required woodstove curtailment program, the Environmental Quality Commission may adopt by rule and the Department of Environmental Quality may operate and enforce a program to curtail residential woodburning during periods of air stagnation. The curtailment program would apply to woodstoves, fireplaces, and other woodheating devices. The State curtailment program must include at a minimum:

- ◆ A provision for a two stage curtailment program based on the severity of the projected air quality conditions.
- ◆ A provision to exempt all Oregon certified woodstoves from the first stage of curtailment.
- ◆ A provision for low income exemptions.
- ◆ A provisional exemption for sole source woodburning households.
- ◆ An exemption for pelletstoves.
- ◆ A provision for the Department to defer the operation and enforcement of the curtailment program at such time as the

local government or regional authority has adopted and is adequately implementing the required curtailment program.

FUNDING AND RESOURCES:

Should it become necessary for the Department to implement a State residential wood smoke curtailment program within a community the Department would seek assistance from the EPA to fund the necessary public education, daily advisory, monitoring, surveyance, and enforcement efforts.

The Department staff could provide support for a public education campaign, and distribute the daily burn advisory. The Department would explore the possibilities of contracting with local agencies to provide services in the areas of monitoring, compliance surveys, and enforcement.

EMISSION REDUCTION:

EPA guidance regarding woodheating curtailment programs suggests that a minimum 10% credit for emission reduction can be taken for a voluntary curtailment program, and that a minimum 50% emission reduction credit may be taken for a mandatory program. The Department has had several years of experience establishing and monitoring curtailment programs in the Medford, Klamath Falls, Jackson County, and Grants Pass PM₁₀ nonattainment areas.

The Department's experience with curtailment programs supports that a 30% emission reduction credit is a reasonable estimate for a voluntary woodburning curtailment program. A mandatory curtailment program, given the proper effort in the area of community education and information is capable of attaining emission reductions in the range of 70% to 90%.

IV. USED STOVE BAN (OAR 340 Division 34)

The 1991 legislature enacted a ban on the sale of uncertified used woodstoves. As of the effective date of House Bill 2175 August 5, 1991 no person shall advertise for sale, offer to sell or sell, a used woodstove that was not certified for sale as new to the 1986 Oregon woodstove emission standard. Additionally, HB2175 has charged the State Building Code Agency to amend their administrative rules, prohibiting the installation of uncertified used woodstoves.

FUNDING AND RESOURCES:

The Department's Woodheating Program staff will

investigate potential violations of the uncertified used stove sales ban, and with assistance from the Department's enforcement section will take the appropriate enforcement action when necessary. The Department's Public Relations section in conjunction with the Woodheating Program staff will mount a public education and information campaign to make the public aware of the new ban on used stove sales. The State Building Code Agency will enforce these regulations prohibiting the installation of uncertified used stoves.

EMISSION REDUCTION:

Our best information indicates that 1 out of every 4 stoves purchased is a uncertified used stove. Prohibiting their purchase and installation will ensure that the full emission credit potential offered by the normal change over to certified stoves will be realized. With the prohibition on uncertified used stoves each old stove replaced will provide at a minimum a 50% decrease in emissions or better depending upon the type of replacement heating device chosen. The 1991 Oregon Legislature adopted a new statute (HB2175) prohibiting the commercial sale of uncertified woodstoves and requiring the removal of conventional woodstoves upon sale of a home. Stove removal upon sale has been reserved as a contingency measure (see below) to be implemented in the event that the attainment strategy fails to achieve the NAAQS. Both measures greatly accelerate the woodstove changeover rate.

RACM Elements

Reasonably Available Control Measures (RACM) for Urban Fugitive Dust, Residential Wood Combustion and Prescribed Burning are defined by the EPA's April 2, 1991, Memorandum on PM₁₀ Moderate Area SIP Guidance. Further guidance is contained in EPA-450/3-88-008 (September, 1988), Control of Open Fugitive Dust Sources and EPA-450/2-89-015 (September, 1989), Guidance Document for Residential Wood Combustion Control Measures.

URBAN FUGITIVE DUST RACM MEASURES

EPA guidance requires that the following fugitive dust RACM elements be included in the PM₁₀ SIPs if the source is a significant contributor to PM₁₀ nonattainment and it is economically and technologically feasible to control:

(1) Pave, vegetate or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads; (2) Require dust control plans for construction or land clearing projects; (3) Require haul trucks to be covered; (4) Provide for traffic rerouting or rapid clean up of temporary (and not readily preventable) sources

of dust on paved roads (water erosion runoff, mud/dirt carryout areas, material spills, skid control sand). Delineate who is responsible for clean up;

(5) Prohibit permanent unpaved haul roads, and parking or staging areas at commercial, municipal, or industrial facilities; (6) Develop traffic reduction plans for unpaved roads using speed bumps, low speed limits, etc. to encourage use of other (paved) roads; (7) Limit use of recreational vehicles on open land (e.g., confine operations to specific areas, require use permits, outright ban); (8) Require improved material specification for and reduction of usage of skid control sand and salt (e.g., require use of coarse, nonfriable material during snow and ice season); (9) Require curbing and pave or stabilize (chemically or with vegetation) shoulders of paved roads; (10) Pave or chemically stabilize unpaved roads;

(11) Pave, vegetate, or chemically stabilize unpaved parking areas; (12) Require dust control measures for material storage piles; (13) Provide for storm water drainage to prevent water erosion onto paved roads; (14) Require revegetation, chemical stabilization, or other abatement of wind erodible soil, including lands subjected to water mining, abandoned farms, and abandoned construction sites and (15) Rely upon the soil conservation requirements (e.g., conservation plans, conservation reserve) of the Food Security Act to reduce emissions from agricultural operations.

Fugitive dust control measures that have already been adopted by rule are found in Chapter 340, Division 21, Department of Environmental Quality. These rules apply within incorporated cities of 4,000 or more population and are enforce under OAR 340-21-060. These rules implement the following fugitive dust RACM measures:

<u>RACM Element</u>	<u>OAR 340 Division 21 Section:</u>
1	(2)(a)
2,10,11	(2)(b)
3	(2)(f)
4	(2)(g)
12	(2)(c)

In addition, the Klamath County Clean Air Ordinance requires implementation of RACM elements 4 (trackout) and 8 (winter road sanding). The contingency plan implements elements 3 (covering haul trucks), 7 (recreational vehicle use on open lands) and 14 (abatement of wind erodible soil).

REASONABLY AVAILABLE RESIDENTIAL WOOD COMBUSTION CONTROL MEASURES

EPA guidance requires that the State PM_{10} SIPs include strategies from each of the following four RACM measures:

1. Establish an episode curtailment program, including: a curtailment plan; a communication strategy to implement the plan; a

surveillance plan (e.g., "windshield" survey, opacity trigger); and enforcement provisions including procedures, penalties, and exemptions). A voluntary program will be deemed reasonable if the area demonstrates attainment.

The Klamath Falls mandatory curtailment program fulfills this requirement. Enforcement procedures, penalties and exemptions are found in the Klamath County Clean Air Ordinance.

2. Establish a public information program to inform and educate citizens about stove sizing, installation, proper operation and maintenance, general health risks of wood smoke, new technology stoves, and alternatives to woodheating.

The Klamath County public education program, as administered by Klamath County Department of Health Services, provides a comprehensive information on each of the elements of this RACM measure. This program is supplemented by the Department's public information program.

3. Encourage improved performance of woodburning devices by:

- Establishing a program to identify, through opacity observation, deficiencies in stove operation and maintenance. (Under such a program, advice and assistance should be provided to the identified households to help reduce visible emissions from their devices);

Klamath County's curtailment surveillance program is used both to assess compliance rates and to identify homeowners that are operating woodstoves with excessive emissions. The mandatory 20%, year around opacity program will identify those that need to improve stove operation.

- Providing voluntary dryness certification programs for dealers and/or making free or inexpensive wood moisture checks available to burners;

The Klamath County program includes a voluntary cordwood certification program implemented through local fire districts. A similar mandatory program is included as a contingency.

- Evaluating and encouraging, as appropriate, the accelerated changeover of existing devices to new source performance standards or other new technology stoves (e.g., hybrid designs, pelletstoves) by such approaches

as subsidized stove purchases tax credits or other incentives.

Accelerated changeover is encouraged through the woodstove changeout program established under OAR 340 Division 34; through the phaseout of curtailment exemptions in the Klamath County ordinance and through the low income home weatherization program operated by Klamath County (PURE).

4. Provide inducements that would lead to reductions in the stove and fireplace population (or use) by:

- Encourage a reduction in the number of woodburning devices (i.e., removing or disabling the devices) through tax credits or other incentives;

OAR 340 Division 34 includes, as a contingency measure, removal of uncertified stoves upon home sale.

- Discouraging the resale of used stoves through taxes, fees or other incentives;

OAR 340 Division 34 and the Klamath County Clean Air Ordinance includes a ban on the sale of used woodstoves.

RACM Measures not included in the Klamath Falls SIP include:

- Discouraging the availability of free (or very inexpensive) firewood by increasing cutting fees or limiting the cutting season.
- Slowing the growth of woodburning devices in new housing units by taxes, installation permit fees, or other disincentives;

REASONABLY AVAILABLE CONTROL MEASURES FOR PRESCRIBED BURNING

EPA guidance requires that RACM measures from prescribed (slash burning) be included where it is shown that prescribed burning is or does contribute significantly to PM_{10} exceedances within the nonattainment area. The guidance specifies that such a program must include (1) smoke dispersion forecasts based (at minimum) on National Weather Service data; (2) a process for preparation and approval of burn plans; (3) availability of training programs for burners; (4) a public information program; (5) provisions for surveillance and enforcement of any mandatory requirements; (6) development of emission inventories; and (7) State oversight of the smoke management programs.

Oregon's forestry smoke management program administered by the Oregon Department of Forestry (ODOF) is administered through a voluntary program on forest lands surrounding Klamath Falls. The voluntary program meets all of the above RACM requirements. Smoke dispersion forecasts issued daily by ODOF's smoke management center for the Klamath Falls area are based on NWS and local weather data. The program requires the preparation and approval of burn plans prior to ignition. Training is provided each year by ODOF staff to all burners. For Federal employees, this training is supplemented by training programs offered by the US Forest Service, the Bureau of Land Management and the National Park Service. ODOF and the Federal agencies all offer information on their programs to the public. Air monitoring surveillance is provided through the Department's programs and through aircraft plume tracking conducted by those conducting the burning. Emission inventories are developed in cooperation with ODOF using state of the art fuel consumption models. The Department oversees ODOF's program through periodic reviews and through ORS 477.515 which requires that the Director of the Department approve the program.

Fugitive Dust Control Element

A 60% reduction in emissions from winter road sanding is required to attain the 24-hour NAAQS on worst-case winter days. Sanding materials used in the Klamath Falls area are obtained from a gravel pit located near Merrill, Oregon where volcanic cinders, pea gavels, silts and clays have been deposited. Nearly all of the aggregate used within the UGB is applied by the Oregon Department of Transportation Highway Division, mostly on US 97, South Sixth Street, Alameda Bypass and the South Side Bypass. The City, County and State all maintain sections of Washburn Way and other streets in South suburban Klamath Falls. The City maintains streets within the Central Business District. Approximately 2,000 cubic yards of aggregate are applied each year by the Highway Division. The County and City use very little sanding material.

Three control options were evaluated: (1) processing of aggregate from the Merrill pit to remove silts and clays thereby reducing the amount of material to be entrained by traffic; (2) substitution of the Merrill aggregate with crushed gravel from hard rock sources located in the area or (3) use of a deicing slurry in lieu of road sanding and improved road sanding practices to minimize use of the aggregate consistent with public safety standards.

Basis for 60% Credit for the Winter Road Sanding Control Program

The specifics of the winter road sanding control strategy are contained in correspondence from the Oregon State Highway Division (Appendix 4). The 60% credit is based on the Highway Division's commitment to reduce winter road sanding by 60% through (a) replacement of aggregate with a deicing slurry; (b) reduction in the amount of aggregate used by maintenance crews and (c) rapid cleanup

using street washing or sweeping of road sanding materials used on major thoroughfares. Streets included in the program are south Sixth Street, Alameda Bypass, Washburn Way, South Side Bypass and portions of US 97. During worst case winter days, a 1,300 pound per day emission reduction will occur. On an annual basis, road sanding emissions will be reduced by 18 tons per year.

These reductions will be documented on the basis of Highway Division records of the number of cubic yards of sanding material applied each winter to roadways. Since roadsanding emissions are linearly related to road surface silt loading, emission reduction credits can be documented on the basis of Oregon State Highway Division records of the number of cubic yards of sanding material used each year within the nonattainment area. Because of significant yearly variations in snowfall, the use of roadsanding aggregate should also be expected to vary accordingly.

Since all of the heavily traveled roads in the Klamath Falls UGB are paved, reductions in resuspended road dust from paved streets may also be considered should additional emission reductions be required. Other methods of control include the addition of asphalt shoulders and curbs to major paved streets thereby eliminating trackout from the edge of the pavement into the traffic lanes. The paving of unpaved roads and control of mud trackout from construction sites are additional strategies that may be useful.

In addition, the Klamath County ordinance provides for mandatory cleanup of trackout from unpaved areas onto State highway right-of-ways enforced through Oregon Department of Transportation administrative rules by the Highway Division.

Restrictions on Open Burning

The Klamath County ordinance contains the following open burning restrictions:

1. A year around prohibition on agricultural open burning within the nonattainment area and within one-quarter mile of the nonattainment area boundary. Elimination of these emissions results in a reduction of 146 tons per year of PM_{10} and is the basis of the emission reduction credit noted in the annual NAAQS demonstration of attainment;
2. Prohibition of highway right-of-way burning within the county and residential open burning on woodburning curtailment days;
3. A voluntary agricultural smoke management program on farm lands within Klamath County coordinated by the Klamath County Farm Bureau was adopted in June, 1991 (Appendix 4). Burn\ no-burn advisories are provided by Klamath County Air Quality during October 15 through March

15 of each year; cooperating operators monitor and report smoke transport conditions and record date, acreage and location of each field fire which is reported to Klamath County yearly.

In correspondence dated November 27, 1989 (Appendix 4) the Department requested that the State Fire Marshal direct the local fire districts not to issue open burning permits during periods when "Yellow" or "Red" woodburning curtailment advisories are issued by the Klamath County Department of Health Services. A cooperative agreement between the Klamath County Board of Fire Chiefs and Klamath County restricting open burning has also been adopted. The Department has further requested that land clearing and agricultural burning permits not be issued within approximately 30 miles of the Urban Growth Boundary during poor air quality days.

Forestry Slash Burning

PM₁₀ emissions from forestry slash burning, both because of the magnitude of the emissions and the proximity of the burning to the nonattainment area, can potentially have a significant impact on Klamath Falls air quality. Forestry burning is regulated under Oregon law (ORS 477.515) which requires that the State Forester and the Department of Environmental Quality jointly approve a plan to manage smoke from slash burning in areas they designate.

By statute, the Oregon Department of Forestry (ODOF) is responsible for the administration of rules (OAR 629-43-043) and written procedures to assure the protection of air quality. At present, the mandatory, daily burning instructions issued by ODOF apply only within the smoke management plan's Restricted Area which covers western Oregon (crest of the Cascades west) and the Deschutes National Forest.

Recognizing the need to protect the Klamath Falls nonattainment area from slash smoke intrusions, forest land owners surrounding Klamath basin have entered into a voluntary smoke management program (See Appendix 4). The voluntary program was adopted in April, 1990 and signed by all of the major forest land owners near Klamath Falls. The provisions of this program are coordinated by the Oregon Department of Forestry which provides daily smoke management forecasts and advisories for Klamath County, thereby meeting EPA's requirements for Reasonably Available Control Measures (RACM) for forestry smoke management programs.

In addition, the Visibility Protection Program incorporated as Section 5.2 of the Oregon State Implementation Plan includes as a goal a 50% reduction in western Oregon PM₁₀ prescribed burning emissions relative to the 1978-79 baseline emissions. These emission reductions are to be achieved in a reasonably linear manner over by the year 2000. Reductions are to be achieved through increases in wood waste utilization, rescheduling burning to spring-like fuel

moisture conditions, application of mass ignition burning techniques, reductions in acres burned and accelerated mop-up of smoldering units. Although the emission reductions will occur west of the Cascades, the strategy will reduce impacts from forestry burning that may be transported into the Urban Growth Boundary from units burned on the Rogue River and Umpqua National Forests and BLM's Medford District.

Industrial Emission Growth Management

In June, 1989, the Department amended OAR 340-20-225 Significant Emission Rate provisions for industrial sources. The significant emission rate for new or expanding industrial emission subject to the New Source Review Rule was revised from 15 to 5 tons per year to assure that even relatively small increases in industrial emissions would be offset by compensating emission reductions of an equal or greater amount. The tightened offset requirement assures that future industrial emission growth will not offset emission reductions achieved through elements of the attainment strategy.

Contingency Measures & Emission Reductions

Section 172(C)(9) of the Clean Air Act Amendments of 1990 Clean Air Act requires that the State Implementation Plan include contingency measures for significant sources of PM_{10} . These measures are to take effect without any further action by the State if the area fails to attain the PM_{10} standard by the attainment date required by the Act. Contingency measures are triggered upon publication by EPA of notice in the Federal Register that the area has failed to attain the National Ambient Air Quality Standard for PM_{10} by the attainment date required in the Clean Air Act. Depending upon the effectiveness of the control strategies, EPA could make this determination in 1994 or subsequent years.

The following elements have been included to fulfill this requirement of the Act:

Residential Woodburning Measures

1. State backup authority from the 1991 Legislature to require removal of uncertified woodstoves upon sale of a home. Rule to implement the statute are being proposed as a revision to OAR 340 Division 34. A similar provision is found in Klamath County ordinance Section 170.650(5);
2. Fuelwood seasoning requirement on all firewood sold with Klamath County implemented through the Klamath County ordinance Section 170.650(6);
3. Expansion of the Klamath County air quality control area to include the Keno - Midland area south to the California border

implemented through the Klamath County ordinance Section 170.650(7);

4. Prohibition on installation of more than one woodstove in a new dwelling implemented through the Klamath County ordinance Section 170.650(9);

Fugitive Dust Control Measures

1. Prohibition on off road vehicle use on open fields and hillsides within the nonattainment area implemented through the Klamath County ordinance Section 170.650(4);

2. Dust control on public and private landfill sites, abandoned construction sites and quarries as well as lots without ground cover implemented through the Klamath County ordinance Section 170.650(3);

3. Requirements to cover haul trucks implemented through the Klamath County ordinance Section 170.650(2);

4. Construction sites within the nonattainment area required to have asphalt trackout strips to reduce trackout implemented through the Klamath County ordinance Section 170.650(3);

5. Requires establishment of a mandatory agricultural open burning smoke management program within Klamath County implemented through the Klamath County ordinance Section 170.650(8);

Industrial RACT Requirements

The industrial contingency plan is adopted as OAR 340-21-200 through 340-21-240. The 1990 Clean Air Act requires RACT in the control strategy if it is needed to demonstrate attainment, and otherwise requires RACT in the contingency plan. The industrial contingency elements in Division 21 satisfy Reasonably Available Control Technology (RACT) requirements for industrial sources of PM₁₀ emissions which are not otherwise subject to RACT under state-wide standards. If the contingency plan is triggered by failure to meet the Clean Air Act deadline for attainment, affected sources will be required to submit detailed plans to the Department within three months and demonstrate compliance within 30 months. This schedule is consistent with requirements under the Clean Air Act to implement contingency measures as expeditiously as practicable to continue progress toward attainment while a revised control strategy is under development.

Under OAR 340-21-210(2), the Department is requesting Weyerhaeuser to conduct a receptor/dispersion modeling study by December 31, 1994, to determine whether emissions from the Weyerhaeuser facility have a significant impact (annual average impact of 1.0 µg/m³, or 24-hour impact of 5.0 µg/m³) at the maximum concentration point within the nonattainment area (Peterson School monitoring site). If the PM₁₀ impacts are determined to be significant, and if attainment

is not reached by the December 31, 1994, deadline of the Clean Air Act, then the Weyerhaeuser facility will become subject to the RACT contingency requirements.

Emission Reductions From Contingency Measures

Woodstove emissions would be reduced an additional 108 tons per year by the year 2000 through the contingency plan. Industrial emissions would be reduced an additional 132 tons per year (844 tons per year including industries outside of the Urban Growth Boundary but inside the Klamath County Control Area with significant impacts) through installation of RACT\BACT contingency emission controls. Additional reductions which cannot be quantified by the emission inventory would be achieved through fugitive dust control contingency measures. Total reductions are estimated at a minimum of 240 tons per year (nonattainment area industries, only) which is 11% of the estimated 1994 emission levels prior to application of control strategy credits and 25% of the expected 1994 emission level following strategy reductions. Because of the dominance of woodburning emission within the airshed and the very large woodstove emission reductions included in the attainment strategy, it is not possible to achieve a full 25% reduction from the 1994 uncontrolled emission level through contingency measures.

4.12.3.3 Demonstration of Attainment

This section describes the application of emission reduction credits described in Section 4.12.3.2. in demonstrating attainment of the NAAQS. The calculations are based on proportional rollback of 1994 emission estimates. Appendix 5 contains the detailed calculations that support the following text.

**Table 4.12.3-4: Summary of 24-Hour Emission Reductions
To Be Achieved by 1994**

<u>Strategy Element</u>	<u>Credit</u>	<u>Emission Reduction</u>
Highway Road Sanding Program	60%	1,344 Pounds/Day
Woodburning Strategies:		
- Woodburning Curtailment	86%	16,624 Pounds/Day
- Certification of Woodstoves	24%	582 Pounds/Day
- Woodstove Removal Program	27%	507 Pounds/Day
		<hr/>
Woodstove Strategies, Total		17,713 Pounds/Day
Total reduction from all strategies....		19,057 Pounds/Day
Required emission reduction		18,922 Pounds/Day

No credits have been taken for the Klamath County public education programs, the 36% reduction in woodburning emissions that have occurred since 1987 because of voluntary fuel switching, the voluntary forestry and agricultural smoke management programs or the other fugitive dust control elements included in the Klamath County ordinance.

Strategy Emission Reduction - Annual Average Case

Attainment of the annual average NAAQS in 1994 will require a 47% reduction in annual emissions or a reduction of 1020 tons per year. Although the entire needed emission reduction is achieved through the woodburning curtailment program, emission reductions obtained from the road deicing, elimination of agricultural burning within the nonattainment area and other elements of the woodburning emission reduction programs are also included since they will occur as a result of implementing the 24-hour strategy. The needed reductions are achieved through the strategy elements listed below.

**Table 4.12.3-5: Summary of Annual Average Emission Reductions
To be Achieved by 1994**

<u>Strategy Element</u>	<u>Credit</u>	<u>Emission Reduction</u>	
Highway Road Sanding Program	60%	18	Tons/Year
Eliminate Agricultural Burning	100%	156	Tons/Year
Woodburning Strategies:			
- Woodburning Curtailment	74%	841	Tons/Year
- Woodstove Certification	24%	78	Tons/Year
- Woodstove 20% Opacity	5%	12	Tons/Year
		<hr/>	
Woodstove Strategies, Total		931	Tons/Year
Total reduction from all strategies.....1203 Tons/Year *			
Total required emission reduction.....1020 Tons/Year			

* Note: On an annual basis, the woodburning curtailment program will result in a 28% reduction in annual wood smoke emissions. This, however, is not reflective of annual air quality benefits of the program since the restricted ventilation during the curtailment periods compounds the benefits of the emission reductions. The effective or equivalent reduction is calculated based on a 86% curtailment program operating on 47 days per year indicating a reduction of the annual average PM₁₀ concentration from 75 to 50.2 µg/m³. As a result, the woodburning curtailment program alone, implemented on 47 days per year, will provide sufficient benefits to assure that the annual NAAQS is achieved. Additional strategy elements are claimed as a result of reductions achieved through the 24-hour strategy. See Section 4.12.3.3.

4.12.3.4 Emission Offsets and Banking

Although the control strategy does not formally incorporate provisions for growth in industrial emissions through an emission offset and banking provisions, there is considerable growth margin for increases in industrial emissions within the current plant permits. The difference between the 1986 actual and the 1994 projected industrial emission projections is 77 tons per year (annual) and 745 pounds per day in PM₁₀ emissions.

OAR 340-20-225 (22) requires that new or modified industrial sources that emit more than 5 tons per year of PM₁₀ emissions must obtain emission reductions from other sources to offset their emissions. The emission offsets may be obtained by reducing emissions within the facility to be modified, from other industrial sources or from external sources, including woodstove emissions from sole source, low income households. The Department estimates that an additional 100 tons per year could be obtained by reducing existing

wood-fired boiler emissions by 70-85% to 0.03 grains per standard cubic foot and veneer driers by 42-70% to 0.3-0.45 pounds per thousand square feet of veneer (3/8" basis). In addition, at least 175 tons per year of PM₁₀ emission offset is available by replacing conventional woodstoves in sole source, low income households with natural gas or electrical heating systems.²⁸

The emissions margins and sources of offsets will help assure continued maintenance of the NAAQS beyond 1994.

4.12.3.5 Demonstration of Maintenance

Emission reductions achieved through the adoption of a county ordinance banning the installation of uncertified woodstoves will assure that emission growth associated with fugitive dust and transportation sources will not cause the NAAQS to be exceeded by the year 2000. Appendix 5 lists emission projections for the six year period following attainment in 1994.

4.12.3.6 Emergency Action Plan Provisions

OAR 340 Division 27 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 the 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 significant harm level for PM₁₀ particulate matter of 600 $\mu\text{g}/\text{m}^3$, 24-hour average (adopted by the Environmental Quality Commission April, 1988) was exceeded twice in Klamath Falls; on January 25, 1988 (792 $\mu\text{g}/\text{m}^3$) and on February 3, 1988 (723 $\mu\text{g}/\text{m}^3$). At the time of these events, the significant harm level was 1,000 $\mu\text{g}/\text{m}^3$ of Total Suspended Particulate, a level which was not exceeded.

The PM₁₀ "Alert" level is 350 $\mu\text{g}/\text{m}^3$; the "Warning" level is 420 $\mu\text{g}/\text{m}^3$ and the "Emergency" level is 500 $\mu\text{g}/\text{m}^3$, 24-hour average. These levels must be coupled with meteorological forecasts for continuing air stagnation to trigger the Action Plan.

²⁸Response to testimony received at the Klamath Falls public hearing on proposed changes to industrial rules. Attachment E to staff report prepared for the June 2, 1989 Environmental Quality Commission, Agenda Item H.

Authority for the Department to regulate air pollution sources during emergency episodes is provided under ORS 468, including emissions from woodstoves. The provisions of HB2175 which authorizes the Department to regulate woodstoves are implemented under OAR 340-34-150 through - 175. These rules and statute give the Department authority to regulate woodstoves under emergency episode conditions. When there is an imminent and substantial endangerment to public health (the significant harm level), 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.

4.12.4 Implementation of the Control Strategy

Specific elements of the strategy were implemented as noted below.

4.12.4.1 Schedule for Implementation

The Oregon Woodstove Certification Program became effective June 30, 1986; the Klamath County Air Quality and voluntary woodburning curtailment programs were implemented on August 31, 1988 and the road sanding control strategy commitments were received from the Oregon Department of Transportation on December 11, 1989 and will be implemented during the winter of 1989-1990. Open burning restrictions implemented through the Oregon State Fire Marshal's office and local Board of Fire Chiefs began in November, 1989. The Department's Significant Emission Rate rules became effective on the date of adoption, June 2, 1989. Klamath County adopted their Clean Air Ordinance on July 31, 1991 and the City of Klamath Falls adopted a resolution assigning air quality program enforcement within the city limits to Klamath County on September 16, 1991. Implementation of all of the provisions of the Klamath County program will begin in September, 1991. All of the program elements will be implemented prior to November 1, 1991, the beginning of the 1991-92 heating season.

4.12.4.2 Rules, Regulations and Commitments

The following rules and commitments have been adopted to assure the enforceability of the control strategies. The ordinance adopted by the City of Klamath Falls authorizes Klamath County to implement their ordinance within the city limits. Item marked with an asterisk (*) are contingency elements.

State of Oregon Rules

Woodstove Changeout Program	OAR Division 34
Ban on Used Woodstove Sales	OAR Division 34
Industrial RACT\BACT Controls *	OAR Division 21
Woodstove Removal on Home Sale *	OAR 340 Division 34

Mandatory Curtailment Authority *	OAR 340 Division 34
Woodstove Certification Program	OAR 340 Division 21
Klamath Falls Significant Emission Rate Rule	OAR 340-20-225

Klamath County & City Ordinances

Klamath County Clean Air Ordinance	Ordinance 36
City of Klamath Falls Ordinance	Ordinance 6630
Klamath County Air Quality Program	Resolution 89-116
Development Plan for the Klamath Falls UGB	

Interagency Commitments

Winter Road Sanding Program, Oregon Department of Transportation Highway Division Memorandum of Understanding.

Oregon Dept. of Forestry Smoke Management Plan OAR 629-43-043
State Fire Marshall's Office Open Burning Statute ORS 478.960

4.12.4.3 Reasonable Further Progress

Part D of Title I of the Clean Air Act Amendments of 1990 (Section 171) requires that State Implementation Plans for PM₁₀ make Reasonable Further Progress (RFP) toward attainment of the National Ambient Air Quality Standards (NAAQS). The Act further specifies that RFP means those annual incremental reductions of PM₁₀ emissions necessary to attain the NAAQS by the attainment date. The Department believes that the scheduled implementation of the provisions of the Klamath Falls PM₁₀ SIP and attainment of the NAAQS within the Klamath Falls nonattainment area fulfills the FRP requirement of the Act.

4.12.4.4 Revisions to the Plan

In the event that the Klamath Falls area fails to meet Reasonable Further Progress milestones, or the applicable PM₁₀ attainment deadline, then the Department, as the designated lead agency, will first notify in writing the affected local governments and industrial organizations. Within 30 days of notification, the Department will complete a written analysis of control strategy commitments, evaluating the adequacy of implementation. Any deficiencies in implementation will be corrected through rulemaking, if necessary, within six months of the original deficiency notification. The six month time frame will accommodate the State's normal rulemaking process. Additionally, affected parties will be notified of the requirement to implement expeditiously the contingency measures, if necessary. As the lead agency, the Department will submit a plan revision that meets all relevant Clean Air Act and EPA requirements within 18 months of a notification from

EPA that the area has failed to meet the attainment deadline and has been reclassified to "Serious." The revision will include provisions to ensure that the Best Available Control Measures (BACM/BACT) for the control of PM₁₀ shall be implemented no later than 4 years after the date the area is reclassified as a "serious" area.'

4.12.4.5 New Source Review Permitting Authority

The New Source Review rules (OAR 340-20-220 to -276) and Air Contaminant Discharge Permit rules (OAR 340-20-140 to -185) identify the procedures for reviewing and permitting new sources. The significant emission rate for PM₁₀ emissions in the Klamath Falls Nonattainment Area is twenty five tons per year (OAR 340-20-225). The New Source Review rule (OAR 340-20-240) identifies requirements for sources in nonattainment areas, including applying the lowest achievable emission rate (LAER) and a 1:1 offset ratio, both required in the Klamath Falls Nonattainment Area.

4.12.4.6 Delegation of Lead Agency Authority

Barbara Roberts, Governor of the State of Oregon, has delegated the Department of Environmental Quality as the lead agency to implement, maintain and enforce the requirements of the Clean Air Act for PM₁₀ air quality in Klamath Falls.

4.12.5 Resource Commitments

Residential woodburning programs are being implemented by Klamath County with a FY 91 budget of \$112,600 to operate public information programs, the daily woodburning advisory, mandatory curtailment program including field surveillance and enforcement, and progress reporting. The Department operates the air monitoring network used by Klamath County for the daily woodburning advisory, provides public information assistance, and administers the woodstove certification program; these services are part of the statewide Department's base program identified in the State/EPA Agreement (SEA).

Financial assistance programs are available through Klamath County's Project PURE to assist low-income households in weatherization and replacement of conventional woodstoves with cleaner burning units; about \$1.44 million has been raised to date.

Industrial compliance assurance programs are implemented by DEQ as part of the statewide base program; resources are identified in the SEA. Open burning control programs are implemented by local fire departments, Klamath County and the Department as part of base programs.

Forestry slash burning programs are administered by the Oregon Department of Forestry, the US Forest Service, the Bureau of Land Management and other private forest land owners as part of their

base programs.

4.12.6 Public Involvement

Development of the Klamath Falls PM₁₀ control strategy included several areas of public involvement including a continuing Citizen Advisory Committee, public participation at hearing on proposed industrial source rules and attendance at hearings conducted by the Klamath County Board of Commissioners.

Proposed industrial rules to reduce the significant emission rate for new or modified industrial sources within the Klamath Falls Urban Growth Boundary were approved by the Environmental Quality Commission on November 4, 1988. A public hearing on the proposal to reduce the significant emission offset from 15 to 5 tons per year PM₁₀ was held in Klamath Falls on February 15, 1988. The rule was adopted at the Environmental Quality Commission's April, 1989 meeting. Public hearings on the Klamath County ordinance occurred on July 10 and 31, 1991.

4.12.6.1 Citizen Advisory Committee

The Klamath County Board of Commissions appointed members to the Klamath County Air Quality Task Force in November of 1987 to assist the County and the Department in the development of control programs for the Klamath Falls Nonattainment Area. The 14 member committee was advised of the requirements of the Clean Air Act and State Implementation Plan. The Task Force considered alternative control strategies and provided recommendation to the Board in November, 1988. On January 26th and February 3rd, 1988, the Board of Commissioners held public hearings on a proposed county mandatory curtailment ordinance designed to achieve the degree of woodsmoke emission reduction required. Following the hearings, the ordinance was dropped from further consideration and a second 15 member Task Force (New Citizens Air Quality Committee) was appointed to consider other options, including development of a voluntary curtailment program. In May of 1988, the Committee submitted an outline for a voluntary curtailment program to the Department and the Klamath County Board of Commissioners and, in April, 1989, the Board adopted the Klamath County Voluntary Woodburning Compliance Program. In May of 1991, the Klamath County Board of Commissioners asked the County Department of Health Services to begin preparation of a comprehensive ordinance to include a mandatory curtailment program. The draft ordinance was reviewed by the County's Advisory Committee, the Department and the County Board of Health prior to the first public hearing on July 10, 1991.

4.12.6.2 Public Notice

Public notice of proposed rule revisions is done through mail lists maintained by the Department, through notifications published in local newspapers and through Department press releases.

4.12.6.3 Public Hearings

As noted above, public hearings on the Klamath County Plan were held on January 26 and February 3, 1988. A hearing on revisions to the industrial rules on significant offset emission rates was held February 15, 1988 and public hearings on proposed woodstove legislation were held before the Senate Agriculture and Natural Resources Committee on several occasions in February and March, 1989. Hearings on the Klamath County ordinance including the mandatory curtailment program occurred on July 10 and 31, 1991. A public hearing on the Klamath Falls PM₁₀ SIP were held in Klamath Falls on September 26, 1991.

4.12.6.4 Intergovernmental Review

Public hearing notices regarding adoption of this revision to the State Implementation Plan will be distributed for local and State agency review through the A-95 State Clearinghouse process forty-five days prior to adoption by the Environmental Quality Commission.

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(10/25/91)

**RULEMAKING STATEMENTS FOR PROPOSED KLAMATH FALLS PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE OF OREGON CLEAN AIR ACT IMPLEMENTATION PLAN**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-20-047. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

The Klamath Falls area has a serious PM₁₀ air pollution problem. PM₁₀ refers to particulate matter ten micrometers or smaller in diameter. PM₁₀ particles are considered a risk to human health due to the body's inability to effectively filter out particles of this size.

The federal Clean Air Act requires that States develop and adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ health and welfare standards are brought into attainment with those standards within prescribed time frames. The proposed control strategy document describes the State of Oregon plan to attain and maintain the annual and 24-hour PM₁₀ standards in the Klamath Falls PM₁₀ Nonattainment Area.

The principal means of achieving the necessary air quality improvements is through PM₁₀ emission reductions from woodstoves and fireplaces, open burning of debris, and road dust. Additional reductions are expected from statewide efforts to reduce slash burning smoke. Contingency plans to be implemented if the airshed fails to attain the air quality standards by December 31, 1991 includes new industrial controls, removal of woodstoves upon sale of a home and further restrictions on agricultural and forestry burning.

(3) Principal Documents Relied Upon

The Clean Air Act Amendments of 1990, Title I. 42 U.S.C. 7401 et seq., as amended. November 15, 1990.

PM₁₀ SIP Development Guideline, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park NC, June 1987, EPA-450/2-86-001.

Previous staff reports to the Environmental Quality Commission (EQC):

Agenda Item D, January 22, 1988, EQC Meeting, Informational Report: New Federal Ambient Air Quality Standard for Particulate Matter (PM₁₀) and Its Effects on Oregon's Air Quality Program.

Agenda Item D, January 31, 1991, EQC Meeting, Revision of the State Implementation Plan (SIP) to include PM₁₀ Air Pollution Control Strategies for the Klamath Falls PM₁₀ Nonattainment Area.

Guidance Document for Residential Wood Combustion Emission Control Measures, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park NC, September 1989, EPA-450/2-89-015.

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED KLAMATH FALLS PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN**

PROPOSAL SUMMARY

The implementation of the PM₁₀ control strategy involves residents, industries, local governments, and state and federal agencies. The group most affected by the proposed PM₁₀ control strategy for the Klamath Falls area are residents with woodstoves or fireplaces. If the contingency plan is implemented, the owners/operators of wood products industries will also be affected. No adverse fiscal impact on small businesses (less than 50 employees) is anticipated. Heating system dealerships may benefit from the woodstove removal upon sale contingency element as well as the phaseout of woodburning curtailment exemptions required by the Klamath County Ordinance.

COSTS TO RESIDENTS WITH WOODSTOVES OR FIREPLACES

Woodstove and fireplace emissions will be reduced by a public education addressing firewood seasoning and woodstove operation, a local mandatory woodburning curtailment program, the Oregon woodstove certification program, financial assistance programs for low income households for replacement of existing woodstoves with cleaner burning units and weatherization of homes and a ban on installation of used, noncertified woodstoves.

The typical cost of woodburning curtailment is estimated at \$2-\$5 per curtailment day per woodburning home, depending primarily on the type of alternative heat, amount of weatherization, and size of home. According to the 1991 Klamath Falls wood heating survey, of the 13,600 households within the nonattainment area, 50% (6,800) burn wood. These homeowners would not be able to burn wood on the approximately 50 red days and 20 yellow days per year (two-year average, 1988-1990) when the mandatory curtailment program is in effect. Based on these estimates, the total homeowner cost associated with the mandatory curtailment program range between \$1 and \$2.4 million dollars per year.

Costs associated with the ban on the sale and installation of used noncertified woodstoves is discussed in the fiscal impact statement for proposed rule (OAR 340-34-010).

Costs associated with the contingency plan element requiring the removal of woodstoves from homes upon sale is discussed in the fiscal impact statement for the proposed rule (OAR 340-34-200).

The above costs are somewhat offset by Klamath County's PURE Project, providing assistance to low-income families for home weatherization and replacement of existing woodstoves with cleaner burning units. Approximately \$1.5 million has been secured thus far through Community Development Block Grants and Oil Overcharge Settlement Funds.

CONTINGENCY PLAN COSTS TO WOOD PRODUCTS INDUSTRY

If Klamath Falls fails to attain the air quality standards by the Clean Air Act deadline of December 31, 1994, some wood products industry emissions will be required under the contingency plan. The contingency plan for industrial emission control requirements within the Urban Growth Boundary will result in an estimated capital cost of about \$2.4 - \$3 million with related maintenance costs of roughly \$600,000 per year. If industries near the nonattainment area are found to have a significant PM₁₀ impact on the nonattainment area, they will also be required to install control systems at an estimated capital cost of \$8 million. Details are discussed in the proposed Industrial RACT\BACT Rule fiscal impact statement (OAR 340 - 21-005 to 250).

COSTS TO STATE AND LOCAL GOVERNMENT AGENCIES

The attainment plan includes a commitment from the State of Oregon Department of Transportation to reduce emissions from winter road sanding by 60% through the use of deicing materials, rapid cleanup of sanding aggregate and use of less sanding material. The cost associated with this program are estimated to range from \$30,000 to \$115,000 per year depending on winter weather conditions.

The fugitive dust contingency element requiring dust control from landfill sites, lots and quarries using a dust palliative is estimated at \$20,000 per year assuming 3 applications per year during the summer months on 20,000 sq. yards of land.

Costs to the Oregon Department of Forestry (ODOF) associated with operation of the voluntary forestry smoke management program are about \$ 23,000 per year for forecasting and program coordination services. Costs to the US Forest Service and private land owners to reschedule slash burning to days with favorable smoke dispersion capacity have been estimated by ODOF at \$23,000 per year.

The contingency plan industrial emission control provisions will require additional plan reviews, inspections, monitoring report reviews, and other compliance assurance activities by Department of Environmental Quality staff. This additional work will be integrated into the permit program and fee structure.

The compliance assurance surveys, exemption permitting and enforcement activities for the woodburning curtailment programs will be conducted by Klamath County staff. Klamath County has budgeted \$112,000 for the next year for a full-time air quality coordinator, two administrative assistants, two part-time enforcement inspectors and associated program costs. Local governments will shift existing resources as necessary to handle the workload associated with the air quality programs.

LTR\AH14493
8/12/91

NOTICE OF PUBLIC HEARING

Hearing Dates: September 26,
27, 30 & October
1, 1991
Comments Due: October 2, 1991

WHO IS AFFECTED:

Individuals, especially those with woodstoves, and board product industries statewide, local governments, agricultural operations and industries in the Medford-Ashland and Klamath Falls Air Quality Maintenance Areas, and the Grants Pass and La Grande PM₁₀ Nonattainment Areas.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the State of Oregon Clean Air Act Implementation Plan to:

- o Revise fine particulate (PM₁₀) Pollution Control Strategies for the Medford, Grants Pass and Klamath Falls areas;
- o Add a new PM₁₀ Control Strategy for the La Grande area;
- o Add new regulations for woodstoves, OAR Chapter 340, Division 34;
- o Add new contingency industrial particulate emission standards for PM₁₀ nonattainment areas, OAR Chapter 340, Division 21;
- o Revise the Medford/Grants Pass Particulate Standard Rules, OAR Chapter 340, Division 30;
- o Revise Board Products Particulate Emission Standard Rules, OAR Chapter 340, Division 25;
- o Revise Ambient Air Standard Rules, OAR Chapter 340, Division 31;
- o Revise Rogue Basin Open Burning Control Area rules, OAR Chapter 340, Division 23.

WHAT ARE THE HIGHLIGHTS:

The federal Clean Air Act requires states to submit PM₁₀ attainment Control Strategies to the U.S. Environmental Protection Agency (EPA) by November 15, 1991. The Control Strategies specify how federal PM₁₀ air quality standards will be attained by the Act's deadline of December 31, 1994. They primarily rely on controlling PM₁₀ emissions from residential woodheating, industry and open burning.

The proposed rules which would implement PM₁₀ Control Strategies will:

ATTACHMENT D

- o Regulate residential woodheating according to new legislative authority including: banning the sale of used, uncertified woodstoves; allowing DEQ to prohibit woodheating on poor air quality days if local governments fail to adopt or implement such programs where needed; and requiring the destruction of uncertified woodstoves upon the sale of a home as a contingency measure if an area fails to attain compliance with the PM₁₀ standard by December 31, 1994.
- o Require industries in PM₁₀ nonattainment areas to meet Reasonably Available and Best Available Control Technology requirements of the Clean Air Act as a contingency measure if areas fail to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Require tighter meteorological criteria for allowing open burning in the Rogue Basin Open Burning Control Area, and ban open burning from November through February in this area as a contingency if it fails to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Address housekeeping/enforceability issues raised by EPA with respect to existing state regulations covering the Board Products Industry, Medford/Grants Pass Industrial Particulate Emission and Ambient Air Standards.

HOW TO COMMENT:

Copies of the complete proposed rule packages may be obtained from the Air Quality Division in Portland at 811 S.W. Sixth Avenue or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact:

Merlyn Hough at (503) 229-6446 (Medford-Ashland)
John Core at (503) 229-5380 (Klamath Falls)
Howard Harris at (503) 229-6086 (Grants Pass)
Brian Finneran at (503) 229-6278 (La Grande)
Andy Ginsburg at (503) 229-5683 (Statewide)
David Collier at (503) 229-5177 (Woodstoves)

Public hearings will be held before a hearings officer at:

7:00 pm
September 26, 1991
Commission Hearing Room
Courthouse Annex
Klamath Falls, Oregon

7:00 pm
September 30, 1991
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
September 27, 1991
City Council Chambers
101 NW "A" Street
Grants Pass, Oregon

7:00 pm
October 1, 1991
City Hall
1000 Adams Avenue
La Grande, Oregon

3:00 pm
October 1, 1991
DEQ Offices
811 SW Sixth Avenue
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received no later than 5 pm, October 2, 1991.

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the EPA as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on November 7, 1991, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

168.300

PUBLIC HEALTH AND SAFETY

(2) in determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(l) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.783]

468.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.825]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.782]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register

Summary of Proposed PM₁₀ Control Strategy Klamath Falls Nonattainment Area

Who? When? Key: L= Local Government, S= State Agency
 E= Existing Strategy, N=New Strategy
 C= New Contingency Plan

Residential Woodburning Controls:

- S E EPA\DEQ certification program for new woodstoves;
- L E Wood burning public education program;
- L E Voluntary cordwood seasoning program.
- L E Year around, 20% woodstove plume opacity (stove startup and shutdown periods exempted);
- L E Phase-out of curtailment exemptions: sole source nonowner occupied dwellings by 1993 and owner occupied, low income sole source by 1998. All sole source households (except tenant occupied and low income) must have secondary heat sources by 1996.
- L E Home weatherization and woodstove replacement program for low income homeowners funded at \$1.44 million;
- L N Mandatory curtailment to achieve 90% compliance;
- L/S N Ban on the sale of used, noncertified woodstoves;
- S N Backup authority from 1991 Legislature for DEQ to adopt mandatory curtailment programs in the event that local governments fail to adopt, implement or enforce local ordinances;
- S N Backup authority from 1991 Legislation for statewide ban on the sale and installation of used, noncertified woodstoves;

- L C Removal of noncertified woodstoves upon sale of the property;
- S C State backup authority from 1991 Legislature to require removal and destruction of noncertified woodstoves upon sale of home.
- L C Fuelwood seasoning requirement on all firewood sold within Klamath County;
- L C Expansion of the nonattainment area Keno- Midland area south to the California border;
- L C Prohibition on installation of more than one woodstove in a new dwelling;

Fugitive Dust Controls:

- S E Winter road sanding emissions reduced by 60% through use of deicing materials, use of less aggregate and rapid cleanup;
- S E Mandatory cleanup of trackout from unpaved areas onto state highway right-of-ways enforced through Oregon Department of Transportation Administrative Rules;
- L E Prohibition of off-road RV use on open fields and hillsides within the nonattainment area;
- L E Dust control on public and private landfill sites, abandoned construction sites and quarries as well as lots without ground cover;
- L E Requirements to cover haul trucks;
- L E Construction sites within the nonattainment area required to have asphalt trackout strips to reduce trackout;

Open Burning Controls:

- L N Year around prohibition on agricultural open burning within the nonattainment area and within one-

quarter mile of the nonattainment area boundary;

- L N Prohibition on highway right-of-way burning within the County;
- L N Prohibition on residential open burning on wood burning curtailment days;
- L N Voluntary agricultural smoke management program on farm lands within Klamath County;
- S N Voluntary forestry smoke management program on forest lands within approximately 25 miles of the nonattainment area.
- L C Mandatory agricultural burning compliance with Klamath County burning advisories within Klamath County.
- L C Mandatory forestry burning compliance with Klamath County burning advisories within Klamath County.

Industrial Controls:

- S E Tightened emission offset requirements to manage emission growth for industrial significant emission rates from 15 down to 5 tons of PM₁₀ per year.
- S C Require installation of RACT industrial particulate emission controls within nonattainment area;
- S C Require installation of RACT industrial particulate emission controls near nonattainment areas if source emissions have a significant impact on the nonattainment area.
- S C Establish BACT with 18 months of area being designated by EPA as a "serious" nonattainment area.

JEC:a

RPT\AH20080
(10/25/91)

DEQ LAND USE EVALUATION STATEMENT
FOR RULEMAKING

PROPOSED KLAMATH FALLS PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN

- (1) Explain the purpose of the proposed rules.

The purpose of the proposed revision to the State Implementation Plan (SIP) is to assure that the Klamath Falls area attains the PM₁₀ standards within the time frames prescribed by the federal Clean Air Act Amendments of 1990. The control strategy includes a compilation of existing and proposed state and local rules and commitments which become federally enforceable upon adoption of the SIP revisions by the Environmental Quality Commission and approval of the SIP revisions by the U.S. Environmental Protection Agency.

- (2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes No

- (a) If yes, identify existing program/rule/activity:

The control strategy includes concurrently proposed new industrial PM₁₀ emission standard rules and other related house-keeping measures which affect a land use program identified as "Issuance of Air Contaminant Discharge Permits (ACDP)".

No other concurrently proposed new provisions of the control strategy are:

- (1) Specifically referenced in the statewide planning goals; or
 - (2) Reasonably expected to have significant effects on:
 - (a) resources, objectives or areas identified in the statewide planning goals, or
 - (b) present or future land uses identified in acknowledged comprehensive plans.
- (b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes No


If no, explain: Not Applicable.

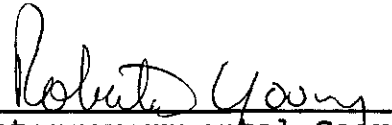
- (c) If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

Not Applicable.

- (3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not Applicable.


Division


Intergovernmental Coord.

10-21-91
Date

ADG:a
MISC\AH19059
(9/9/91)

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 24, 1991

TO: Environmental Quality Commission
FROM: Linda Wishart, Hearings Officer *LW*
SUBJECT: Hearings Report for Klamath Falls PM₁₀ Control Strategy

Five hearings were held to accept testimony on four PM₁₀ Control Strategies and three packages of supporting rules required to meet the Clean Air Act November 15, 1991 deadline for PM₁₀ State Implementation Plan revisions. These hearings were authorized by the Environmental Quality Commission at an August 22, 1991, telephone conference.

On September 26, 1991 a public hearing, held in the Commission Hearing Room of the Courthouse Annex, Klamath Falls, Oregon, was attended by 24 persons; 15 gave oral comments and 7 submitted written comments.

On September 27, 1991, a public hearing was held at the City Council Chambers, 101 NW "A" Street, Grants Pass, Oregon. There were nine persons in attendance, one gave oral testimony and two submitted written comments.

On September 30, 1991, a public hearing was held at the Smullin Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 34 persons present, 15 gave oral testimony and 13 submitted written comments.

On October 1, 1991, a public hearing, held in Zabel Hall, room 110, Eastern Oregon State College, La Grande, Oregon, was attended by 21 persons; five gave oral comments, four submitted written comments.

On October 1, 1991, a public hearing was held at the conference room of the Oregon Operations office of the U.S. Environmental Protection Agency (EPA), 811 SW Sixth Avenue, Portland, Oregon. Four people attended. Three gave oral testimony. No written testimony was received.

Additional testimony was received prior to the October 2, 1991 deadline. Copies of written comments have been provided to the Environmental Quality Commission. The following is a summary of all comments received, both oral and written.

Klamath Falls Control Strategy

No.	Testimony Summary/Issues	Whose Comment
1.	<p>BACT should not be required in the contingency plan.</p> <p>Many people (industry, government, members of the public) were strongly opposed to including Best Available Control Technology (BACT) industrial requirements in the contingency plan and indicated that the federal Clean Air Act only requires Reasonably Available Control Technology (RACT). They expressed concern that the high cost of BACT would force industry to cut back operations and employment. They noted that industry has a long history of regulations and has already spent a lot to reduce PM₁₀. Industry is now a small percent of the emissions so that additional controls will not solve the problem.</p> <p>It would be more appropriate to wait until 1994, determine source of problem, and design a comprehensive approach. Less costly alternatives to controls such as taller stacks should be explored. Since BACT is more stringent than required by EPA for contingency plans and no one knows how effective RACT will be, BACT should not be required.</p>	<p>K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K14,</p>
2.	<p>Restrictions on agricultural burning need to be reconsidered. More monitoring is needed to clearly define it as a problem. Solid waste disposal (including ag.) is only 9%. Agricultural burns, which are dry and short in duration, are managed by wind direction, which is away from the monitored area 90% of the time. Consider fate of agriculture if restrictions are imposed.</p>	<p>K15</p>
3.	<p>Nonattainment area should include Weyerhaeuser. Why is it exempt?</p>	<p>K13</p>

- | | |
|--|--------------------------|
| <p>4. The community expressed support for the woodstove curtailment program with one exception.</p> <p>Community is largely supportive of woodstove curtailment program and happy with financial assistance offered low-income sole-source users.</p> <p>An exception to this was expressed. Imposed restrictions on woodstove replacement and a \$250 fine for failure to comply with ban was felt to be unreasonable considering other forms of heat are too expensive.</p> | <p>K1, K12</p> <p>K7</p> |
| <p>5. Nonattainment area should be designated under Smoke Management Plan as part of Control Strategy rather than Contingency Plan.</p> | <p>P6</p> |
| <p>6. EPA raised several questions about the emission inventory and growth projections.
Requests for the following were made:</p> <ul style="list-style-type: none"> a. Expanded documentation on base year emission inventory. b. A base year fugitive dust inventory. c. Documentation on industrial emission growth. | <p>P5</p> |
| <p>7. EPA raised questions about the attainment calculations.</p> <ul style="list-style-type: none"> a. Credit taken for woodstove certification b. An error was noted in the calculation period between the base year and the attainment year of 1994.. | <p>P5</p> |
| <p>8. Additional documentation and clarification was requested by EPA on the monitoring, modeling, and penalty discussions.</p> <ul style="list-style-type: none"> a. The air monitoring survey b. Justification of the use of receptor modeling, rather than dispersion modeling c. Penalties in the Klamath Falls ordinance. | <p>P5</p> |

9. **Sierra Club supports woodstove curtailment provisions, suggests additional measures for forestry smoke management, and recommends expanding the nonattainment boundary in the contingency plan.** The smoke management plan should include designation of restricted areas in the control plan, not the contingency plan. There should be no slash burning on yellow or red days within a 50 mile zone of nonattainment boundaries. The nonattainment boundary should be expanded to include the Weyerhaeuser facility. Rather than using modeling, all facilities over 50 tons/yr of PM₁₀ within 10 miles of a nonattainment area should be included in the contingency plan.

P6

10. **Wood Heating Alliance and Wood Energy Institute found objections to assigned "credits", inclusion of the term "durable" and the woodstove replacement program priorities.**

P8, P9

a. The Control Strategies reference studies that show 50% cleaner-burning woodstoves. These studies pertain to stoves no longer on the market. EPA Phase II stoves tested out at 90% and 70% reductions in the Klamath Falls and Crested Butte studies.

b. Reference to 'durable' woodstoves should be withdrawn. Durability will be addressed by market and EPA compliance testing, and is preempted by HB 2175 until after December 1994.

c. Programs to encourage replacement of uncertified woodstoves are biased against replacements with certified woodstoves and are unacceptable.

11. **Other Issues:**

Diesel truck and cars are the real problem, not woodstoves. K7

Accuracy of data attained from Health Division Study on lung functions of school children is questioned. Why was there no study at Pelican School near Jeld-Wen? K2

Increasing respiratory ailments in the community are recognized and citizens are concerned with the lack of sufficient testing sites and monitoring of industrial emissions and proper maintenance of existing pollution control equipment. DEQ is urged to adopt a consistent, equitable plan to bring all sources into compliance. K17

What is being done about noise? K7

It appears the task force report has been ignored and that environmental commissions are against working people. K13

Stagnation problem is from 10 pm to noon, so why permit smoke emission in the morning? K13

Testimony References

Public Testimony Given in La Grande

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
L1.	A	Grant Darrow, Chimney Sweep
L2.	B	Francis Mohr, Acting Air Resource Manager Wallowa-Whitman National Forest
L3.	B	R.M. Richmond, Forest Supervisor, Wallowa-Whitman National Forest
L4.	C	Jeff Blackwood, Forest Supervisor, Umatilla National Forest
L5.	D	Larry Dalrymple, City Manager, La Grande
L6.	no	Jim Brown, Air Quality Committee, Citizens
L7.	no	Roberta Bates, Resident, La Grande

Public Testimony Given in Klamath Falls

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
K1.	no	Doss Decker, Resident, Klamath Falls
K2.	no	Nancy Roeder, Resident, Klamath Falls
K3.	no	Harry Fredricks, County Commissioner
K4.	E	Stan Meyers, Vice President Engineering, JELD-WEN, INC.
K5.	F	Joseph Riker, Community Development Director, City of Klamath Falls
K6.	G	John D. Monfore, Land Use Manager, Weyerhaeuser

K7. no Leo Dunn, Resident,
Klamath Falls

K8. H Drew Honzel, Columbia Plywood Corp.

K9. I Ron Loveness, Resident, Klamath Falls

K10. no Del Parks, State Representative,
Klamath County

K11. J James Keller, City Manager,
Klamath Falls

K12. K Kurt Schmidt, Employee,
Modoc Lumber Co.

K13. no Roy Ford, Resident,
Klamath Falls

K14. L Steve Kandra,
President Klamath County Chamber of
Commerce

K15. no Bob Flowers, Farmer, Klamath Falls

K16. M Nina Pence, President,
League of Women Voters,
Klamath County

K17. N Carol Yarbrough, President,
Citizens for Quality Living

Public Testimony Given in Grants Pass

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
G1.	no	Paul Brandon, Resident, Grants Pass
G2.	O	Dennis Spencer, Regional General Manager, Stone Forest Industries
G3.	P	Candace Bartow, Mayor, Grants Pass
G4	Q	Josephine County Board of Commissioners

Public Testimony Given in Medford

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
M1.	R	Wallace Skyrman, Resident, Central Point
M2.	S	Anna Hirst, League of Women Voters
M3.	T	Frank Hirst, Audubon Society
M4.	U	Robert Palzer, PhD., Coalition to Improve AQ
M5.	no	James Dodson, Resident, Medford
M6.	no	Gary Stevens, Environmental Health Department, Jackson County
M7.	V	Vera Morrell, Chairperson, Coalition to Improve Air Quality
M8.	W	Paul Wyntergreen Regional Director, Oregon Environmental Council
M9.	X	Neil Robbins, Resident, Medford
M10.	Y	Patricia Kuhn, Resident, Medford
M11.	no	Ronald Meyer, Farmer, Talent
M12.	no	Myra Erwin, Chairperson, Rogue Group Sierra Club
M13.	Z	William Barbour, Farmer, Medford
M14.	Z	Victoria Montgomery, Resident, Medford
M15.	AA	Jan Young, Pulmonary Rehabilitation Coordinator, Medford
M16.	BB	Greg Miller, Executive Vice President, Southern Oregon Timber Association

M17. BB Bob Morris,
Environmental Affairs Committee Chair,
Southern Oregon Timber Association

M18. CC Kathleen Muir, Resident, Ashland

M19. DD Phyllis Hughes,
Rogue Group Sierra Club

M20. EE Garl Grigsby, Double Dee Lumber Company

M21. FF Anne & Bob Gottschalk,
Residents, Talent

M22. GG Robert Owens, Co-Executive Council
American Indian Cultural Center

M23. HH C. Herschel King, MD
Retired Anesthesiologist, Ashland

Public Testimony Given in Portland and Misc. Letters Submitted

<u>NO.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
P1.	no	Joe Weller, Lung Association
P2.	no	Jim Britton, Executive Director, Asphalt Paving Association
P3.	no	Harry Fredricks, Klamath County Commissioner
P4.	II	David Kircher, Chief Air Programs Development Section
P5.	JJ	David Kircher, Chief Air Programs Development Section
P6.	KK	Bob Palzer, Air Quality Coordinator, Sierra Club
P7.	LL	James Whitty, Legislative Counsel, Associated Oregon Industries
P8.	MM	Tim Nissen, President, Wood Energy Institute
P9.	NN	John Crouch, Emissions Specialist, Wood Heating Alliance

LLW:a
RPT\AH20082
(10/24/91)

RESPONSE TO TESTIMONY RECEIVED AT THE PUBLIC HEARING
ON THE PROPOSED PM₁₀ CONTROL STRATEGY
FOR THE KLAMATH FALLS NONATTAINMENT AREA

Issue No. 1: BACT should not be required in the contingency plan.

Response: See the discussion in the related Agenda Item I regarding industrial rule revisions. The Department has revised the proposal to separate the RACT and BACT requirements. These requirements are included in the contingency element of the strategy in response to a requirement of the Clean Air Act. In establishing BACT emission rates, the economic impact on industry are considered on a case-by-case basis. Although industries in Klamath Falls are a small contributor (7%) in the 1986 worst-case day emission inventory, they increase to 36% of the 1994 worst-case day inventory following application of all other control strategies.

Issue No. 2: Restrictions on agricultural burning need to be reconsidered. More monitoring is needed to clearly define it as a problem.

Response: The control strategy elements banning agricultural burning within the Klamath Falls nonattainment area and establishing a smoke management program were adopted as part of the Klamath County Clean Air Ordinance. They were included in the state PM₁₀ control strategy so that credit could be taken in the attainment demonstration for the emission reductions and air quality improvements that will occur as a result of the County program. On an annual basis, agricultural burning is a significant PM₁₀ source estimated at 156 tons per year.

Issue No. 3: The nonattainment area should include Weyerhaeuser. Why is it exempt ?

Response: Air monitoring studies conducted by the Department to date suggests that emissions from Weyerhaeuser are not a significant contributing source to the PM₁₀ nonattainment problem. The Department's proposed contingency PM₁₀ industrial emission control rule (OAR 340-21-210), however, requires that studies of the impact of any major sources (including Weyerhaeuser) be performed. If these studies indicate that emissions from any facility have a significant impact on the nonattainment area, the source will become subject to the industrial emission control contingency requirements of the rule. Further, the

Department has made a commitment to EPA to revise the attainment control strategy if new dispersion modeling studies indicate that Weyerhaeuser has a significant impact.

Issue No. 4: The community expressed support for the woodstove curtailment program with one exception.

Response: The Department believes that local governments and the public have made exceptional progress toward restoring healthful air quality to Klamath Falls. The Department also support the woodstove curtailment program as an essential element of the control strategy.

Issue No. 5: The nonattainment area should be designated under Smoke Management Plan as a part of the control strategy rather than the contingency plan.

Response: The Department does not have sufficient technical information to clearly demonstrate that slash burning smoke is a significant contributor to PM_{10} nonattainment in Klamath Falls and cannot under the Clean Air Act require that a mandatory smoke management plan be included in the attainment strategy. Instead, the Department has worked with the Oregon State Department of Forestry (OSDF) which coordinates a voluntary forestry slash burning smoke management program designed to protect the nonattainment area from slash burning impacts. This program is an element of the attainment strategy and has been supported by the Klamath County Commission and the joint OSDF/DEQ Smoke Management Plan Review Advisory Committee.

Issue No. 6: EPA raised several questions about the emission inventory and growth projections.

Response: Documentation requested by EPA has been forwarded; clarifications documenting industrial emission growth and the woodstove emission factor have been added to the control strategy.

Issue No. 7: EPA raised questions about the attainment calculations.

Response: Revisions to the woodstove certification credits (from 27 to 24%) were made to correct a calculation error made between the 1986 and year 1994 emissions.

Issue No. 8: Additional documentation and clarification was requested on the monitoring, modeling and penalty discussions.

Response: Technical documentation supporting the siting of the monitoring site was requested by EPA and has been forwarded; and justification for use of receptor modeling has been added to the text. EPA's questions regarding the cumulative nature of penalties under the Klamath County Ordinance have been added to the text.

Issue No. 9: The Sierra Club supports woodstove curtailment provisions, suggests additional measures for forestry smoke management and recommends expanding the nonattainment boundary in the contingency plan.

Response: The issue of inclusion of a mandatory forestry smoke management program is addressed under Issue No. 5. Provisions for a prohibition on burning within 20 (rather than 50 miles) on Red curtailment days within the Klamath voluntary smoke management program is under discussion with the OSDF. The issue of broadening the nonattainment boundary and inclusion of 50 tpy sources is discussed in the response to Issue No. 3.

Issue No. 10: The Wood Heating Alliance and Wood Energy Institute found objections to assignment of "credits", inclusion of the term "durable" and the woodstove replacement program priorities.

Response: The obsolete language relative to stove durability and the prioritization of heating systems has been deleted from the relevant sections of the control strategy. After consultation with EPA, the emission reduction credit used for certified woodstoves was not revised.

Issue No. 11: Other Issues

Response: Diesel trucks, although a highly visible source, are very small contributors to the PM₁₀ levels in Klamath Falls based on both emission inventory and chemical "fingerprinting" studies.

Regarding the accuracy of the lung function testing conducted by the Oregon Department of Health, valid questions were initially raised about the accuracy of one of the spirometers used in the study. These questions were later resolved by the Health Department following a series of tests on the spirometer which indicated that the data was usable. Limited resources prohibited testing at all of the schools in the area.

The Peterson School air monitoring sites in Klamath Falls was selected following several surveys which consistently demonstrated that this was the area within which the highest PM₁₀ concentrations are found. The addition of more monitoring sites is neither technically justified nor feasible given resource limitations. The monitoring programs meets EPA requirements.

Regarding noise, the Department's noise control program was deleted from the agency budget during the last Legislative session. Noise complaints are now being referred to local governments.

The first Klamath Falls Advisory Committee recommended County adoption of a mandatory woodburning curtailment program which is the foundation of the proposed control strategy. Additional measures have been included in the strategy to ensure attainment.

Emissions of smoke from woodstoves are regulated under the Klamath County Ordinance throughout the day, not just between 10 pm and noon. Smoke emissions greater than 20 % opacity are not permitted at any time.

JEC:a
RPT\AH20083
(10/25/91)

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: 0
Division: Air Quality
Section: Planning & Development

SUBJECT:

Adoption: Revised PM₁₀ Control Strategy for the Medford-Ashland Air Quality Maintenance Area (AQMA).

PURPOSE:

To meet new Clean Air Act requirements.

ACTION REQUESTED:

- | | | |
|-------------------------------------|--------------------------------------|---------------------|
| <input type="checkbox"/> | Authorize Rulemaking Hearing | |
| <input checked="" type="checkbox"/> | Adopt Rules | |
| | Proposed Rules | Attachment <u>A</u> |
| | Rulemaking Statements | Attachment <u>B</u> |
| | Land Use Compatibility Statement | Attachment <u>G</u> |
| | Fiscal and Economic Impact Statement | Attachment <u>C</u> |
| | Public Notice | Attachment <u>D</u> |

DESCRIPTION OF REQUESTED ACTION:

An addendum to the control strategy for PM₁₀ air pollution is proposed for the Medford-Ashland Nonattainment Area to ensure attainment of federal ambient air quality standards. This addendum to the control strategy must be submitted to the U.S. Environmental Protection Agency by November 15, 1991 under the new Clean Air Act requirements.

National PM₁₀ (particulate matter less than 10 micrometers in size) ambient air quality health standards were exceeded in the Medford-Ashland Air Quality Maintenance Area (AQMA) approximately 20 days per year during 1984-86. Maximum concentrations were over twice the 24-hour air quality health standard.



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PM₁₀ concentrations have improved during 1984-91 but still violate the annual average and 24-hour air quality health standards. The 1990 Clean Air Act (Act) requires states to revise PM₁₀ control strategies for nonattainment areas to assure attainment of the air quality health standards.

The revised strategy for Medford-Ashland includes specific Reasonably Available Control Measures (RACMs) and a contingency plan. The Department of Environmental Quality (DEQ, Department) is proposing to utilize its new Legislature-approved woodstove curtailment authority for Central Point to meet the enforceability requirements of the Act for RACMs if Central Point voters reject a ballot measure to reinstate a woodburning curtailment ordinance. Other RACMs include a ban on sale and installation of used uncertified woodstoves and a more restrictive ventilation index for open burning.

The Medford-Ashland industrial rules adopted by the Environmental Quality Commission (EQC, Commission) during 1978-89 meet or exceed the Reasonably Available Control Technology (RACT) requirements of the Clean Air Act. The most recent industrial rules, adopted by the Commission in September 1989, are considered Best Available Control Technology (BACT) for large wood-fired boilers and veneer dryers and these rules are being implemented during 1990-94. A dual-fuel feasibility study on large wood-fired boilers is proposed; if found to be feasible and needed, dual fueling would become part of the contingency plan. Feasibility and need of dual-fueling requirements would be determined as part of a normal EQC rulemaking process during 1994-95.

Proposed contingency plans which would automatically go into effect if the area fails to attain the PM₁₀ standard by the Act deadline of December 31, 1994, include removal and destruction of uncertified woodstoves upon home sale and a November-February ban on open burning.

A complete listing of the control strategy is presented in Attachment F. The proposed control strategy has been designed to assure attainment of the air quality standards and meet the requirements of the Clean Air Act.

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AUTHORITY/NEED FOR ACTION:

X Statutory Authority: ORS 468.305 Attachment E

X Pursuant to Federal Law/Rule:

Federal Clean Air Act Amendments of 1990.

X Time Constraints:

The 1990 Clean Air Act requires states to:

- o Submit revised PM₁₀ control strategies (including contingency plans) by November 15, 1991;
- o Fully implement the attainment strategies by December 10, 1993;
- o Attain PM₁₀ standards by December 31, 1994; and
- o Implement contingency plan by July 1, 1995, if PM₁₀ standards are not met by December 31, 1994.

DEVELOPMENTAL BACKGROUND:

X Hearing Officer's Report/Recommendations Attachment H

Public hearings were held in Medford, Grants Pass, Klamath Falls, La Grande, and Portland during September 26 to October 1, 1991, on the proposed PM₁₀ control strategies and supporting rules.

X Response to Testimony/Comments Attachment I

The major issues/responses related to the overall Medford-Ashland PM₁₀ control strategy are discussed here. Additional details are included in the related agenda items for the supporting industrial, open burning and woodheating rules.

X Prior EQC Agenda Items:

Agenda Item E, September 8, 1989 Medford Industrial Rules
Agenda Item E, January 31, 1991 Medford-Ashland PM₁₀ Plan
Agenda Item A, August 22, 1991* Medford-Ashland PM₁₀ Plan
(* hearing authorization for this proposal)

X Supplemental Background Information

Summary of Control Strategy and
Contingency Plan

Attachment F

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The Medford-Ashland PM₁₀ Control Strategy was adopted by the Environmental Quality Commission (EQC, Commission) on January 31, 1991, as a part of the State Implementation Plan. At the time of adoption it was recognized that additional elements would be needed by November 15, 1991, to address the repeal of the Central Point residential woodburning ordinance and to meet new requirements of the Clean Air Act. This revision provides these additional elements.

The contingency plan was developed in consideration of Environmental Protection Agency (EPA) guidance and consultation and the provisions of House Bill 2175. Local interested persons and groups were contacted and their comments on the conceptual program outlined in Attachment F were considered. Public hearings were held in Medford on September 30, 1991, and in other Oregon cities during September 26 to October 1, 1991.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Overview

Implementation of the PM₁₀ air pollution control strategy involves residents, industries, local governments, and state and federal agencies. Residents with woodstoves and fireplaces and owners/operators of wood products industries are the two groups most affected by the previous PM₁₀ attainment strategies (adopted in September 1989 and January 1991) and the proposed revisions to the strategy, including the contingency plan.

In the event that a PM₁₀ control strategy for the Medford-Ashland area is not adopted as a revision to the State Implementation Plan (SIP), the Clean Air Act requires economic sanctions which include restricting federal highway funds, increased emission offset requirements for new or expanding industry, and ultimately a Federal Implementation Plan to be implemented by EPA.

Most of the testimony at the Medford public hearing stressed the need for a comprehensive and equitable PM₁₀ control strategy that is enforced by state and local agencies and adequate to meet PM₁₀ air quality health standards. (The hearing officer summary of testimony and the major issues/responses are included as attachments.)

The Department believes the proposed strategy is comprehensive and equitable. The proposed PM₁₀ control strategy requires substantial emission reductions from

industry, residential woodheating, open burning, and dust sources. Enforcement by DEQ and local agencies has increased in recent years and is expected to further increase in the future. Improvements in PM₁₀ concentrations indicate the strategy is on track to meet air quality standards by the December 31, 1991, deadline.

The economic impacts of the proposed strategy as taken to the public hearings are outlined in Attachment C. Due to changes in the proposal in response to testimony, some of the economic impacts are lower than initially projected.

Slash Burning

Another issue of significant concern among the public is smoke from forest slash burning. Although the current Oregon Department of Forestry (ODOF) Smoke Management Program meets Clean Air Act requirements, revision to the SIP to strengthen protection of PM₁₀ nonattainment areas from smoke impacts are being discussed with ODOF and will be included in the SIP in the near future.

Residential Woodburning

The proposed PM₁₀ control strategy would provide for DEQ implementation of mandatory woodburning curtailment, under the authority of House Bill 2175 passed by the 1991 Legislature, in Central Point if the City is unable to do so. The Central Point City Council re-adopted a curtailment ordinance on August 15, 1991, and referred the ordinance to voters for approval at the November 5, 1991, general election. (A similar ordinance was adopted by the City Council in December 1989 but repealed by voters in November 1990.)

Open Burning

The Department proposed to adopt more restrictive ventilation criteria for the Rogue Basin Open Burning Control Area to be consistent with recently adopted local ordinances and more protective of air quality. The Department also proposed a ban on open burning in the entire Open Burning Control Area during November, December, January, and February as part of the PM₁₀ contingency plans if the Medford-Ashland or Grants Pass area fails to meet PM₁₀ standards by December 31, 1994.

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The Department has revised the open burning proposal in response to public testimony to give additional flexibility to orchardists for burning prunings during February 1992 and February 1993 while alternatives are being developed. This is consistent with the recent recommendation of the Jackson County Open Burning Task Force and recent revisions to the Jackson County ordinance. Additional details are included in a separate agenda item (Item K) for the November 8, 1991, EQC meeting.

Industry

Within the regulated industrial community, the principal concerns were the proposed dual-fuel feasibility study for large wood-fired boilers and the proposed RACT\BACT industrial emission strategy in the contingency plan.

The Department has clarified that the dual-fuel study requirements are a part of the attainment plan to be completed by 1994 so that, if found technically and economically feasible, dual fueling of large wood-fired boilers could be implemented as part of the post-1994 contingency plan. The Department has also clarified protocol and criteria to ensure an unbiased study. Feasibility and need of dual-fueling requirements would be determined as part of a normal EQC rulemaking process during 1994-95.

The Department had originally proposed adoption of rules that would establish BACT in the contingency plan instead of waiting until eighteen months after the contingency trigger as allowed under the Clean Air Act in order to give industry some certainty of requirements early in the process and to avoid the establishment of two different standards (RACT and BACT) within a short time-frame. The industries in the Medford-Ashland area already meet (or in the process of implementing) BACT requirements for most types of sources so the proposed BACT requirements were not as big an issue as in other Oregon PM₁₀ nonattainment areas. The proposed BACT requirements in the contingency plan would have required additional controls on the charcoal furnace and smaller air conveying systems in the Medford-Ashland area by mid-1999 if ambient PM₁₀ standards were not met by the December 31, 1994 deadline. The Department has revised the proposed contingency plan by removing the BACT establishment; instead BACT requirements will be identified within 18 months of an area failing to meet the December 31, 1994, deadline. This is consistent with the Clean Air Act and would allow consideration of any new (1991-95) technological developments.

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The Department's industrial rules proposal and alternatives are further explained in the documentation for the proposed industrial emission standard rules under a separate agenda item (Item I) for the November 8, 1991, EQC meeting.

PROGRAM CONSIDERATIONS:

If the City of Central Point does not replace the mandatory woodburning curtailment ordinance repealed by voters in November 1990, then the Department will implement a curtailment program directly or in cooperation with Jackson County in order to meet Clean Air Act requirements. The Department has obtained additional federal funding to carry out this task.

The Department is concerned about long-term local and state government resources to implement critical residential woodheating elements of the PM₁₀ control strategy, particularly the operation of curtailment and public information programs as well as financial incentives for replacement of existing woodstoves with cleaner burning units. The Department will continue to explore funding options and may propose new legislation to address this need.

The contingency plan, if required due to failure to meet PM₁₀ standards by the December 1994 deadline, would also require new Department work. New industrial work should be able to be integrated into the industrial permitting program activities and emission fee structure as modified to meet Title V requirements. New woodheating work may require additional resources as discussed above.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Defer action to EPA. If a state fails to meet the Clean Air Act PM₁₀ requirements, EPA is required to impose sanctions and ultimately prepare a Federal Implementation Plan (FIP) to address the PM₁₀ problems.
2. Rely only on the destruction of uncertified woodstoves upon home sales provision of HB2175 for the contingency plan and not address other significant sources affecting airshed PM₁₀ violations. This alternative could be perceived by the community as inequitable and could weaken cooperative efforts of citizens needed to effectively implement the plan.

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3. Adopt the amendments and addendum to the Medford-Ashland PM₁₀ control strategy including changes made in response to public testimony. The key elements of the addendum are a state-operated Central Point curtailment program if the City is unable to do so, a State ban on sale of uncertified woodstoves, and a contingency plan for industry, woodstoves and open burning.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the third alternative, specifically that the Commission adopt the proposed amendments and addendum (Attachment A) to the control strategy for the Medford-Ashland PM₁₀ Nonattainment Area as a revision to the State of Oregon Clean Air Act Implementation Plan. Adoption is required for the Department to submit a fully approvable PM₁₀ control strategy to the Environmental Protection Agency within the time frame required by the Clean Air Act.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed PM₁₀ control strategies are consistent with Goals 2, 3, 4, and 5 of the Strategic Plan. The Department is not aware of any conflicts with agency or legislative policy. The proposed strategy and supporting rules are consistent with the Oregon Benchmarks goal of increasing the percentage of Oregonians living in areas which meet ambient air quality standards.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the dual-fueling feasibility study be completed prior to the attainment date or initiated only if the Medford-Ashland contingency plan is triggered? (See Agenda Item I for further discussion.)
2. Should more restrictive and uniform open burning requirements be adopted as part of the Medford-Ashland attainment and contingency plans? Should orchardists be provided some flexibility for burning during February 1992 and February 1993? (See Agenda Item K for further discussion.)

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INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan revisions (amendments and addendum to the Medford-Ashland PM₁₀ Control Strategy) to EPA for approval.
2. Implement the Medford-Ashland PM₁₀ air pollution control strategy (including industrial, woodheating, fugitive dust, open burning, and slash burning control measures) and enforce all mandatory control measures in coordination with other local, state and federal agencies.
3. Oversee the industrial dual-fuel feasibility studies conducted by industries with large wood-fired boilers.
4. Monitor emission reductions and progress to meet PM₁₀ air quality standards. If PM₁₀ air quality standards are not met by the December 31, 1994, deadline:
 - a. Immediately implement the contingency plan;
 - b. Revise the PM₁₀ control strategy within 18 months to include Best Available Control Technology (BACT) for any industrial sources not already meeting BACT, and Best Available Control Measures (BACM) for any area sources (residential woodheating, slash burning, open burning, etc.) not already meeting BACM; and
 - c. Bring the results of the industrial dual-fueling study to the Commission for implementation decision.
5. Seek long-term funding assistance for local and state residential woodburning emission control programs.

Approved:

Section: John F. Kawalyszke

Division: De [unclear]

Director: Jul Haver

Report Prepared By: Merlyn Hough (229-6446)
Date Prepared: October 25, 1991

MLH:e
RPT\AH20084
(10/25/91)

PM-10 Control Strategy for Particulate Matter (Addendum)

**Medford-Ashland, Oregon
Nonattainment Area**

**A Plan for Attaining and
Maintaining the National Ambient
Air Quality Standard for PM-10**

**State of Oregon
Department of Environmental Quality
Air Quality Division**

October 1991

AMENDMENTS TO JANUARY 31, 1991 MEDFORD-ASHLAND PM₁₀ STRATEGY

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Preface (Revised)

~~[Significant changes have occurred since the initial air quality analysis of this PM₁₀ control strategy and the proposal as a revision to the State Implementation Plan:~~

- ~~--1. The Central Point ordinance for curtailment of woodburning during air pollution episodes was repealed by voters in November 1990, and~~
- ~~--2. The 1990 Clean Air Act was passed by Congress and signed by the President on November 15, 1990.~~

~~As a result, several additions to this plan are needed to fully meet the 1990 Clean Air Act requirements. The shortfall caused by the repeal of the Central Point ordinance must be corrected. Sections must be added or expanded to identify an enforceable contingency plan, reasonable further progress reporting, and possibly other provisions of the 1990 Clean Air Act to be clarified by the U.S. Environmental Protection Agency in the months ahead. These additions are expected by November 15, 1991, as required by the 1990 Clean Air Act.~~

~~The 1990 Clean Air Act also requires that PM₁₀ air quality standards be attained by December 31, 1994.~~

The Medford-Ashland PM₁₀ Control Strategy was adopted by the Environmental Quality Commission (EQC) on January 31, 1991, as a part of the State Implementation Plan. At the time of adoption it was recognized that additional elements would be needed by November 15, 1991, to address the repeal of the Central Point residential woodburning ordinance and to meet new requirements of the Clean Air Act passed by Congress and signed by the President on November 15, 1990. This revision updates the Executive Summary and Introduction and includes an addendum which:

1. Reviews the results of recent and expanded PM₁₀ monitoring in the Medford-Ashland Air Quality Maintenance Area (AOMA);
2. Identifies additional control measures, including a mandatory woodburning curtailment program for the Central Point area, to insure that the strategy is adequate for attainment of PM₁₀ standards on schedule;
3. Includes commitments for a contingency plan that would automatically go into effect if PM₁₀ standards are not achieved by the deadline of the Clean Air Act;
4. Evaluates the PM₁₀ control strategy against Reasonably Available Control Measures (RACM) and Best Available Control Measures (BACM);

5. Identifies the lead agency and resource commitments to insure that the control strategy will be implemented and enforced;
6. Describes provisions for reporting reasonable further progress, revising the plan if necessary, and reviewing and permitting new sources; and
7. Updates the public involvement process, including a public hearing and intergovernmental review on this addendum.

The addendum is included as a new Section 4.14.6 of the State Implementation Plan.

Executive Summary (Revised)

The U.S. Environmental Protection Agency (EPA) adopted new particulate National Ambient Air Quality Standards (NAAQS) for PM₁₀ on July 1, 1987. PM₁₀ particulate is less than 10 micrometers in aerodynamic diameter or about one-tenth of the diameter of a human hair. The Clean Air Act requires that States develop and adopt State Implementation Plan (SIP) revisions to assure that areas which exceed the PM₁₀ standards are brought into attainment ~~[within the time frames prescribed by the Clean Air Act (September 1991)]~~ by December 31, 1994. This document describes the State of Oregon plan to attain the PM₁₀ standards in the Medford-Ashland Air Quality Maintenance Area (AQMA).

High exposure to particulate matter is of concern because of human health effects such as changes in lung functions and increased respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alternation in the body's defense system against foreign materials, damage to lung tissue, increased risk of cancer and, in extreme cases, premature death. Most sensitive to the effects of particulate matter are people with chronic obstructive pulmonary cardiovascular disease and those with influenza, asthmatics, the elderly, children and mouth-breathers.

Air quality measurements taken in Medford have determined that the 24-hour PM₁₀ health standard was exceeded an average of about 20 days per year during the winter months in 1984-86. In addition, the annual average concentration of PM₁₀ exceeded the annual PM₁₀ health standard.

The PM₁₀ standards adopted by the EPA, and subsequently adopted by the Oregon Environmental Quality Commission, were established to protect public health and welfare. The 24-hour PM₁₀ standard is 150 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$). The maximum 24-hour concentration of PM₁₀ measured in Medford was over 300 $\mu\text{g}/\text{m}^3$. The 24-hour standard cannot be exceeded more than an average of one day per year. The annual average PM₁₀ concentration in Medford is about 58 to 68 $\mu\text{g}/\text{m}^3$ in the peak areas compared to the average annual PM₁₀ standard of 50 $\mu\text{g}/\text{m}^3$.

An inventory of PM₁₀ emissions developed for the Medford-Ashland Air Quality Maintenance Area (AQMA) indicates that the major sources of particulate emissions are residential wood combustion, industry, and soil and road dust. Annual average and worst day PM₁₀ emissions during the baseline period (1985-86) are compared in the following table.

<u>Source Category</u>	<u>Annual PM₁₀ Emissions (%)</u>	<u>Worst Day PM₁₀ Emissions (%)</u>
Residential woodsmoke	38	60
Wood products industry	27	18
Soil and road dust	22	18
<u>Other</u>	<u>13</u>	<u>4</u>
Total	100	100

The air pollution impacts from these PM₁₀ emissions have been measured, calculated and verified at various locations within the AQMA through the combination of the air monitoring network (PM₁₀ measurement stations), dispersion modeling (mathematical modeling of diffusion in the atmosphere), and receptor modeling (chemical fingerprinting) techniques.

PM₁₀ design values are those 24-hour worst case and annual average concentrations from which reductions must be made to achieve compliance with the standards. The 24-hour design value represents the fourth highest daily concentration measured in a 3-year period; the annual design value represents the 3-year average concentration.

The design values were determined with the following considerations. The eight highest 24-hour PM₁₀ concentrations during 1984-86 occurred during December 1985 so the December 1985 meteorology was used for the worst-case-day dispersion modeling. The 1984-86 period had the highest 3-year PM₁₀ average concentration since monitoring began so this period was used for the annual-average analysis; the most precise wind data was available during July 1985 to June 1986 and this 12-month period had average concentrations similar to the 1984-86 average so the annual-average dispersion modeling was done with the July 1985 to June 1986 meteorology. The highest PM₁₀ concentrations were measured in the area between the Jackson County Courthouse at Oakdale/Main and McAndrews Road (monitors located near Oakdale/Main, Haven/Holly, Oak/Taft, and Welch/Jackson).

Analysis of the dispersion modeling results for 1985-86 and all of the available PM₁₀ air quality data from 1984-1986 indicates a 24-hour design value of 266 to 309 $\mu\text{g}/\text{m}^3$ (Oakdale/Main and Oak/Taft, respectively) and an annual average design value of 58 to 68 $\mu\text{g}/\text{m}^3$ (Oakdale/Main and Oak/Taft, respectively) depending on the location within the peak problem area. In addition to the peak impact site (Oak/Taft), the impact analysis is also summarized for the Courthouse site (Oakdale/Main) since most of the historical particulate data (20+ years) and chemical fingerprinting data (10+ years) has been collected at the Courthouse. These specific design values are based on the dispersion modeling results but they agree very closely with the actual ambient monitoring data at these sites.

Control strategies included in this plan have been designed to reduce 24-hour concentrations of PM₁₀ by at least 159 $\mu\text{g}/\text{m}^3$ (309-150 $\mu\text{g}/\text{m}^3$) and the annual average by at least 18 $\mu\text{g}/\text{m}^3$ (68-50 $\mu\text{g}/\text{m}^3$) by 1992.

Control measures adopted in this plan must be legally enforceable, demonstrated to be adequate to achieve the needed air quality improvements, and designed to attain the standards within the time frames provided by the Clean Air Act.

The principal means of achieving these air quality improvements within the 3-year period allowed by the Clean Air Act is through PM₁₀ emission reductions from woodstoves and fireplaces (RWC), the wood products industries, open burning of debris, and road dust. Additional reductions are expected from statewide efforts to reduce slash burning smoke.

Residential Wood Combustion Strategies

The residential woodsmoke reduction strategies are closely patterned after the December 1987 recommendations of the Jackson County Woodburning Task Force. Woodstove and fireplace emissions will be reduced by an expanded public information program, an areawide mandatory woodburning curtailment program (75% compliance rate needed to meet standards at the Courthouse, but 85% compliance rate needed to meet standards at Oak/Taft), the Oregon woodstove certification program, financial assistance programs for replacement of existing woodstoves with cleaner burning units and weatherization of homes, a ban on installation of non-certified woodstoves, and continued improvements in firewood seasoning and woodstove operation.

Wood Products Industry Strategies

Wood products industry emissions will be reduced by additional control requirements on veneer driers and large wood-fired boilers at plywood plants, more extensive source testing and continuous emission monitoring in order to maximize performance of pollution control equipment, and more restrictive emission offset requirements to insure a net air quality benefit from any new or expanded industries.

Open Burning Strategies

Open burning emissions will be reduced during the critical November to February period by local ordinances banning open burning during these months. Annual open burning emissions will be reduced by a year around ban within Medford and more restrictive ventilation criteria and shorter burn seasons in unincorporated areas of Jackson County and in Central Point.

Road Dust Strategies

Road dust emissions will be reduced by continuing programs to pave unpaved roads, to curb and gutter shoulders on paved roads, and to control mud and dirt trackout from industrial, construction and agricultural operations.

Other Strategies

Slash burning emissions will be reduced in western Oregon by about 20% between 1984 and the year 2000 as part of the Oregon Visibility Protection Plan. These emission reductions will further insure that background PM₁₀ concentrations will not increase in future years.

In addition, forestry slash burning impacts on the nonattainment area will be minimized through voluntary agreements among forest land managers. This program will help assure that forestry open burning does not adversely affect Medford-Ashland AQMA air quality on winter wood heating curtailment days.

Implementation of all of the elements of the overall PM₁₀ control strategy will require the efforts of residents and industries within the Medford-Ashland AQMA, Jackson County, the cities within the AQMA, Oregon Department of Environmental Quality, Oregon Department of Forestry, U.S. Forest Service and Bureau of Land Management.

Strategy Emission Reduction - 24 Hour Worst Case Day

Attainment of the 24-hour PM₁₀ standards by 1992 will require up to a 51% reduction in ambient PM₁₀ concentrations depending on the location within the AQMA. This reduction will be accomplished by the previously described strategies. The PM₁₀ impacts at the Jackson County Courthouse from the major source categories are compared in the following table for the 1985-86 base period and ~~the~~ 1992 ~~attainment-year~~. The PM₁₀ emissions and impacts are projected to be slightly lower in 1994 than in 1992. The PM₁₀ impacts are in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). (NC indicates No Change.)

Site: Jackson County Courthouse

<u>Source Category</u>	<u>24-Hour PM₁₀ Impact ($\mu\text{g}/\text{m}^3$)</u>		<u>Change</u>
	<u>Worst Day</u> <u>1985-86</u>	<u>Worst Day</u> <u>1992</u>	
Residential woodsmoke	195.0	26.4	-86%
Wood products industry	29.2	20.3	-30%
Soil and road dust	27.6	27.6	NC
<u>Other</u>	<u>10.6</u>	<u>11.6</u>	+9%
Local sources	262.4	85.9	-67%
<u>Background</u>	<u>44.0</u>	<u>44.0</u>	NC
Total	306.4	129.9	-58%

<u>Source Category</u>	<u>Design Day</u>		<u>Change</u>
	<u>1985-86</u>	<u>1992</u>	
Residential woodsmoke	156.2	23.1	-85%
Wood products industry	22.6	14.6	-35%
Soil and road dust	32.1	32.1	NC
<u>Other</u>	<u>11.6</u>	<u>12.6</u>	+9%
Local sources	222.5	82.4	-63%
<u>Background</u>	<u>44.0</u>	<u>44.0</u>	NC
Total	266.5	126.4	-53%

The Courthouse monitoring site is of special interest since it is the site of the longest historical particulate monitoring in the AQMA and it is located in the general area of highest particulate levels. However, the Oak and Taft monitoring site in Medford has recorded and projects slightly higher PM₁₀ levels which are summarized in the following table.

Site: Medford Oak and Taft

<u>Source Category</u>	<u>24-Hour PM₁₀ Impact ($\mu\text{g}/\text{m}^3$)</u>		<u>Change</u>
	<u>Worst Day</u> <u>1985-86</u>	<u>Worst Day</u> <u>1992</u>	
Residential woodsmoke	182.2	24.5	-87%
Wood products industry	77.8	55.1	-26%
Soil and road dust	28.7	28.7	NC
<u>Other</u>	<u>9.5</u>	<u>10.3</u>	+9%
Local sources	298.2	118.6	-60%
<u>Background</u>	<u>44.0</u>	<u>44.0</u>	NC
Total	342.2	162.6	-52%

<u>Source Category</u>	<u>24-Hour PM₁₀ Impact (μg/m³)</u>		<u>Change</u>
	<u>Design Day</u> <u>1985-86</u>	<u>Design Day</u> <u>1992</u>	
Residential woodsmoke	167.3	22.3	-87%
Wood products industry	58.8	42.0	-29%
Soil and road dust	29.8	29.8	NC
<u>Other</u>	<u>9.5</u>	<u>10.3</u>	+9%
Local sources	265.3	104.4	-61%
<u>Background</u>	<u>44.0</u>	<u>44.0</u>	NC
Total	309.3	148.4	-52%

These 24-hour PM₁₀ impacts represent the worst day and design day during the 1985-86 baseline period. The design value is based on the fourth highest day during a 3-year period. For the Oak/Taft site the modeled fourth highest day after implementation of the control strategy in 1992 is 148 μg/m³ which would be in compliance with the 24-hour health standard of 150 μg/m³.

Other areas of the AQMA had been measured in violation of the 24-hour or annual standards, notably the White City and Central Point areas, but the dispersion modeling also indicated compliance in those areas, with 1992 concentrations lower than at Oak/Taft.

Strategy Emission Reduction - Annual Average Case

Attainment of the annual average PM₁₀ standards by 1992 will require up to a 26% reduction in ambient PM₁₀ concentrations depending on the location within the AQMA. This reduction will be accomplished by the previously described strategies. The PM₁₀ impacts at the Jackson County Courthouse from the major source categories are compared in the following table for the 1985-86 base period and ~~the~~ 1992 ~~attainment-year~~. The PM₁₀ emissions and impacts are projected to be slightly lower in 1994 than in 1992. Again, the PM₁₀ impacts are in micrograms per cubic meter (μg/m³).

Site: Jackson County Courthouse

<u>Source Category</u>	<u>Annual PM₁₀ Impact (μg/m³)</u>		<u>Change</u>
	<u>1985-86</u>	<u>1992</u>	
Residential woodsmoke	28.8	16.6	-42%
Wood products industry	7.2	4.3	-40%
Soil and road dust	6.9	6.9	NC
<u>Other</u>	<u>2.7</u>	<u>3.0</u>	+9%
Local sources	45.6	30.8	-32%
<u>Background</u>	<u>13.1</u>	<u>13.1</u>	NC
Total	58.7	43.9	-25%

The Oak and Taft monitoring site in Medford recorded slightly higher annual PM₁₀ levels than the Courthouse. The Oak and Taft PM₁₀ levels are summarized in the following table.

Site: Medford Oak and Taft

<u>Source Category</u>	<u>Annual PM₁₀ Impact (μg/m³)</u>		<u>Change</u>
	<u>1985-86</u>	<u>1992</u>	
Residential woodsmoke	28.2	16.2	-43%
Wood products industry	17.9	11.3	-37%
Soil and road dust	6.6	6.6	NC
<u>Other</u>	<u>2.3</u>	<u>2.5</u>	+9%
Local sources	55.0	36.6	-33%
<u>Background</u>	<u>13.1</u>	<u>13.1</u>	NC
Total	68.1	49.7	-27%

The annual average PM₁₀ levels at both the Courthouse and Oak and Taft sites are projected to be in compliance with the annual PM₁₀ health standard of 50 μg/m³ after implementation of the control strategy in 1992.

The dispersion modeling projected potential PM₁₀ problems in two other one-kilometer grids north of the Oak & Taft grid but the 1985 Medford particulate gradient study and the 1989 mobile nephelometer surveys indicated that PM₁₀ levels at the DeHague & Howard and McAndrews & Court sites were not as high as at the Oak & Taft site. The Department ~~will~~ conducted additional monitoring in the two potential problem grids ~~by 1991~~ during the 1990-91 winter season to determine the actual PM₁₀ concentrations ~~as the control strategy is implemented. If the ambient data confirms a nonattainment problem that the control strategy will not bring into attainment by 1992, then the control strategy will be modified as necessary to assure that attainment will be reached.~~ This monitoring confirmed that the potential problem grids had slightly lower overall PM₁₀ concentrations than the Oak & Taft/Welch & Jackson grid on which the control strategy is based.

Air Quality Standard Maintenance

Subsequent to attainment and by the year 2000, a net decrease in emissions is projected to occur as a result of continuation of the attainment strategies, offsetting increases in fugitive dust and transportation emissions. Both the 24-hour and annual standards are projected to be maintained to the year 2000 at which time worst case day PM₁₀ and the annual average PM₁₀ are projected to be 146 and 48 μg/m³, respectively, at Oak and Taft.

Contingency Plan

The Clean Air Act requires that PM₁₀ control strategies include a contingency plan that would automatically go into effect if the area does not meet PM₁₀ standards by December 31, 1994. The Medford-Ashland contingency plan consists of residential woodburning, industrial, and open burning elements. The specific contingency plan elements that would go into effect, if the Medford-Ashland AQMA fails to meet PM₁₀ standards by the Clean Air Act deadline, include:

1. Backup authority for DEQ to implement residential woodburning curtailment programs where necessary to meet PM₁₀ standards;
2. Requirement for noncertified woodstove removal upon home sale;
3. If found to be technologically and economically feasible, dual fueling of large wood-fired boilers, with alternate fuel to be used during woodburning curtailment periods; and
4. Open burning ban during November through February.

Enforceability

The Clean Air Act requires SIP control strategies to be enforceable. The necessary State rules and local ordinances have been adopted and are included in the appendix for this plan. The 1984 Oregon woodstove certification program and the 1989 industrial rules have been submitted to EPA previously.

Several existing strategy elements to reduce residential woodsmoke will be continued or expanded including: comprehensive public information programs on proper woodstove operation, firewood seasoning, and home weatherization; financial assistance programs to replace existing woodstoves with cleaner burning units and provide home weatherization (CLEAR, SOLVE and ACCESS programs); voluntary firewood moisture certification programs; daily woodburning advisory program (for areas outside the critical PM₁₀ control area); and the woodstove certification program.

The major new residential wood combustion strategies in this plan are the mandatory woodburning curtailment programs and the bans on installation of non-certified woodstoves. The mandatory curtailment programs adopted by the ~~{cities}~~ City of Medford ~~{and Central Point}~~ and Jackson County, ~~{and}~~ the ban on installation of non-certified stoves adopted by the City of Ashland and Jackson County, and the Oregon Administrative Rules (OARs) to implement House Bill 2175 (1991 Legislature) are included in the appendix. The OARs provide for enforcement of a woodburning curtailment program in Central Point if the City does not replace the ordinance repealed by voters in November 1990. Also included are local ordinances on opacity limits, what can be burned in woodstoves, and sale of seasoned firewood.

The new industrial strategies are more stringent control requirements on veneer dryers and large wood-fired boilers, more extensive source testing and continuous emission monitoring, and more restrictive emission offset requirements for new or expanded industries. These rules were adopted by the Environmental Quality Commission on September 8, 1989, and are included in the appendix. The new industrial rules are in addition to the industrial rules for the Medford-Ashland area adopted in 1978 and 1983.

The OARs to implement the residential woodburning, industrial and open burning elements of the contingency plan are included in the appendix.

The current local ordinances and OARs that regulate open burning and trackout are included in the appendix. Also included is a progress report on paving of unpaved roads and curbing of shoulders on paved roads within the city of Medford.

4.14.0.1 Introduction (Revised)

On July 1, 1987, the U.S. Environmental Protection Agency (EPA) promulgated new 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) standard.¹ 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 are those which have a greater than 95 percent probability of exceeding the PM₁₀ National Ambient Air Quality Standards (NAAQS). Air monitoring has shown that air quality within the Medford-Ashland AQMA exceeds the PM₁₀ standards (NAAQS).

~~{Section 110 of the}~~ The Federal Clean Air Act requires States to adopt and submit plans (State Implementation Plans or SIPs) to EPA ~~{within nine months after the effective date of the standard}~~ by November 15, 1991. ~~{The Clean Air Act allows EPA four months to approve or disapprove the plan.}~~ The plan must provide for attainment of the standard ~~{as expeditiously as practicable but no later than three years from the date of EPA approval of the SIP².}~~ Hence, ~~attainment theoretically must be reached by September 1, 1991}~~ by December 31, 1994.

The Air Quality Division of the Department of Environmental Quality (subsequently referred to as the Department) has developed this plan in consultation with officials of Jackson County, the cities within the Medford-Ashland AQMA, the Oregon Departments of Transportation and Forestry, and EPA. The plan was prepared in accordance with the regulations and requirements of the Federal Clean Air Act and the EPA. The Department believes that the PM₁₀ plan can achieve attainment of the NAAQS within the time frame required by the Act and maintain attainment at least through the year 2000.

4.14.0.2 SIP Overview (Revised)

This revision to the State Implementation Plan (SIP) has ~~{five}~~ six sections. Section 4.14.1 provides a description of PM₁₀ ambient air quality in Medford-Ashland AQMA; Section 4.14.2 describes the PM₁₀ air quality problem within the Medford-Ashland AQMA; Section 4.14.3 describes emission reductions needed to attain NAAQS; Section 4.14.4 describes implementation of the control strategies; ~~{and}~~ Section 4.14.5 describes public involvement; and Section 4.14.6 is an addendum that includes a contingency plan and addresses other requirements of the 1990 Clean Air Act.

¹A micrometer (μm) 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.

4.14.6 Addendum (New Section)

4.14.6.1 Purpose of the Addendum

The Medford-Ashland PM₁₀ Control Strategy was adopted by the Environmental Quality Commission (EQC) on January 31, 1991. At the time of adoption it was recognized that additional elements would be needed by November 15, 1991, to address the repeal of the Central Point residential woodburning ordinance and to meet new requirements of the Clean Air Act passed by Congress and signed by the President on November 15, 1990. This addendum:

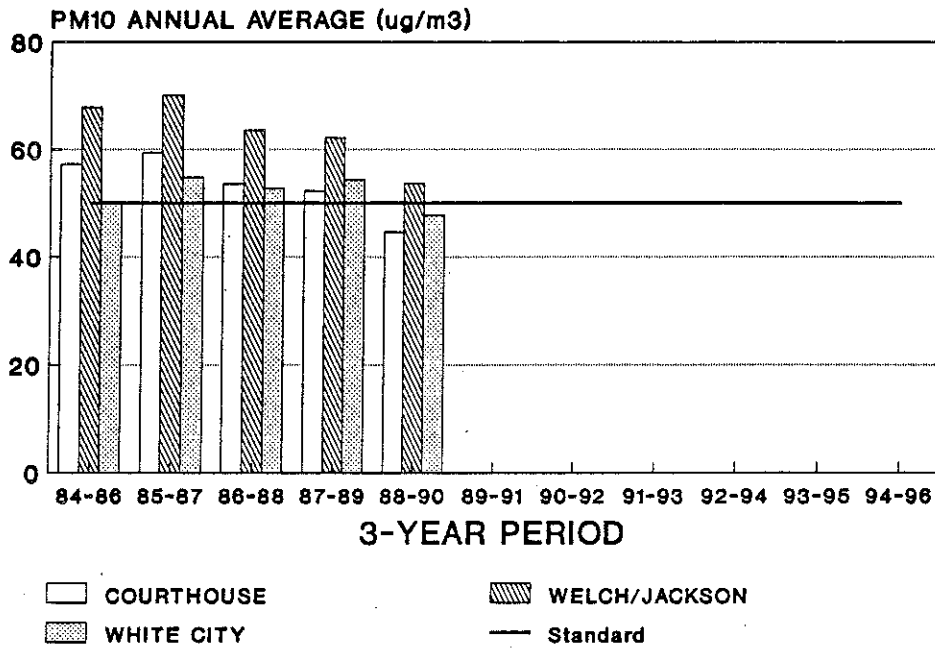
1. Reviews the results of recent and expanded PM₁₀ monitoring in the Medford-Ashland Air Quality Maintenance Area (AQMA);
2. Identifies additional control measures, including a mandatory woodburning curtailment program for the Central Point area, to insure that the strategy is adequate for attainment of PM₁₀ standards on schedule;
3. Includes commitments for a contingency plan that would automatically go into effect if PM₁₀ standards are not achieved by the deadline of the Clean Air Act;
4. Evaluates the PM₁₀ control strategy against Reasonably Available Control Measures (RACM) and Best Available Control Measures (BACM);
5. Identifies the lead agency and resource commitments to insure that the control strategy will be implemented and enforced;
6. Describes provisions for reporting reasonable further progress, revising the plan if necessary, and reviewing and permitting new sources; and
7. Updates the public involvement process, including a public hearing and intergovernmental review on this addendum.

The Executive Summary and Introduction of the overall control strategy have been revised to discuss the new Clean Air Act requirements and the elements of this addendum.

4.14.6.2 Ambient Air Quality Update

Annual average and peak day PM₁₀ concentrations have improved between the baseline period (1984-86) and the most recent three year period (1988-90), as shown in Figures 4.14.6-1 and 4.14.6-2. Annual average PM₁₀ concentrations at Welch & Jackson were slightly above the annual average PM₁₀ standard during 1988-90, but annual average PM₁₀ concentrations at the Courthouse and in White City were in compliance with the annual average standard during this period. As expected, the 24-hour standard continues to be the more difficult standard to attain.

MEDFORD-WHITE CITY PM10 SUMMARY



MEDFORD-ASHLAND PM10 SUMMARY MONTHLY AVERAGES DURING 1988-90

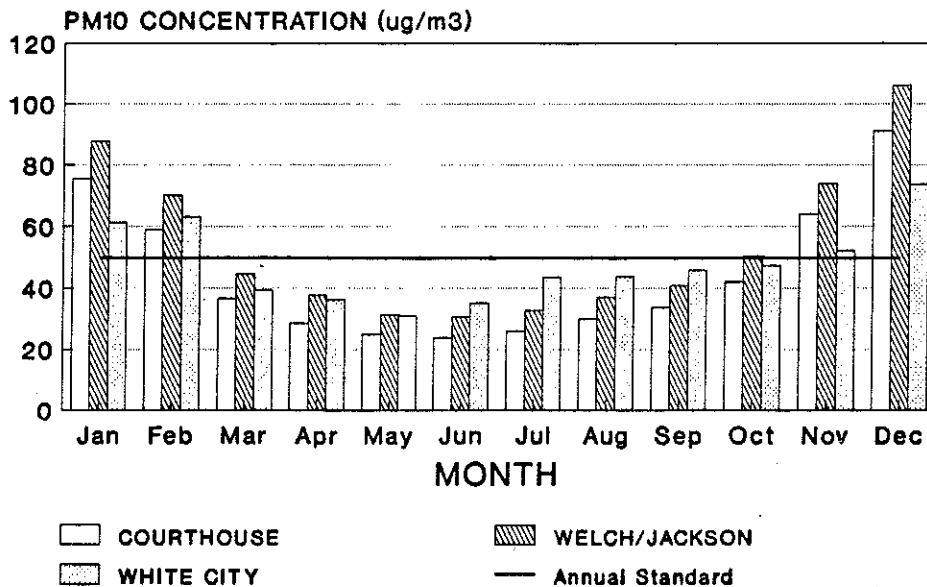
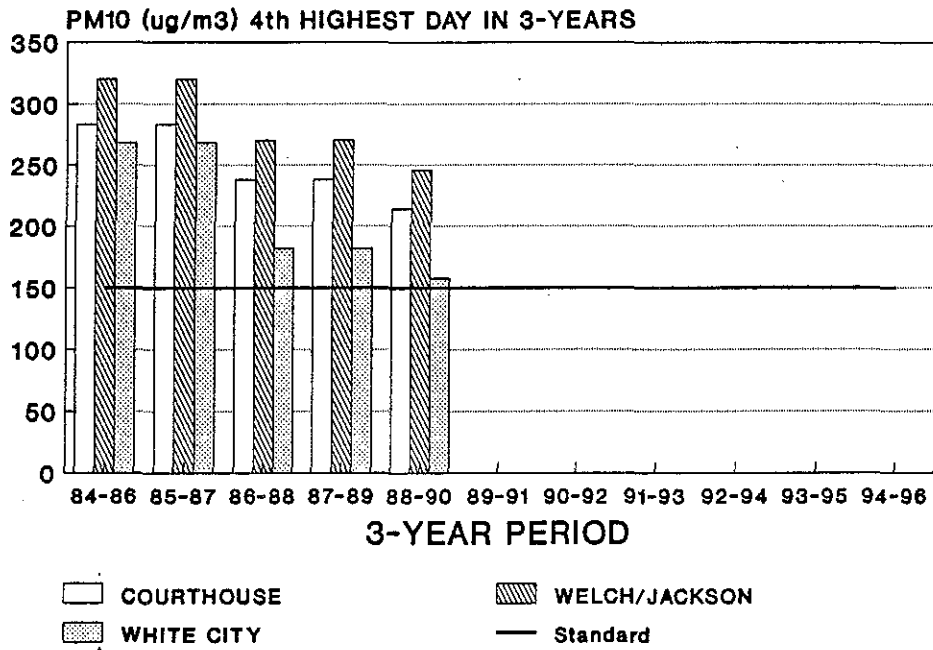


Figure 4.14.6-1: Ambient PM₁₀ Trends.

MEDFORD-WHITE CITY PM10 SUMMARY



MEDFORD-WHITE CITY PM10 SUMMARY

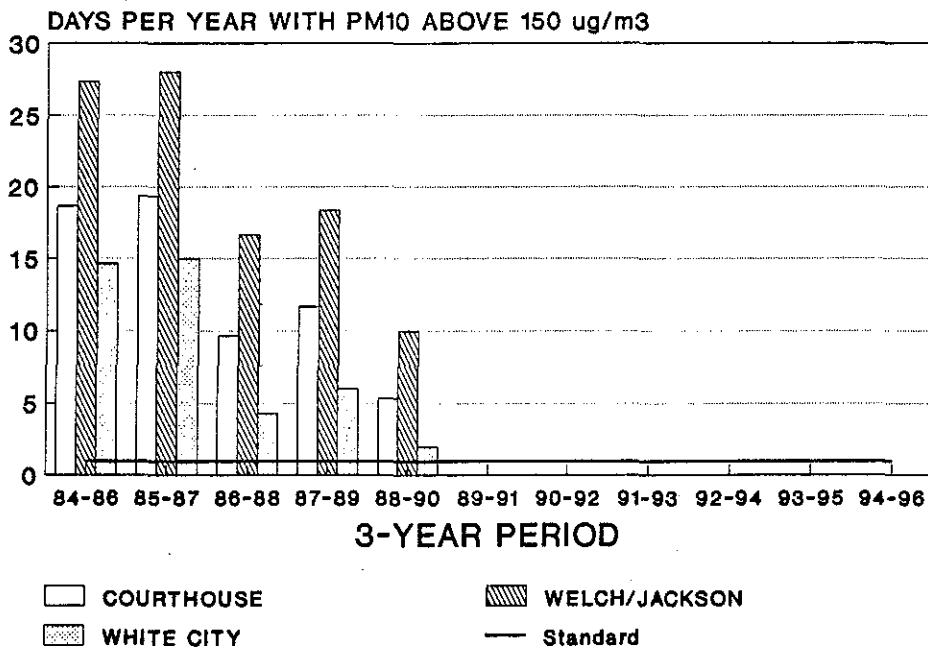


Figure 4.14.6-2: Ambient PM₁₀ Trends.

PM₁₀ concentrations did not fully meet the annual or 24-hour PM₁₀ health standards during 1988-90 since the control strategy was not yet fully implemented. Completion of the strategy (remaining industrial control measures, mandatory Central Point residential woodburning curtailment program, sunseting of some of the Medford and Jackson County sole-source woodstove exemptions, continued replacement of existing woodstoves with cleaner burning units, etc.) is projected to result in attainment of PM₁₀ health standards before December 31, 1994.

Expanded monitoring during the 1990-91 winter season indicated that elevated PM₁₀ concentrations occur throughout the Medford-Central Point-White City area during air stagnation episodes; on a given day, the peak concentration can occur in any one of these three subareas. The highest overall PM₁₀ concentrations were measured in the Welch & Jackson (Oak & Taft) grid in Medford, confirming that site as the critical (design value) site for the PM₁₀ control strategy. Examples of PM₁₀ isopleths during air stagnation advisories on three different days in both December, 1989, and January, 1991 are shown in Figures 4.14.6-3 to 4.14.6-8.

The Dodge Road background site was re-established in December 1990. The background PM₁₀ concentrations measured thus far appear to be similar to those measured during the 1984-86 baseline period.

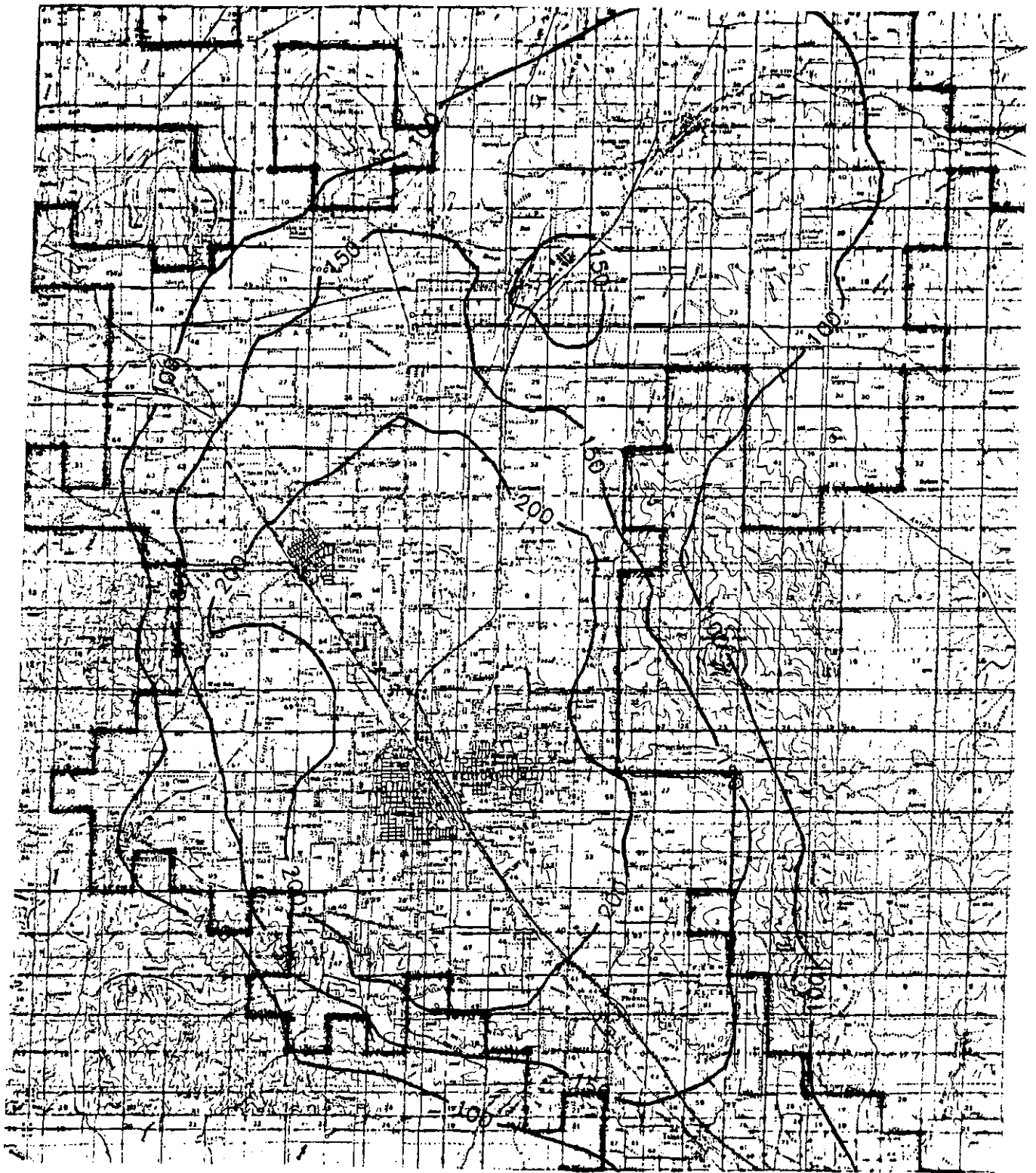


Figure 4.14.6-3: PM₁₀ Isopleths, December 21, 1989.

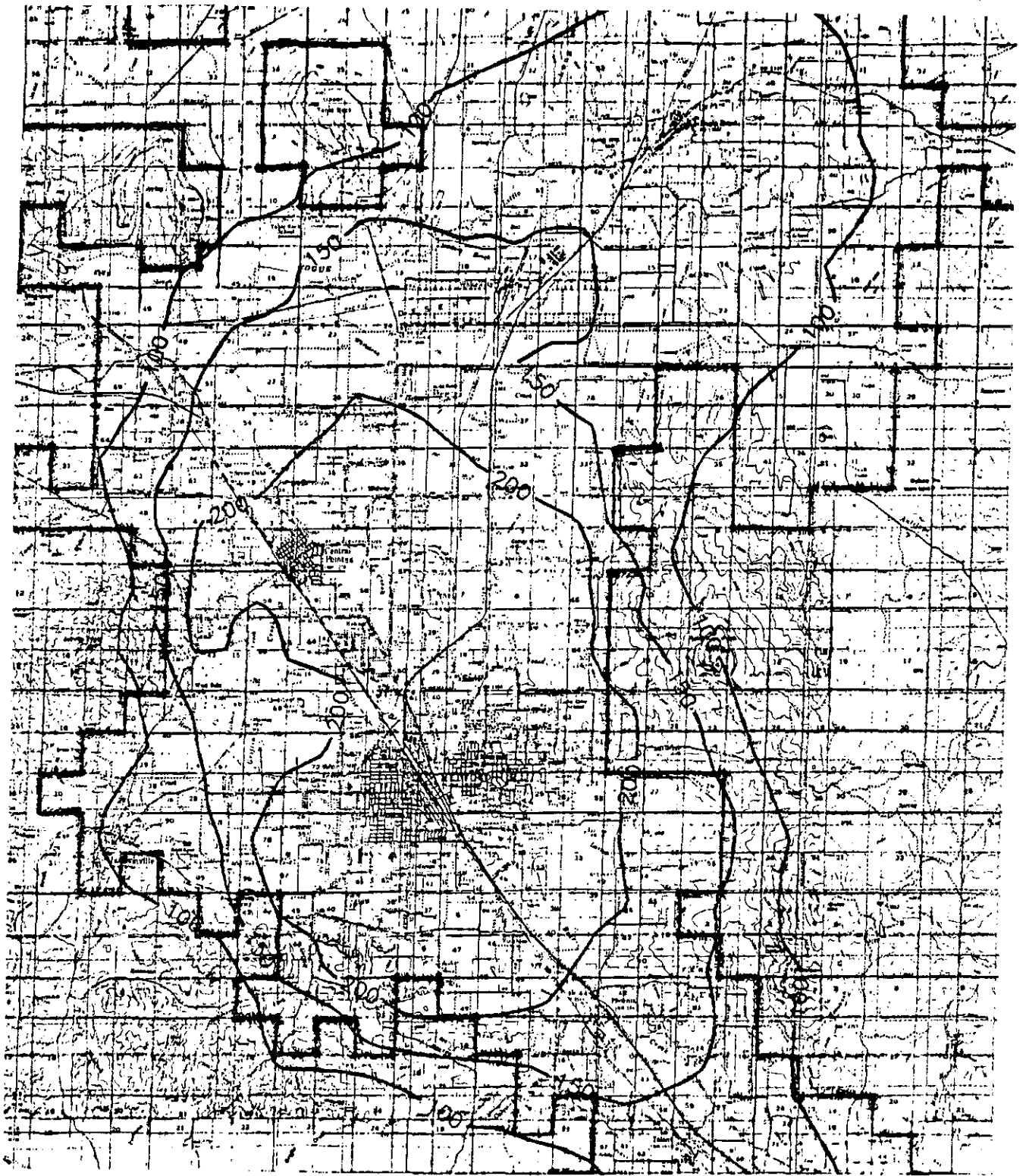


Figure 4.14.6-4: PM₁₀ Isopleths, December 22, 1989.

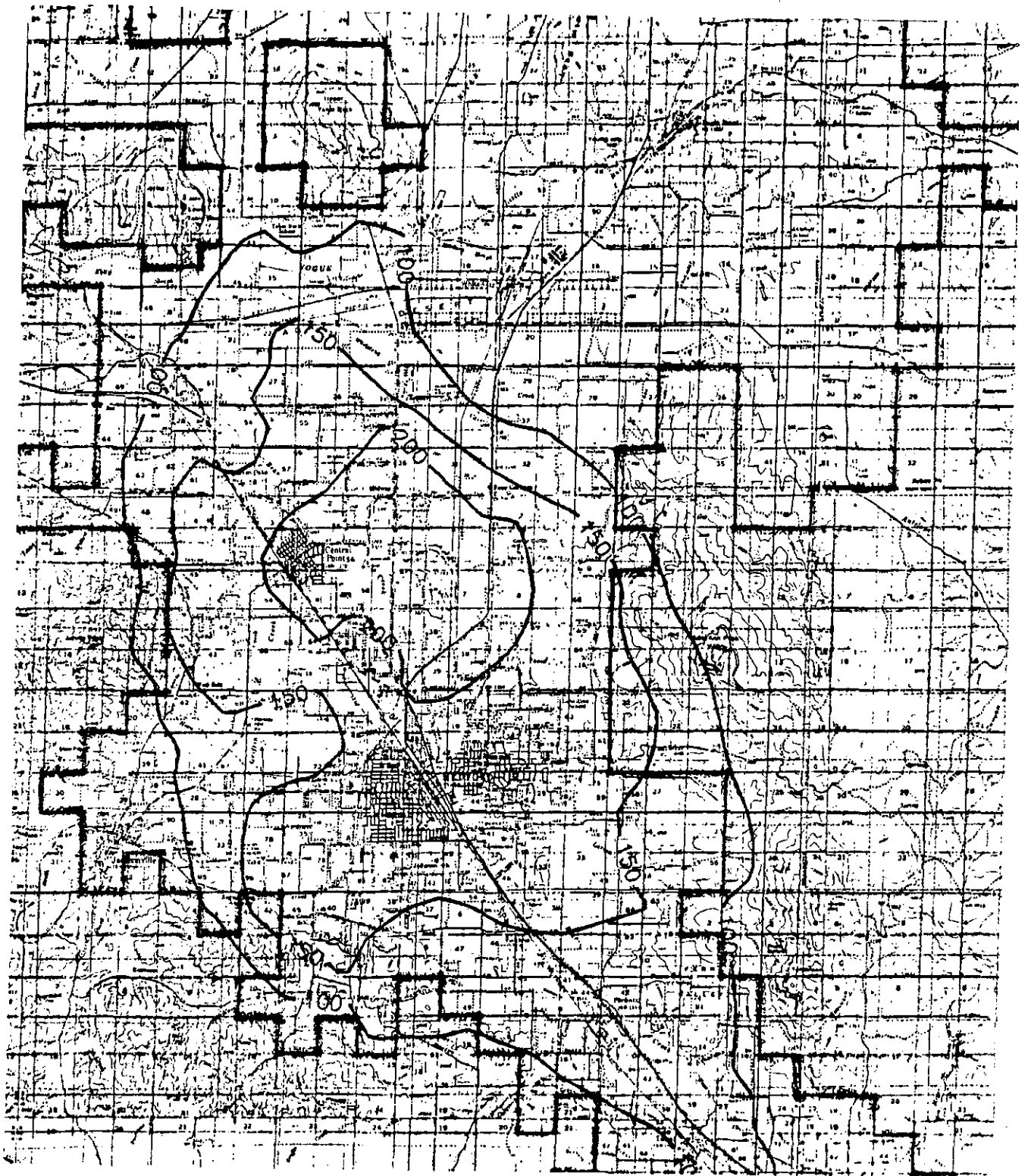


Figure 4.14.6-5: PM₁₀ Isopleths, December 24, 1989.

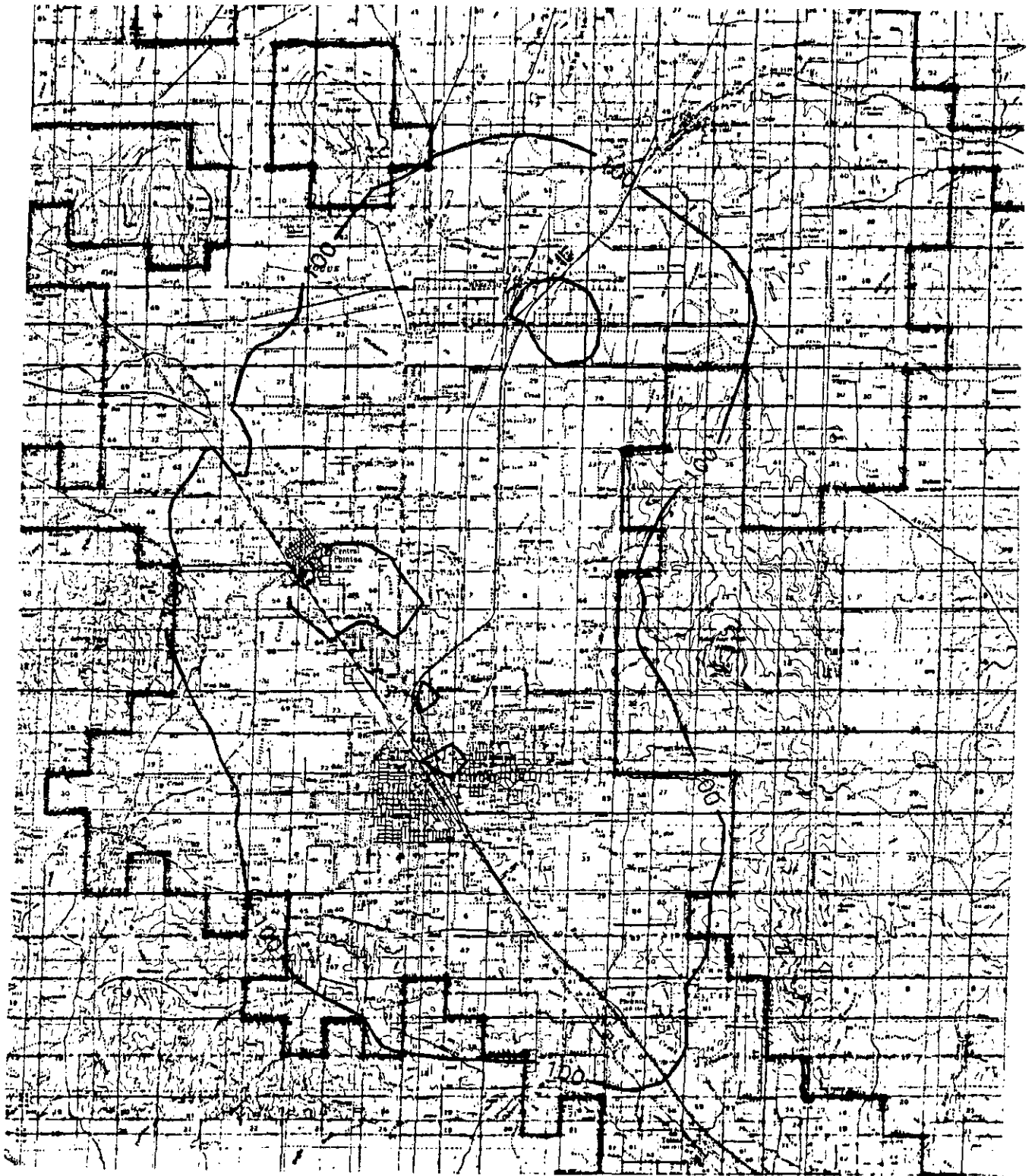


Figure 4.14.6-6: PM₁₀ Isopleths, January 2, 1991.

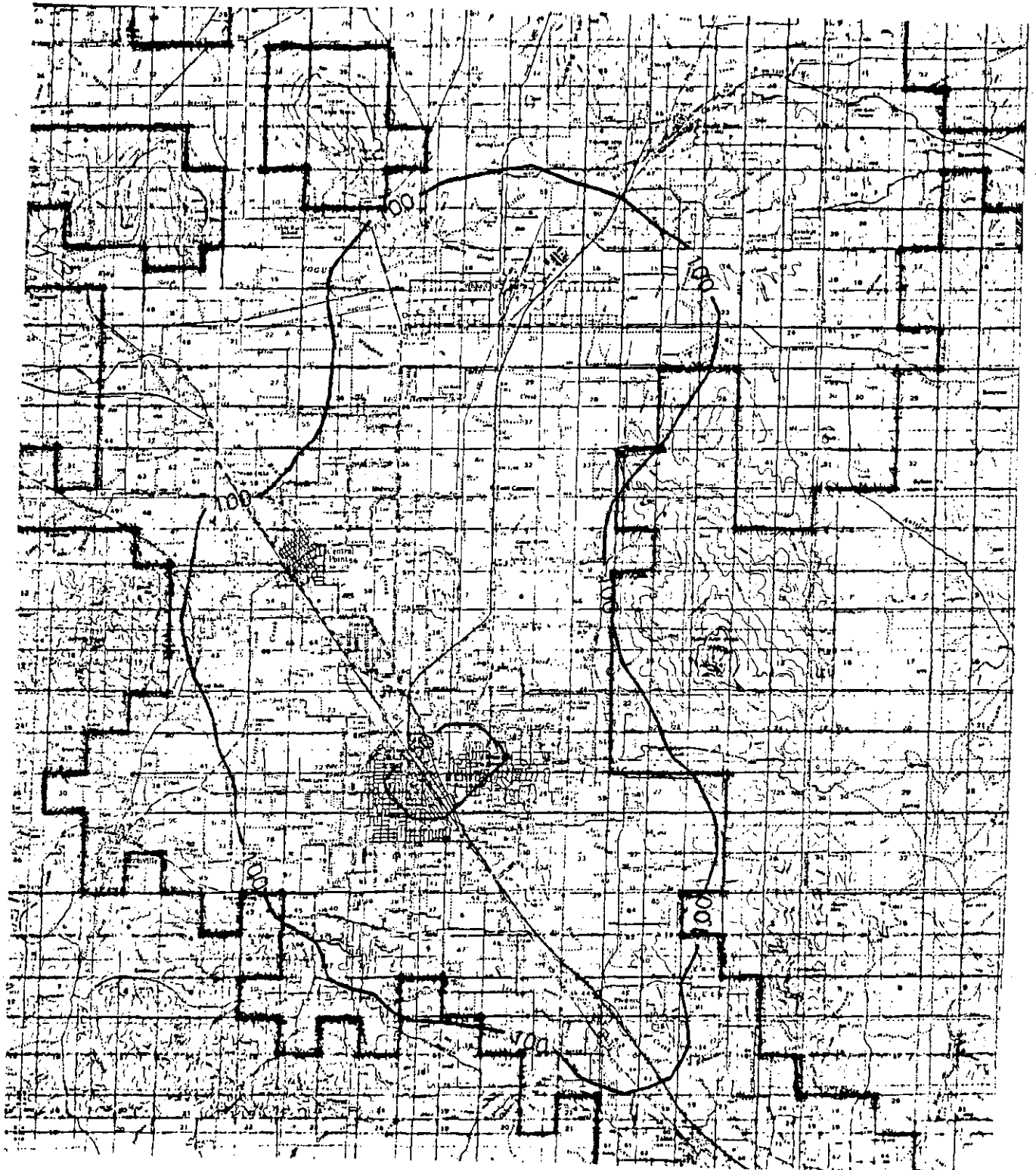


Figure 4.14.6-7: PM_{10} Isopleths, January 4, 1991.

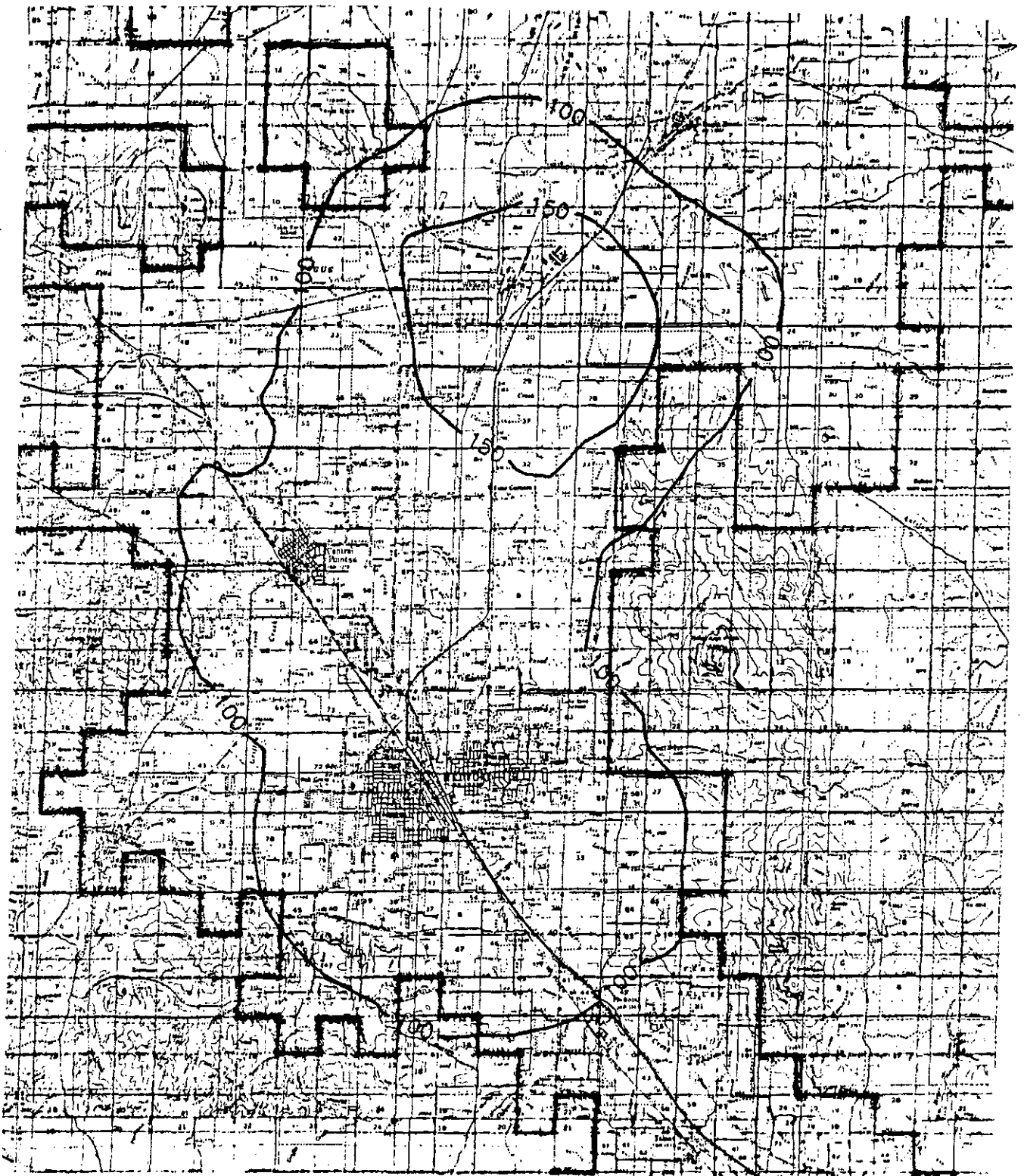


Figure 4.14.6-8: PM₁₀ Isopleths, January 5, 1991.

4.14.6.3 Additional Control Measures in Attainment Strategy

The following additional control measures are included in the Medford-Ashland PM₁₀ attainment strategy:

1. Mandatory residential woodburning curtailment program within the City of Central Point;
2. Ban on installation or sale of noncertified woodstoves in Oregon;
3. More restrictive ventilation index criteria for open burning within the Rogue Basin Open Burning Control Area; and
4. Forestry slash burning restrictions in the Smoke Management Plan.

Residential Woodburning Curtailment

The 1991 Oregon Legislature authorized the Environmental Quality Commission to adopt by rule a mandatory (enforceable) woodburning curtailment program which would be applicable to any area that failed to adopt or implement such a program, if necessary to meet PM₁₀ standards under the Clean Air Act. The curtailment program would apply to woodstoves, fireplaces, and other woodheating devices. The State curtailment program must include at a minimum:

- o A provision for a two stage curtailment program based on the severity of the projected air quality conditions;
- o A provision to exempt all Oregon certified woodstoves from the first stage of curtailment;
- o A provision for low income exemptions;
- o A provisional exemption for sole source woodburning households;
- o An exemption for pelletstoves;
- o A provision for the Department to defer the operation and enforcement of the curtailment program at such time as the local government or regional authority has adopted and is adequately implementing the required curtailment program.

Ambient monitoring of PM₁₀ concentrations and the control strategy attainment analysis confirm that a mandatory curtailment program is needed in Central Point. The Central Point City Council adopted a mandatory curtailment ordinance in December, 1989, but this ordinance was repealed by voters in November, 1990. The Department will implement a mandatory curtailment program in Central Point under the authority of OAR 340-34-150 to -170 unless the City of Central Point adopts and implements an equivalent program as described in OAR 340-34-175.

Installation or Sale of Used Noncertified Woodstoves

The 1991 legislature enacted a ban on the sale and installation of noncertified used woodstoves. As of the effective date of HB2175 (November 5, 1991) no person shall advertise for sale, offer to sell or sell, a used woodstove that was not certified for sale as

new on or after July 1, 1986, under the Oregon Woodstove Certification Program.

Additionally, HB2175 has charged the State Building Codes Agency to amend their administrative rules, prohibiting the installation of noncertified used woodstoves.

Ventilation Criteria for Open Burning

The ventilation index criteria for open burning within the Rogue Basin Open Burning Open Burning Control Area has been revised in OAR 340-23-043 from a 200 index to the more restrictive 400 index. Based on 1983-90 ventilation index data, this will increase the number of "no burn" days from 73 to 149 on an annual basis and from 54 to 83 on a November-February (four-month) seasonal basis. (The actual number of "no burn" days is greater than indicated due to fire safety criteria and seasonal open burning bans in local ordinances.)

Forestry Slash Burning

PM₁₀ emissions from forestry slash burning, both because of the magnitude of the emissions and the proximity of the burning to the nonattainment area, can potentially have a significant impact on air quality within the Medford-Ashland AQMA. Forestry burning is regulated under Oregon law (ORS 477.515) which requires that the State Forester and the Department of Environmental Quality jointly approve a plan to manage smoke from slash burning in areas they designate.

By statute, the Oregon Department of Forestry (ODOF) is responsible for the administration of rules (OAR 629-43-043) and written procedures to assure the protection of air quality. Mandatory, daily burning instructions are issued by ODOF within the Smoke Management Plan's Restricted Area which covers western Oregon (crest of the Cascades west) and the Deschutes National Forest. The objective of the Plan is to prevent smoke resulting from burning on forest lands from being carried to or accumulating in designated areas. The Medford-Ashland AQMA has been set aside as one of these designated areas. The provisions of this program exceed EPA's requirements for Reasonably Available Control Measures (RACM) for forestry smoke management programs.

Provisions included in the Oregon Visibility Protection Plan (OAR 340-20-047, Section 5.2) establish a goal of a 22% reduction in slash burning emissions (relative to 1982-84 levels) by the year 2000. Emission information received from ODOF suggests that this goal has nearly been achieved. Additional major reductions in slash burning emissions are expected to occur within the coming years due to reductions in timber harvest levels on National Forest lands in Western Oregon. As a result, contributions from slash burning to PM₁₀ background air quality and direct impacts of

smoke from forestry burning are expected to decline further in the near future.

While the current Smoke Management Plan meets Clean Air Act requirements, the Department will continue to pursue additional forestry slash burning control measures with the Oregon Department of Forestry (ODOF) which may include establishment of a mandatory Special Protection Zone within which special restrictions would apply during the winter months when woodburning curtailment programs are in effect and violations of NAAQS are most likely. These restrictions may include surveillance and mopup of pile burning within the Zone and restrictions on all burning on woodburning curtailment days within the AQMA. Also under discussion is a contingency measure which would prohibit slash burning within the Zone during the winter months should the Medford-Ashland nonattainment area fail to attain the NAAQS within the deadlines established under the Act and slash burning smoke is implicated as a significant contributor.

Public hearings on revisions to the Smoke Management Plan and adoption of rule changes by the Environmental Quality Commission and the Oregon Board of Forestry is expected in the Fall of 1991. As noted above, the specific revisions to the Plan have yet to be decided.

4.14.6.4 Reasonably Available Control Measures (RACM/RACT) and Best Available Control Measures (BACM/BACT)

The Clean Air Act requires that PM₁₀ control strategies include Reasonably Available Control Measures (RACM). EPA guidance lists control measures that are considered to be RACM and indicates that listed RACM measures must be included in the attainment plan if any of those measures are needed to demonstrate attainment. Otherwise, RACM is to be included in the contingency plan for all significant source categories contributing to PM₁₀ violations. Individual source categories may be excluded from meeting RACM requirements if any such sources do not contribute significantly to the PM₁₀ problem. Also, a specific RACM may be excluded if analysis indicates that the measure would be infeasible to implement. RACM for industrial point sources is referred to as Reasonably Available Control Technology (RACT).

For an area that fails to meet PM₁₀ standards by December 31, 1994, the Clean Air Act requires that the area be redesignated as a "serious" nonattainment area and that a revised PM₁₀ control strategy include additional control measures. EPA guidance indicates Best Available Control Measures (BACM) must be included for all significant source categories contributing to PM₁₀ violations. BACM for industrial point sources is referred to as Best Available Control Technology (BACT).

The Medford-Ashland PM₁₀ control strategy (the combination of the attainment strategy and contingency plan) satisfies the RACM requirements for residential woodburning, fugitive dust and prescribed burning and the RACT requirements for industrial point sources. EPA is scheduled to provide BACM guidance on residential woodburning, fugitive dust and prescribed burning by May 15, 1992. It is anticipated that the Medford-Ashland PM₁₀ control strategy will satisfy most of the BACM requirements for area sources and BACT requirements for industrial point sources.

Reasonably Available Control Measures (RACM) for Urban Fugitive Dust, Residential Wood Combustion and Prescribed Burning are defined by the EPA's April 2, 1991, Memorandum on PM₁₀ Moderate Area SIP Guidance. Further guidance is contained in EPA-450/3-88-008 (September, 1988), Control of Open Fugitive Dust Sources and EPA-450/2-89-015 (September, 1989), Guidance Document for Residential Wood Combustion Control Measures.

Urban Fugitive Dust RACM

EPA guidance requires that the following fugitive dust RACM elements be included in the PM₁₀ SIPs if the source is a significant contributor to PM₁₀ nonattainment and it is economically and technologically feasible to control:

- (1) Pave, vegetate or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads;
- (2) Require dust control plans for construction or land clearing projects;
- (3) Require haul trucks to be covered;
- (4) Provide for traffic rerouting or rapid clean up of temporary (and not readily preventable) sources of dust on paved roads (water erosion runoff, mud/dirt carryout areas, material spills, skid control sand). Delineate who is responsible for clean up;
- (5) Prohibit permanent unpaved haul roads, and parking or staging areas at commercial, municipal, or industrial facilities;
- (6) Develop traffic reduction plans for unpaved roads using speed bumps, low speed limits, etc. to encourage use of other (paved) roads;
- (7) Limit use of recreational vehicles on open land (e.g., confine operations to specific areas, require use permits, outright ban);
- (8) Require improved material specification for and reduction of usage of skid control sand and salt (e.g., require use of coarse, nonfriable material during snow and ice season);
- (9) Require curbing and pave or stabilize (chemically or with vegetation) shoulders of paved roads;
- (10) Pave or chemically stabilize unpaved roads;
- (11) Pave, vegetate, or chemically stabilize unpaved parking areas;
- (12) Require dust control measures for material storage piles;
- (13) Provide for storm water drainage to prevent water erosion onto paved roads;
- (14) Require revegetation, chemical stabilization, or other abatement of wind erodible soil, including lands subjected to water mining, abandoned farms, and abandoned

construction sites; and (15) Rely upon the soil conservation requirements (e.g., conservation plans, conservation reserve) of the Food Security Act to reduce emissions from agricultural operations.

Fugitive dust control measures that have already been adopted by rule are found in OAR 340-21-050 to -060. These rules apply within the Rogue Basin (which includes the Medford-Ashland AQMA) and other special control areas. These rules implement the following fugitive dust RACM measures:

<u>RACM Element</u>	<u>OAR 340-21-060</u>
1	(2) (a)
2,10,11	(2) (b)
3	(2) (f)
4	(2) (g)
12	(2) (c)

In addition, local programs and ordinances in the Medford-Ashland AQMA require implementation of RACM elements (4) (trackout) and (8) (winter road sanding).

Residential Wood Combustion RACM

EPA guidance requires that the state PM₁₀ SIPs include strategies from each of the following four RACM measures:

1. Establish an episode curtailment program, including: a curtailment plan; a communication strategy to implement the plan; a surveillance plan (e.g., "windshield" survey, opacity trigger); and enforcement provisions including procedures, penalties, and exemptions). A voluntary program will be deemed reasonable if the area demonstrates attainment;

The Medford, Jackson County and Central Point mandatory curtailment programs fulfill this requirement. Enforcement procedures, penalties and exemptions are found in the local ordinances and OAR 340-34-150;

2. Establish a public information program to inform and educate citizens about stove sizing, installation, proper operation and maintenance, general health risks of wood smoke, new technology stoves, and alternatives to woodheating;

The public education programs operated by Jackson County, cities within the AQMA, and the Department provide comprehensive information on each of the elements of this RACM measure;

3. Encourage improved performance of woodburning devices by:

- (a) Establishing a program to identify, through opacity observation, deficiencies in stove operation and maintenance. (Under such a program, advice and assistance should be provided to the identified households to help reduce visible emissions from their devices);
- (b) Providing voluntary dryness certification programs for dealers and/or making free or inexpensive wood moisture checks available to burners;
- (c) Evaluating and encouraging, as appropriate, the accelerated changeover of existing devices to new source performance standards or other new technology stoves (e.g., hybrid designs, pelletstoves) by such approaches as subsidized stove purchases tax credits or other incentives.

The curtailment surveillance programs are used to assess compliance rates and to identify homeowners that are operating woodstoves with excessive emissions. Jackson County and Ashland implement opacity limits. In these and other areas, information packets are distributed to households with excessive smoke.

The Jackson County program includes a voluntary cordwood certification program implemented through local fire districts.

Accelerated changeover is encouraged through financial assistance Project CLEAR and the SOLVE Program.

4. Provide inducements that would lead to reductions in the stove and fireplace population (or use) by:

- (a) Encouraging a reduction in the number of woodburning devices (i.e., removing or disabling the devices) through tax credits or other incentives;
- (b) Discouraging the resale of used stoves through taxes, fees or other incentives;
- (c) Discouraging the availability of free (or very inexpensive) firewood by increasing cutting fees or limiting the cutting season; or
- (d) Slowing the growth of woodburning devices in new housing units by taxes, installation permit fees, or other disincentives.

Sole-source exemptions in the curtailment programs, if not also low-income, are scheduled for sunseting. OAR 340 Division 34 includes, as a contingency measure, removal of noncertified stoves upon home sale.

Jackson County and Medford ordinances ban the installation of noncertified woodstoves. OAR 340 Division 34 includes a ban on the sale of used woodstoves.

Prescribed Burning RACM

EPA guidance requires that RACM measures from prescribed burning (slash burning) be included where it is shown that prescribed burning is or does contribute significantly to PM₁₀ exceedances within the nonattainment area. The guidance specifies that such a program must include: (1) smoke dispersion forecasts based (at minimum) on National Weather Service data; (2) a process for preparation and approval of burn plans; (3) availability of training programs for burners; (4) a public information program; (5) provisions for surveillance and enforcement of any mandatory requirements; (6) development of emission inventories; and (7) State oversight of the smoke management programs.

Oregon's forestry smoke management program administered by the Oregon Department of Forestry (ODOF) exceeds all of the above RACM requirements for the nonattainment area within Western Oregon. Smoke dispersion forecasts are issued daily by ODOF's smoke management center are based on NWS and local weather data. The program requires the preparation and approval of burn plans prior to ignition. Training is provided each year by ODOF staff to all burners. For Federal employees, this training is supplemented by training programs offered by the US Forest Service, the Bureau of Land Management and the National Park Service. ODOF and the Federal agencies all offer information on their programs to the public. Air monitoring surveillance is provided through the Department's programs and through aircraft plume tracking conducted by those conducting the burning. The program is enforced by ODOF Forest Practices foresters located in offices throughout the State. Emission inventories are developed in cooperation with ODOF using state of the art fuel consumption models. The Department oversees ODOF's program through periodic reviews and through ORS 477.515 which requires that the Director of the Department approve the program.

Industrial RACT

The Medford-Ashland industrial rules in OAR 340 Division 30 meet or exceed the RACT requirements. In addition to the RACT already required in the Medford-Ashland area, a feasibility study (adequacy of wintertime natural gas supply, modification costs and technical need/feasibility) on the dual-fueling of all large wood-fired boilers in the Medford-Ashland AQMA will be conducted by July 1, 1994.

4.14.6.5 Contingency Plan Commitments

The Clean Air Act requires that the State Implementation Plan include contingency measures for significant sources of PM₁₀. These measures are to take effect without any further action by the State if the area fails to attain the PM₁₀ standard by the attainment date required by the Act. Accordingly, the following measures are included as contingency measures which will only take effect upon publication by EPA in the Federal Register that the area has failed to attain the PM₁₀ air quality standard by the required attainment date. Depending on the effectiveness of the control strategies, EPA could make this determination in 1994 or subsequent years.

The contingency plan consists of residential woodburning, industrial, and open burning elements. The specific contingency plan elements that would go into effect, if the Medford-Ashland AQMA fails to meet PM₁₀ standards by the Clean Air Act deadline, include:

1. Backup authority for DEQ to implement residential woodburning curtailment programs where necessary to meet PM₁₀ standards;
2. Requirement for noncertified woodstove removal upon home sale;
3. If found to be technologically and economically feasible, dual fueling of large wood-fired boilers, with alternate fuel to be used during woodburning curtailment periods; and
4. Open burning ban during November through February.

Residential Woodburning Curtailment

As discussed under Section 4.14.6.3, the 1991 Oregon Legislature authorized the Environmental Quality Commission to adopt by rule a mandatory woodburning curtailment program which would be applicable to any area that failed to adopt or implement such a program, if necessary to meet PM₁₀ standards under the Clean Air Act.

Noncertified Woodstove Removal Upon Home Sale

HB2175, passed by the 1991 Oregon Legislature, requires that after December 31, 1994, all noncertified woodstoves, except antique and cookstoves, be removed and destroyed upon sale of a home in any PM₁₀ nonattainment area that does not meet PM₁₀ standards by that date. This requirement would increase the current normal replacement rate of noncertified stoves by 3-5% per year.

Industrial RACT Requirements

The industrial contingency plan is adopted as OAR 340-21-200 through 340-21-240. The 1990 Clean Air Act requires Reasonably Available Control Technology (RACT) in the control strategy if it is needed to demonstrate attainment, and otherwise requires RACT in the contingency plan. The industrial contingency elements in Division 21 satisfy RACT requirements for industrial sources of PM₁₀ emissions which are not otherwise subject to RACT under state-wide standards. The Medford-Ashland industrial rules in OAR 340 Division 30 meet or exceed the RACT requirements in the Industrial Contingency Plan.

In addition to the RACT already required in the Medford-Ashland area, a feasibility study (adequacy of wintertime natural gas supply, modification costs and technical need/feasibility) on the dual-fueling of all large wood-fired boilers in the Medford-Ashland AQMA will be conducted by July 1, 1994. If found to be technologically and economically feasible, dual fueling of large wood-fired boilers, with alternate fuel to be used during woodburning curtailment periods, will be proposed through the normal EQC rulemaking process in 1994-95. Implementation of this measure is dependent on the scientifically defensible need for such a program.

Seasonal Ban on Open Burning

If the Medford-Ashland AQMA fails to meet PM₁₀ standards by the Clean Air Act deadline, all open burning will be prohibited by OAR 340-23-090 within the Rogue Basin Open Burning Control Area during November, December, January, and February unless specifically authorized by letter permit pursuant to 340-23-100.

Seasonal Restrictions on Slash Burning

Additional forestry slash burning measures, while not required by the Clean Air Act, are being discussed with the Oregon Department of Forestry which may include establishment of a mandatory Special Protection Zone within which special restrictions would apply during the winter months when woodburning curtailment programs are in effect and violations of NAAQS are most likely. These restrictions may include a contingency measure which would prohibit slash burning within the Zone during the winter months should the Medford-Ashland nonattainment area fail to attain the NAAQS within the deadlines established under the Act and slash burning smoke is implicated as a significant contributor.

Public hearings on revisions to the Smoke Management Plan and adoption of rule changes by the Environmental Quality Commission and the Oregon Board of Forestry is expected in the Fall of 1991. As noted above, the specific revisions to the Plan have yet to be decided.

Emission Reductions From Contingency Measures

The attainment plan is projected to reduce PM₁₀ emissions by about 874 tons per year between the 1985-86 base year and the 1992-94 projected attainment period. Some control measures in the attainment plan will continue to provide emission reductions after 1994; the contingency plan, if triggered, would also provide additional emission reductions after 1994.

The woodstove certification program will provide a 94 ton per year net reduction (accounting for increased firewood use due to population growth) in residential woodburning emissions between the years 1994 and 2000. Woodstove emissions would be reduced an additional 160 tons per year by the year 2000 due to the requirement in the contingency plan for removal and destruction of non-certified woodstoves upon home sale.

Industrial emissions will be reduced an unquantified amount as a result of the increased source testing and continuous emission monitoring (CEM) requirements in the attainment plan; the actual emission reductions may be quantifiable after the CEM program is fully implemented. [For example, a 10% CEM industrial reduction would reduce emissions by an additional 100 tons per year.] Industrial controls installed in the Medford-Ashland area already meet or exceed the RACT requirements so no additional RACT emission reductions are included in the contingency plan. The emission reductions from dual fueling of large wood-fired boilers will depend on the degree of dual fueling that is determined technologically and economically feasible in the scheduled study. The November 1994 implementation of industrial emission fees (\$25 per actual ton of emissions) to meet the Clean Air Act Title V requirements will provide a market incentive for voluntary additional (but unquantifiable at this time) industrial emission reductions.

Additional contingency plan reductions which cannot be quantified by the emission inventory would be achieved through seasonal restrictions on open burning and additional slash burning emission reductions.

The additional PM₁₀ emission reduction from the above contingency and other control measures would be over 254 tons per year. This represents a potential 29% or more additional emission reduction compared to the 874 ton per year emission reduction in the attainment plan.

4.14.6.6 Additional Rules and Regulations

The following rules and regulations are supplementary to those included in the State Implementation Plan adopted by the Environmental Quality Commission in January 1991 (Section 4.14.4.2). In addition to the following, the statutory ban on

installation of used noncertified woodstoves will be codified into State rules by the Building Codes Agency.

<u>OAR</u>	<u>Subject</u>
340-21-005 to -240	Industrial Contingencies, RACT Control Requirements
340-23-043	Revised Open Burning Rules, More Restrictive Ventilation Criteria
340-23-090	Open Burning Contingency, Seasonal Ban on Open Burning
340-30-115	Dual-fuel Feasibility Study for Wood-waste Boilers
340-34-010	Ban on Sale of Noncertified Woodstoves Statewide
340-34-150	Backup Authority for Woodburning Curtailment Programs
340-34-200	Removal of Woodstove Upon Home Sale (Contingency Measure)

4.14.6.7 Lead Agency Designation

Governor Roberts has designated the Department of Environmental Quality as the lead agency to implement, maintain and enforce the requirements of the Clean Air Act regarding PM₁₀ pollution.

4.14.6.8 Resource Commitments

Residential woodburning programs are being implemented by local and State governments. Jackson County has budgeted about \$125,000 for FY92 to operate public information programs, the daily woodburning advisory, mandatory curtailment program including field surveillance and enforcement, and progress reporting. The City of Medford has budgeted about \$24,000 for FY92 to operate its mandatory curtailment program. The City of Ashland has budgeted over \$20,000 for FY92 for woodburning related programs. Central Point has about \$5,000 available to operate its voluntary curtailment program. DEQ operates the air monitoring network used by Jackson County for the daily woodburning advisory, to provide public information assistance, and to administer the woodstove certification program; these services are part of the statewide DEQ base program identified in the State/EPA Agreement.

Financial assistance programs are available through Project CLEAR and the SOLVE Program to assist low-income households in weatherization and replacement of conventional woodstoves with cleaner burning units; about \$1.5 million has been raised to date.

Industrial compliance assurance programs are implemented by DEQ as part of the statewide base program; resources are identified in the State/EPA Agreement. Open burning control programs are

implemented by local fire departments, Jackson County and DEQ as part of base programs.

Forestry slash burning programs are administered by the Oregon Department of Forestry as part of base programs.

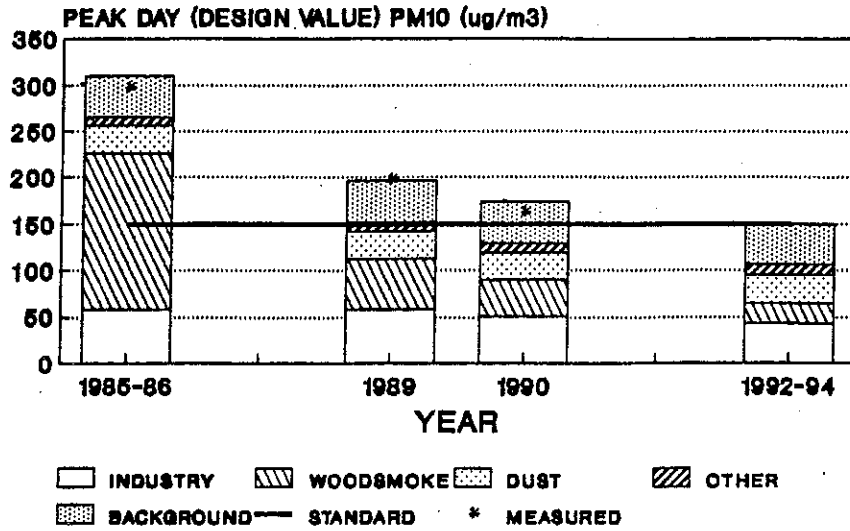
4.14.6.9 Reasonable Further Progress

Part D of Title I of the Clean Air Act Amendments of 1990 (Section 171) requires that State Implementation Plans for PM₁₀ make Reasonable Further Progress (RFP) toward attainment of the National Ambient Air Quality Standards (NAAQS). The Act further specifies that RFP means those annual incremental reductions of PM₁₀ emissions necessary to attain the NAAQS by the attainment date. The Department believes that the scheduled implementation of the provisions of the Medford-Ashland PM₁₀ SIP and attainment of the NAAQS within the Medford-Ashland nonattainment area fulfill the RFP requirement of the Act. PM₁₀ concentrations have improved substantially since 1989 with the implementation of key elements of the control strategy. PM₁₀ monitoring by the Department and woodburning curtailment compliance surveys by Jackson County from 1985 to present indicate that the strategy is on track to meet standards by 1992-94. Figure 4.14.6-9 compares the actual measured annual and peak-day concentrations (asterisks) to the projected concentrations based on dispersion modeling, chemical fingerprinting, and compliance surveys (bars).

4.14.6.10 Plan Revision Provisions

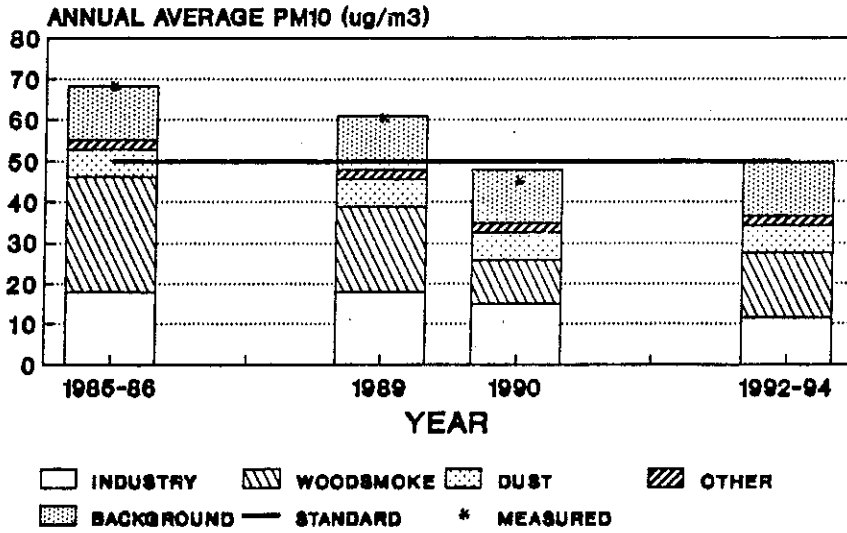
In the event that the Medford-Ashland area fails to meet Reasonable Further Progress milestones, or the applicable PM₁₀ attainment deadline, then the Department, as the designated lead agency, will first notify in writing the affected local governments and industrial organizations. Within 30 days of notification, the Department will complete a written analysis of control strategy commitments, evaluating the adequacy of implementation. Any deficiencies in implementation will be corrected through rulemaking, if necessary, within six months of the original deficiency notification. The six-month timeframe will accommodate the State's normal rulemaking process. Additionally, affected parties will be notified of the requirement to implement expeditiously the contingency measures, if necessary. As the lead agency, the Department will submit a plan revision that meets all relevant Clean Air Act and EPA requirements within 18 months of a notification from EPA that the area has failed to meet the attainment deadline and has been reclassified as a "serious" nonattainment area. The revision will include provisions to ensure that the Best Available Control Measures (BACM/BACT) for the control of PM₁₀ shall be implemented no later than four years after the area is reclassified as a "serious" nonattainment area.

MODELED MEDFORD PM10 IMPACTS COMPARED TO MEASURED AIR QUALITY LEVELS



WELCH/JACKSON MONITORING SITE

MODELED MEDFORD PM10 IMPACTS COMPARED TO MEASURED AIR QUALITY LEVELS



WELCH/JACKSON MONITORING SITE

Figure 4.14.6-9: Measured vs. Projected PM₁₀ Concentrations.

4.14.6.11 Reviewing and Permitting New Sources

The New Source Review rules (OAR 340-20-220 to -276) and Air Contaminant Discharge Permit rules (OAR 340-20-140 to -185) identify the procedures for reviewing and permitting new sources. The significant emission rate for PM₁₀ emissions in the Medford-Ashland Air Quality Maintenance Area (AQMA) is five tons per year or ten pounds per hour (OAR 340-20-225, Table 2). The Emission Offsets rule (OAR 340-30-111) identifies the 1.2:1 offset ratio required in the Medford-Ashland AQMA. The Medford-Ashland AQMA was designated as a PM₁₀ nonattainment area by the Environmental Quality Commission in January 1991.

4.14.6.12 Public Involvement Update

Public hearings were held on the Medford-Ashland PM₁₀ SIP in Medford on August 6 and September 12, 1990. Notices were published in the Secretary of State Bulletin on July 1, 1990, in the Medford Mail Tribune on August 5 and 10, 1990, and in the Ashland Daily Tidings on August 4, 1990. The State Clearinghouse initiated the intergovernmental review process on August 3, 1990. The Medford-Ashland PM₁₀ SIP was adopted by the Environmental Quality Commission on January 31, 1991.

Public hearings were held on the addendum to the Medford-Ashland PM₁₀ SIP in Medford on September 30, 1991, and in other Oregon cities during September 26 to October 1, 1991. Notices were published in the Secretary of State Bulletin on September 1, 1991, and in various newspapers at least 30 days prior to the hearings. The A-95 State Clearinghouse initiated the intergovernmental review process over 45 days prior to adoption of the addendum by the Environmental Quality Commission.

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(10/29/91)

**RULEMAKING STATEMENTS FOR PROPOSED MEDFORD-ASHLAND
PM₁₀ CONTROL STRATEGY AS A REVISION TO THE
STATE OF OREGON CLEAN AIR ACT IMPLEMENTATION PLAN**

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-20-047. It is proposed under authority of Oregon Revised Statutes (ORS) Chapter 468.

(2) Need for these Rules

The Medford-Ashland Air Quality Maintenance Area (AQMA) violates federal and state PM₁₀ air quality health standards. PM₁₀ refers to particulate matter ten micrometers or smaller in diameter. PM₁₀ particles are considered a risk to human health due to the body's inability to effectively filter out particles of this size.

The federal Clean Air Act requires that states develop and adopt State Implementation Plan (SIP) revisions to assure that areas which violate the PM₁₀ standards are brought into attainment with those standards within prescribed time frames. A contingency plan is also required to be developed and automatically implemented if the area fails to meet the deadline. The proposed control strategy document describes the State of Oregon plan to attain and maintain the annual and 24-hour PM₁₀ standards in the Medford-Ashland AQMA.

The principal means of achieving the necessary air quality improvements is through PM₁₀ emission reductions from woodstoves and fireplaces, the wood products industries, open burning of debris, slash burning, and road dust.

(3) Principal Documents Relied Upon

The Clean Air Act Amendments of 1990, Title I. 42 U.S.C. 7401 et seq., as amended. November 15, 1990.

PM₁₀ SIP Development Guideline, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, June 1987, EPA-450/2-86-001.

Report of the Jackson County Woodburning Task Force, December 1987, Jackson County Department of Planning and Development, Medford, Oregon.

Previous staff reports to the Environmental Quality Commission (EQC):

Agenda Item D, January 22, 1988, EQC Meeting, Informational Report: New Federal Ambient Air Quality Standard for Particulate Matter (PM₁₀) and Its Effects on Oregon's Air Quality Program.

Agenda Item H, November 4, 1988, EQC Meeting, Request for Authorization to Conduct Public Hearings on New Industrial Rules for PM₁₀ Emission Control in the Medford-Ashland AQMA and Grants Pass and Klamath Falls Urban Growth Areas (Amendments to OAR 340, Divisions 20 and 30).

Agenda Item E, September 8, 1989, EQC Meeting, Industrial PM₁₀ Rules for Medford-Ashland and Grants Pass: Adoption of New Industrial Rules That Were Taken to Public Hearings in January 1989.

Agenda Item G, June 29, 1990, EQC Meeting, Request for Authorization to Conduct Public Hearing on PM₁₀ Air Pollution Control Strategy for the Medford-Ashland AQMA (Amendments to OAR 340-20-047).

Agenda Item D, January 31, 1991, EQC Meeting, PM₁₀ Air Pollution Control Strategy for the Medford-Ashland AQMA: Adoption of SIP Revisions That Were Taken to Public Hearings in August and September 1990.

Guidance Document for Residential Wood Combustion Emission Control Measures, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park NC, September 1989, EPA-450/2-89-015.

All documents referenced may be inspected at the Department of Environmental Quality, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, during normal business hours.

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(10/14/91)

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR PROPOSED MEDFORD-ASHLAND PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN**

PROPOSAL SUMMARY

The implementation of the Medford-Ashland PM₁₀ control strategy involves residents, industries, local governments, and state and federal agencies. The two groups most affected by the proposed PM₁₀ control strategy are the owners/operators of wood products industries and residents with woodstoves or fireplaces.

No adverse fiscal impact on small businesses (less than 50 employees) is anticipated. Heating system dealerships may benefit from the woodstove-removal-upon-sale contingency element as well as the phaseout of woodburning curtailment exemptions required by local ordinances.

COSTS TO WOOD PRODUCTS INDUSTRIES

Wood products industry emissions will be reduced by additional control requirements on veneer driers and large wood-fired boilers at plywood plants, more extensive source testing and continuous emission monitoring in order to maximize performance of pollution control equipment, and more restrictive emission offset requirements to insure a net air quality benefit from any new or expanded industries. The new industrial emission control and monitoring requirements will result in estimated capital costs of about \$9-14 million; there will also be related increases in maintenance costs, but those costs are more difficult to quantify. Industrial PM₁₀ rules to implement these requirements were adopted by the Environmental Quality Commission (EQC) in September 1989 and incorporated into the Medford-Ashland PM₁₀ Control Strategy adopted by the EQC as a SIP revision on January 31, 1991.

If the Medford-Ashland area fails to attain the air quality standards by the Clean Air Act deadline of December 31, 1994, some additional wood products industry emission reductions will be required under the contingency plan. The contingency plan for industrial emission control requirements within the Medford-Ashland AQMA will result in an estimated capital cost of about \$1.3 million with related maintenance costs of roughly \$0.3 million per year. Details are discussed in the proposed Industrial RACT/BACT Rule fiscal impact statement (OAR 340-21-005 to 250).

COSTS TO RESIDENTS WITH WOODSTOVES OR FIREPLACES

Woodstove and fireplace emissions will be reduced by an expanded public information program, an areawide local mandatory woodburning curtailment program, the Oregon woodstove certification program, financial assistance programs for replacement of existing woodstoves with cleaner burning units and weatherization of homes, a ban on installation of non-certified woodstoves, and continued improvements in firewood seasoning and woodstove operation.

The typical cost of woodburning curtailment is estimated at \$2-4 per curtailment day per woodburning home, depending primarily on the type of alternative heat, amount of weatherization, and size of home. Economic, sole-source and certified-stove exemptions are available to qualifying households. Up to 12,000 homes in the critical PM₁₀ control area would be affected about 22 red days and 14 yellow days per year (five-year average, 1985-1990). Based on these estimates, the initial total annual homeowner cost associated with the mandatory curtailment program would be up to \$0.9-1.7 million, decreasing to \$0.3-0.7 million or less as non-certified woodstoves are replaced with cleaner burning units.

Costs associated with the ban on the sale and installation of used noncertified woodstoves is discussed in the fiscal impact statement for the proposed rule (OAR 340-34-010).

Costs associated with the contingency plan element requiring the removal of woodstoves from homes upon sale is discussed in the fiscal impact statement for the proposed rule (OAR 340-34-200).

The above costs are somewhat offset by local financial assistance programs. The CLEAR (Coordinated Local Effort for Air Resources) Project of the Housing Authority of Jackson County and ACCESS, Inc. are providing assistance to low-income families for home weatherization and replacement of existing woodstoves with cleaner burning units. Approximately \$2.0 million of funding has been secured thus far through Community Development Block Grants, Regional Strategies Funds, Oil Overcharge Settlement Funds, and utility company rebates. The City of Ashland has budgeted \$64,494 for the first year of the SOLVE (Save Our Liveability, View and Environment) Program to replace existing woodstoves and weatherize homes.

COSTS TO STATE AND LOCAL GOVERNMENT AGENCIES

The new industrial emission control and monitoring requirements will require additional plan reviews, permit modifications, inspections, monitoring report reviews, and other compliance assurance activities by Department of Environmental Quality staff. This additional work will be integrated into the permit

program and fee structure.

The daily decision on woodburning curtailment programs will be based on air quality information from the Department's existing air monitoring network and meteorological information from the National Weather Service. The daily woodburning decision (red, yellow, or green call) will be made by the Jackson County Health Department. Public information programs will be done by Jackson County and cities within the AQMA with DEQ or subcontractor assistance. The compliance assurance surveys, exemption permitting and enforcement activities for the woodburning curtailment programs will be conducted by local government staff of Jackson County and affected cities within the AQMA. Depending on whether or not a local ordinance is adopted, DEQ may be involved in implementing a mandatory curtailment program in Central Point. Some grant funds from the U.S. Environmental Protection Agency (EPA) may be available to help support these programs.

Jackson County has budgeted about \$105,000 for the next year for an air quality coordinator, three part-time technicians, one part-time clerical assistant, and the public information program. The City of Medford has budgeted about \$24,000 for its air quality program during the next heating season. The City of Ashland has budgeted \$64,494 for the first year of the SOLVE Program. These local governments, and other cities within the AQMA, will also shift existing resources as necessary to handle the workload associated with the air quality programs.

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(8/14/91)

NOTICE OF PUBLIC HEARING

Hearing Dates: September 26,
27, 30 & October
1, 1991

Comments Due: October 2, 1991

WHO IS AFFECTED:

Individuals, especially those with woodstoves, and board product industries statewide, local governments, agricultural operations and industries in or near the Medford-Ashland, Klamath Falls, Grants Pass and La Grande PM₁₀ Nonattainment Areas.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the State of Oregon Clean Air Act Implementation Plan to:

- o Revise fine particulate (PM₁₀) Pollution Control Strategies for the Medford, Grants Pass and Klamath Falls areas;
- o Add a new PM₁₀ Control Strategy for the La Grande area;
- o Add new regulations for woodstoves, OAR Chapter 340, Division 34;
- o Add new contingency industrial particulate emission standards for PM₁₀ nonattainment areas, OAR Chapter 340, Division 21;
- o Revise the Medford/Grants Pass Particulate Standard Rules, OAR Chapter 340, Division 30;
- o Revise Board Products Particulate Emission Standard Rules, OAR Chapter 340, Division 25;
- o Revise Ambient Air Standard Rules, OAR Chapter 340, Division 31;
- o Revise Rogue Basin Open Burning Control Area rules, OAR Chapter 340, Division 23.

WHAT ARE THE HIGHLIGHTS:

The federal Clean Air Act requires states to submit PM₁₀ attainment Control Strategies for PM₁₀ Nonattainment Areas to the U.S. Environmental Protection Agency (EPA) by November 15, 1991. The Control Strategies specify how federal PM₁₀ air quality standards will be attained by the Act's deadline of December 31, 1994. They primarily rely on controlling PM₁₀ emissions from residential woodheating, industry and open burning.

ATTACHMENT D

The proposed rules which would implement PM₁₀ Control Strategies will:

- o Regulate residential woodheating according to new legislative authority including:
 - > Banning the sale of used, uncertified woodstoves statewide;
 - > allowing DEQ to prohibit woodheating on poor air quality days if local governments fail to adopt or implement such programs where needed;
 - > Requiring the destruction of uncertified woodstoves upon the sale of a home as a contingency measure if an area fails to attain compliance with the PM₁₀ standard by December 31, 1994.
- o Require industries in PM₁₀ nonattainment areas to meet Reasonably Available and Best Available Control Technology requirements of the Clean Air Act as a contingency measure if areas fail to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Require tighter meteorological criteria for allowing open burning in the Rogue Basin Open Burning Control Area, and ban open burning from November through February in this area as a contingency if it fails to attain compliance with the PM₁₀ standard by the Clean Air Act deadline.
- o Address housekeeping/enforceability issues raised by EPA with respect to existing state regulations covering the Board Products Industry, Medford/Grants Pass Industrial Particulate Emission and Ambient Air Standards.

HOW TO COMMENT:

Copies of the complete proposed rule packages may be obtained from the Air Quality Division at 811 S.W. Sixth Avenue, Portland, OR 97204, or the regional office nearest you. For further information, call toll free 1-800-452-4011 (in Oregon), or contact:

Merlyn Hough at (503) 229-6446 (Medford-Ashland)
John Core at (503) 229-5380 (Klamath Falls)
Howard Harris at (503) 229-6086 (Grants Pass)
Brian Finneran at (503) 229-6278 (La Grande)
Andy Ginsburg at (503) 229-5581 (Industry)
David Collier at (503) 229-5177 (Woodstoves)

Public hearings will be held before a hearings officer at:

7:00 pm
September 26, 1991
Commission Hearing Room
Courthouse Annex
Klamath Falls, Oregon

7:00 pm
September 30, 1991
Smullin Center Auditorium
Rogue Valley Medical Ctr.
Medford, Oregon

7:00 pm
September 27, 1991
City Council Chambers
101 NW "A" Street
Grants Pass, Oregon

7:00 pm
October 1, 1991
City Hall
1000 Adams Avenue
La Grande, Oregon

3:00 pm
October 1, 1991
DEQ Offices
811 SW Sixth Avenue
Portland, Oregon

Oral and written comments will be accepted at the public hearings. Written comments may be sent to the DEQ, but must be received no later than 5 pm, October 2, 1991.

WHAT IS THE NEXT STEP:

After public hearings, the Environmental Quality Commission may adopt rule amendments and Control Strategies identical to the proposed amendments, adopt modified rule amendments and Control Strategies on the same subject matter, or decline to act. The adopted rules and Control Strategies will be submitted to the EPA as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come on November 7, 1991, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

YM:a
RPT\AH15041
(8/14/91)

168.300

PUBLIC HEALTH AND SAFETY

(2) in determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(l) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.783]

468.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.825]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.782]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register

**Summary of Proposed PM₁₀ Control Strategy
Medford-Ashland Air Quality Maintenance Area (AQMA)**

Who? When? Key: L=Local Government, S=State Agency,
E=Existing Strategies, N=New Strategies,
C=New Contingency Plan

Residential Woodburning Controls:

L/S	E	Woodburning public education program;
L	E	Voluntary cordwood seasoning program;
L	E	Financial assistance programs to assist low-income households in weatherization and replacement of conventional woodstoves with cleaner burning units (Project CLEAR and SOLVE Program, about \$1.5 million raised to date);
L	E	Mandatory woodburning curtailment to achieve 85% compliance during air stagnation episodes in the PM ₁₀ Critical Control Area;
L	E	Ban on installation of non-certified woodstoves in Medford and the unincorporated portion of the AQMA;
S	E	EPA\DEQ certification program for new woodstoves;
S	N	Backup authority from 1991 Legislature for DEQ to adopt mandatory curtailment programs in the event that local governments fail to adopt, implement or enforce local ordinances (in November 1990, Central Point voters repealed their mandatory curtailment program);
S	N	Statewide ban from 1991 Legislature on the sale and installation of used, non-certified woodstoves;
S	C	State backup authority from 1991 Legislature to require removal of non-certified woodstoves upon sale of property.

Fugitive Dust Controls:

- L E Winter road sanding emissions reduced through use of pea gravel aggregate and rapid cleanup;
- L E Mandatory prevention or cleanup of trackout from unpaved areas onto roadways;
- L E Financial assistance programs to pave unpaved roads and curb unpaved shoulders on paved roads.

Open Burning Controls:

- L E Year-round ban on open burning in the City of Medford;
- L E Seasonal bans on open burning and restrictive ventilation index criteria in other cities and in Jackson County within the AQMA;
- S E Ban on commercial, industrial and land-clearing open burning within the Rogue Basin Open Burning Special Control Area;
- S E Mandatory forestry smoke management program in the Restricted Area (area west of crest of Cascades plus the Deschutes National Forest) limiting slash burning to times and locations that smoke is not expected to impact designated areas such as the Medford-Ashland AQMA;
- S E Voluntary forestry smoke management program to restrict all BLM slash burning within 30 miles of the Medford-Ashland AQMA on red residential woodburning curtailment days;
- S N Revision of the ventilation criteria for the Rogue Basin Open Burning Special Control Area from the current 200 index to the more restrictive 400 index;
- S C Ban on open burning within the Rogue Basin Open Burning Control Area during November, December, January, and February.

Who? When? Key: L=Local Government, S=State Agency,
E=Existing Strategies, N=New Strategies,
C=New Contingency Plan

Industrial Controls:

- | | | |
|---|---|--|
| S | E | More restrictive AQMA industrial rules than the statewide requirements for particle dryers, fiberboard plants, charcoal furnaces, air conveying systems, large wood-fired boilers, wigwam burners, operation and maintenance, fugitive emissions, and source testing (implemented during 1978-84); |
| S | E | New industrial rules adopted in 1989 to require additional air pollution controls on veneer dryers and large wood fired-boilers; |
| S | E | Additional continuous emission monitoring and periodic source testing requirements on industrial sources to maximize performance of control equipment and minimize emissions; |
| S | E | More restrictive offset requirements for new or expanded industrial operations; |
| S | N | Feasibility study on dual-fueling of large wood-fired boilers. |
| S | C | Tightening of industrial rules for air conveying systems and charcoal plants to insure meeting RACT/BACT or better emission control; |
| S | C | If determined feasible, dual-fueling on large wood-fired boilers, with the alternate fuel to be used on red or yellow days. |

EQC\MFRSIP.ATF
RPT\AH20087
(10/18/91)

DEQ LAND USE EVALUATION STATEMENT
FOR RULEMAKING

PROPOSED MEDFORD-ASHLAND PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN

(1) Explain the purpose of the proposed rules.

The purpose of the proposed revision to the State Implementation Plan (SIP) is to assure that the Medford-Ashland area attains the PM₁₀ standards within the time frames prescribed by the federal Clean Air Act Amendments of 1990. The control strategy includes a compilation of existing and proposed state and local rules and commitments which become federally enforceable upon adoption of the SIP revisions by the Environmental Quality Commission and approval of the SIP revisions by the U.S. Environmental Protection Agency.

(2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes No

(a) If yes, identify existing program/rule/activity:

The control strategy includes concurrently proposed new industrial PM₁₀ emission standard rules and other related house-keeping measures which affect a land use program identified as "Issuance of Air Contaminant Discharge Permits (ACDP)".

No other concurrently proposed new provisions of the control strategy are:

- (1) Specifically referenced in the statewide planning goals; or
- (2) Reasonably expected to have significant effects on:
 - (a) resources, objectives or areas identified in the statewide planning goals, or
 - (b) present or future land uses identified in acknowledged comprehensive plans.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes No


If no, explain: Not Applicable.

(c) If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

Not Applicable.

- (3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not Applicable.


Division


Intergovernmental Coor.

10-21-91
Date

ADG:a
MISC\AH19059
(9/9/91)

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMORANDUM

DATE: October 24, 1991

TO: Environmental Quality Commission
FROM: Linda Wishart, Hearings Officer *LW*
SUBJECT: Hearings Report for Medford-Ashland PM₁₀ Control Strategy

Five hearings were held to accept testimony on four PM₁₀ Control Strategies and three supporting rule packages required to meet the Clean Air Act November 15, 1991, deadline for PM₁₀ State Implementation Plan revisions. These hearings were authorized by the Environmental Quality Commission at an August 22, 1991, telephone conference.

On September 26, 1991 a public hearing, held in the Commission Hearing Room of the Courthouse Annex, Klamath Falls, Oregon, was attended by 24 persons; 15 gave oral comments, and 7 submitted written comments.

On September 27, 1991, a public hearing was held at the City Council Chambers, 101 NW "A" Street, Grants Pass, Oregon. There were nine persons in attendance, one gave oral testimony and two submitted written comments.

On September 30, 1991, a public hearing was held at the Smullin Center Auditorium of the Rogue Valley Medical Center, Medford, Oregon. Of the 34 persons present, 15 gave oral testimony and 13 submitted written comments.

On October 1, 1991, a public hearing, held in Zabel Hall, room 110, Eastern Oregon State College, La Grande, Oregon, was attended by 21 persons; five gave oral comments, four submitted written comments.

On October 1, 1991, a public hearing was held at the conference room of the Oregon Operations office of the U.S. Environmental Protection Agency (EPA), 811 SW Sixth Avenue, Portland, Oregon. Four people attended. Three gave oral testimony. No written testimony was received.

Additional testimony was received prior to the October 2, 1991 deadline. Copies of written comments have been provided to the Environmental Quality Commission. The following is a summary of all comments received, both oral and written.

Medford-Ashland Control Strategy

No.	Testimony Summary/Issues	Whose Comment
1.	<p>Several people indicated the current air quality situation in the Medford-Ashland Air Quality Maintenance Area (AQMA) is unacceptable. They also expressed concern that the proposed plan will not be adequate to fully meet health standards.</p>	
	<p>a. Citizen support and cooperation has resulted in a reduction of PM10 levels, but a more aggressive plan is needed for attainment.</p>	M6, M10
	<p>b. SIPs have been weakened by negotiations and when finally adopted are ignored and unenforced.</p>	M10
	<p>c. Health risks associated with PM10 were documented in a March 1991 study on school children in Klamath Falls. The number of asthma patients is increasing in this area.</p>	M10, M15
	<p>d. Consideration of costs to health have been preceded by consideration to control costs for industry. <u>Forced</u> restrictions on industry will result in progressive, innovative technology and better health. To this end, BACT will direct the cost back to industry.</p>	M3, M5, M6, M10 M13, M14 M15
	<p>e. Success of the new SIP will be dependent on a strong contingency plan.</p>	M23

2. Several people stressed the need for a comprehensive control strategy and the importance of reducing all sources of PM₁₀, not just the residential woodheating and industrial sources.

a. Contingency Plan is not equitable. DEQ is proposing to ease restrictions on industry while planning phase 2 of the wood stove curtailment program in 1994. Concentrate on annual average, rather than worst day readings. Focus on all sources of PM10. Curtailment on yellow and red days should be applied to all sources.

M1, M5,
M7, M9,
M13,
M14,
M16,
M17

b. DEQ says PM10 is generated by woodstoves. How do they determine source of particulates? Natural fuels are better than fossil fuel which contributes to greenhouse effect.

M5

c. Has I-5 traffic been considered as a source? Diesel truck emissions should be addressed.

M2, M3
M21

d. Most recently, with temperatures in the 90s and 100s, pollution has been heavy as evidenced by dust on windows and cars and by an influx of asthma patients to their doctors. Woodstoves were not in operation but industry was. SIP does not adequately address the real problem.

M8, M9

e. The Inspection and Maintenance Program is ineffective because exempted vehicles from outside the zone are allowed to pollute inside the zone.

M21

3. **Several people recommended more stringent restrictions on slash burning.**

a. Slash burning is the largest PM10 source in Jackson County. The proposed 20-mile setback from the AQMA for slash burning does not recognize the migration of valley smoke from 50 to 75 miles away. At the very least, the current BLM 30-mile setback should be the minimum.

M1, M3,
M5, M6,
M13,
M14,

b. A 75-mile setback should be imposed during the heating season and no slash burning allowed on yellow or red days.

M4, M7,
M19

c. Propose the slash burn setback coincide with the watershed boundaries.

M3

d. Forestry should be encouraged to find ways of handling natural fuel buildup in the woods, a source of wild fires and PM10 pollution, for the good of the forest and human health. Propose a task force involving agencies, businesses and citizens to study and design possible alternatives. The aim should be to turn this pollution source into a fuel source.

M3, M13
M14,
M18

e. Reference to further reductions in slash burning are as yet undefined in the proposals.

M4

f. No slash burning should be permitted between February and November. Yard debris should be shredded and used.

M12
M21

g. Sierra Club believes the smoke management plan should include designation of restricted areas in the control plan, not the contingency plan. There should be no slash burning on yellow or red days within a 50 mile zone of nonattainment boundaries.

P6

h. Proposed amendment to forestry SIP is to be reviewed by Department of Forestry. Industry wants input on Forestry proposal.

M20

4. Many people expressed the need for tight enforcement of air pollution requirements on all sources, especially industry, and the need for extensive continuous emission monitoring of industrial processes.
- a. The AQMA has 57 sources and only 29% have ever been tested. Onsite inspections average 1.4 times a year and most are prearranged. In the past 3 years no sources passed all 3 years and only 7 passed for two years. Increased monitoring and enforcement is needed. M1, M23
- b. Only two industrial sources have paid fines this year. More monitoring is needed for enforcement and to ensure accuracy of identified sources. More research is needed to provide better and less costly controls. M1, M4
- c. Because DEQ tends to underestimate industrial emissions, tighter controls are needed. The thin safety margin provided in SIP increases likelihood of failure to attain standard given any new problem or error. M4, M8
- d. In regard to dust control, local ordinances are failing to enforce the trackout provisions. M8
- e. Woodstoves are blamed for Medford Corporation smoke vented behind convenience store on Court Street and Riverside. M9
- f. Plywood plants have no regulated exhaust system on driers. M9
- g. SIPs have been weakened by negotiations and when finally adopted are ignored and unenforced. M10

5. **Several people recommended more stringent industrial controls and a focus on dual fuel capabilities.**

a. Because industrial sources are a big source of year-round PM10 pollution, industry claims of hardship should be considered carefully case-by-case. Large boilers should be defined as over 10 million BTU/hr and should not be given exemption from Continuous Emission Monitoring (CEM).

M1, M12
M18
M19

b. As suggested by the Coalition two years ago, dual fueling should be implemented as a means of reducing PM10 output on high pollution days, for cold starts after holiday closures or when poor fuel must be used. Availability of natural gas has been curtailed to industry in preference to residential customers. Propose immediate efforts to increase gas supply to area.

M1, M4,
M12,
M18,
M19
P6

c. The North Medford area has the most severe PM10 pollution and is the location of the four largest mills: Boise Cascade, Medco, Medite, and Timber Products. Industry emission impacts here are 1.5 times higher than those at the courthouse, while woodstove emission impacts are comparable.

M4,
M10,
M15

d. SIP fails to identify use of emission credits. The potential for accumulating large emission credits by using state-of-the-art technology is seen as a detriment to achieving the best possible standards. Biomass, currently using this technology, has achieved emission reduction of 80%-90% less than DEQ minimum requirement - proving it works. With this in mind, limits should be set for 0.01 gr/dscf for large boilers in the North Medford area. Emission offset ration should be increased from 1.2:1 to 1.5:1.

M4, M19
P6

e. Most recently, with temperatures in the 90s and 100s, pollution has been heavy as evidenced by dust on windows and cars and by an influx of asthma patients to their doctors. Woodstoves were not in operation but industry was. SIP does not adequately address the real problem.

M8, M9

6. While industry has complied with regulations for years and will continue to do so, industry opposes the Contingency Plan requirement for a dual fuel study. This requirement for industry to fund a study on dual fueling large boilers precedes implementation of original plan and it's outcome and is therefore highly questionable. Factors against dual fueling are:

M16,
M17,
M20

a. Not all boilers are created equal and thus operate differently.

b. Conversion of boilers is a case-by-case situation and cannot be addressed by industry-wide standards.

c. Switching to alternative fuel can actually result in higher emissions.

d. Cost of conversion estimated at between \$450,000 and \$500,000 per unit, making the cost/benefit ratio small for the 15-20 days per year use.

7. **Several people recommended more stringent controls on particle dryers similar to the recently adopted veneer dryer controls.**

M4, M10
M12,
M18,
M19
P6

While veneer driers in North Medford are subject to tighter standards, no new controls are proposed for the particle driers, which could be reduced by 50% using off the shelf equipment.

8. **Some people were opposed to including Best Available Control Technology (BACT) industrial requirements in the contingency plan and indicated that the federal Clean Air Act only requires Reasonably Available Control Technology (RACT). The Act requires BACT to be established within 18 months of the time an area is redesignated as a "serious" nonattainment area.**

M16,
M17,
M20

Requirements of BACT and CEM will have severe economic impact on both industry and area. Equipment required for these measures is too costly for small operations and therefore favor big business. Recognition of the recent resource problems in the Wood Products Industry should be a factor taken into consideration. While competitors outside the Rogue Valley focus on surviving the new timber shortage, we'll be striving to meet the new PM10 Control Strategy regulations.

9. **One person pointed out that mandatory woodheating curtailment should also be required in Phoenix and Talent.**

a. Medford-Ashland SIP excludes Phoenix and Talent from mandatory woodstove curtailment. Why?

M8

b. Sierra Club supports woodstove curtailment provisions.

P6

- | | |
|---|---|
| <p>10. Testimony on the proposed tightening of open burning requirements was mixed. Several people supported the more restrictive 400 ventilation index for the Rogue Basin and the contingency plan provision for a seasonal November-to-February open burning ban if PM₁₀ standards are not met by 1994. One person urged more flexibility for agricultural burning related to orchards, including the less restrictive 200 ventilation index during February-to-November.</p> <p>a. Open burning should be minimized to allow for disease control only and no open burning during winter months in the Rogue Basin when Ventilation Index is 400 or less. No open burning should be allowed in the Rogue Valley after 1994.</p> <p>b. Agricultural burning is needed for: 1) disposal of tree pruning, 2) disease control, and 3) removal of old orchards. Alternative methods are too expensive. Agricultural burning is a minor polluter but a major contributor to air quality. DEQ is urged to allow a 200 index from February to November and a 400 index during December and January.</p> <p>c. The Native American Community has requested a continued exemption for traditional ceremonial fires.</p> | <p>M3, M6,
M7, M8,
M9,
M12,
M19</p> <p>M11</p> <p>M22</p> |
| <p>11. Disbelief in public comments having any impact on the final outcome was strongly stated. Believes this 'hearing' to be, in fact, an informational meeting.</p> | <p>M20</p> |
| <p>12. EPA recommends the contingency measure reductions equal 25% of the total reduction in the control strategy and otherwise is pleased with the quality of the proposal.</p> | <p>P5</p> |

Testimony References

Public Testimony Given in La Grande

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
L1.	A	Grant Darrow, Chimney Sweep
L2.	B	Francis Mohr, Acting Air Resource Manager Wallowa-Whitman National Forest
L3.	B	R.M. Richmond, Forest Supervisor, Wallowa-Whitman National Forest
L4.	C	Jeff Blackwood, Forest Supervisor, Umatilla National Forest
L5.	D	Larry Dalrymple, City Manager, La Grande
L6.	no	Jim Brown, Air Quality Committee, Citizens
L7.	no	Roberta Bates, Resident, La Grande

Public Testimony Given in Klamath Falls

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
K1.	no	Doss Decker, Resident, Klamath Falls
K2.	no	Nancy Roeder, Resident, Klamath Falls
K3.	no	Harry Fredricks, County Commissioner
K4.	E	Stan Meyers, Vice President Engineering, JELD-WEN, INC.
K5.	F	Joseph Riker, Community Development Director, City of Klamath Falls
K6.	G	John D. Monfore, Land Use Manager, Weyerhaeuser

K7.	no	Leo Dunn, Resident, Klamath Falls
K8.	H	Drew Honzel, Columbia Plywood Corp.
K9.	I	Ron Loveness, Resident, Klamath Falls
K10.	no	Del Parks, State Representative, Klamath County
K11.	J	James Keller, City Manager, Klamath Falls
K12.	K	Kurt Schmidt, Employee, Modoc Lumber Co.
K13.	no	Roy Ford, Resident, Klamath Falls
K14.	L	Steve Kandra, President Klamath County Chamber of Commerce
K15.	no	Bob Flowers, Farmer, Klamath Falls
K16.	M	Nina Pence, President, League of Women Voters, Klamath County
K17.	N	Carol Yarbrough, President, Citizens for Quality Living

Public Testimony Given in Grants Pass

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
G1.	no	Paul Brandon, Resident, Grants Pass
G2.	O	Dennis Spencer, Regional General Manager, Stone Forest Industries
G3.	P	Candace Bartow, Mayor, Grants Pass
G4	Q	Josephine County Board of Commissioners

Public Testimony Given in Medford

<u>No.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
M1.	R	Wallace Skyrman, Resident, Central Point
M2.	S	Anna Hirst, League of Women Voters
M3.	T	Frank Hirst, Audubon Society
M4.	U	Robert Palzer, PhD., Coalition to Improve AQ
M5.	no	James Dodson, Resident, Medford
M6.	no	Gary Stevens, Environmental Health Department, Jackson County
M7.	V	Vera Morrell, Chairperson, Coalition to Improve Air Quality
M8.	W	Paul Wyntergreen Regional Director, Oregon Environmental Council
M9.	X	Neil Robbins, Resident, Medford
M10.	Y	Patricia Kuhn, Resident, Medford
M11.	no	Ronald Meyer, Farmer, Talent
M12.	no	Myra Erwin, Chairperson, Rogue Group Sierra Club
M13.	Z	William Barbour, Farmer, Medford
M14.	Z	Victoria Montgomery, Resident, Medford
M15.	AA	Jan Young, Pulmonary Rehabilitation Coordinator, Medford
M16.	BB	Greg Miller, Executive Vice President, Southern Oregon Timber Association

M17. BB Bob Morris,
Environmental Affairs Committee Chair,
Southern Oregon Timber Association

M18. CC Kathleen Muir, Resident, Ashland

M19. DD Phyllis Hughes,
Rogue Group Sierra Club

M20. EE Garl Grigsby, Double Dee Lumber Company

M21. FF Anne & Bob Gottschalk,
Residents, Talent

M22. GG Robert Owens, Co-Executive Council
American Indian Cultural Center

M23. HH C. Herschel King, MD
Retired Anesthesiologist, Ashland

Public Testimony Given in Portland and Misc. Letters Submitted

<u>NO.</u>	<u>Written Comment</u>	<u>Name and Affiliation</u>
P1.	no	Joe Weller, Lung Association
P2.	no	Jim Britton, Executive Director, Asphalt Paving Association
P3.	no	Harry Fredricks, Klamath County Commissioner
P4.	II	David Kircher, Chief Air Programs Development Section
P5.	JJ	David Kircher, Chief Air Programs Development Section
P6.	KK	Bob Palzer, Air Quality Coordinator, Sierra Club
P7.	LL	James Whitty, Legislative Counsel, Associated Oregon Industries
P8.	MM	Tim Nissen, President, Wood Energy Institute
P9.	NN	John Crouch, Emissions Specialist, Wood Heating Alliance

LLW:a
RPT\AH20088
(10/24/91)

**RESPONSE TO TESTIMONY RECEIVED AT THE PUBLIC HEARING
ON THE PROPOSED PM₁₀ CONTROL STRATEGY ADDENDUM
FOR THE MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA**

Issue No. 1: Several people indicated the current air quality situation in the Medford-Ashland Air Quality Maintenance Area (AQMA) is unacceptable. They also expressed concern that the proposed plan will not be adequate to fully meet health standards.

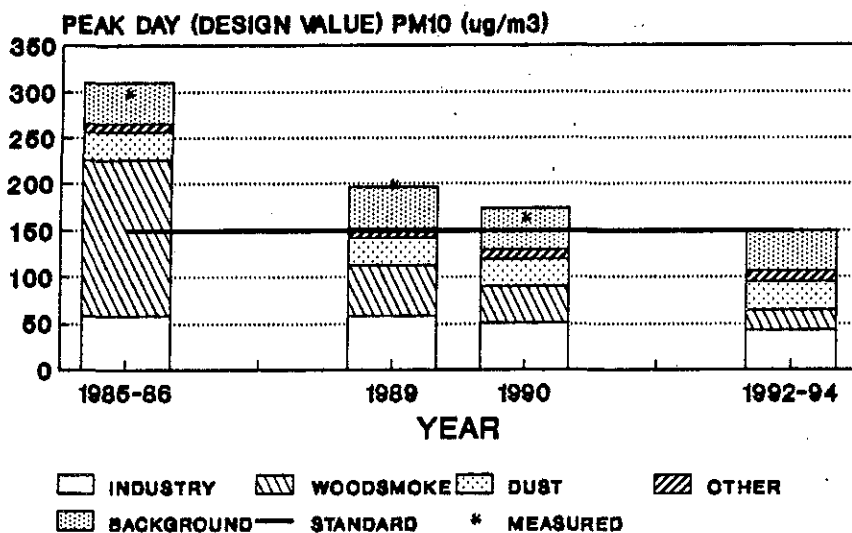
Response: The Department of Environmental Quality (DEQ, Department) concurs that the current air quality situation is unacceptable and of serious health concern. The PM₁₀ concentrations measured in Medford violate both the annual and 24-hour PM₁₀ ambient air quality standards.

However, PM₁₀ concentrations have improved substantially since 1989 with the implementation of key elements of the control strategy. PM₁₀ monitoring by the Department and woodburning curtailment compliance surveys by Jackson County from 1985 to present indicate that the strategy is on track to meet standards by 1992-94. See Figure 1 which compares the actual measured annual and peak-day concentrations (asterisks) to the expected concentrations based on dispersion modeling, chemical fingerprinting, and compliance surveys (bars).

Between 1985 and 1990, annual average and peak-day PM₁₀ levels improved by over 30%. The successful completion of the remainder of the strategy elements (especially the additional industrial controls and the implementation of mandatory woodburning curtailment in Central Point) are critical to fully meet health standards by the Clean Air Act deadline. Implementation of these strategies is projected by airshed modeling to result in attainment of PM₁₀ air quality standards.

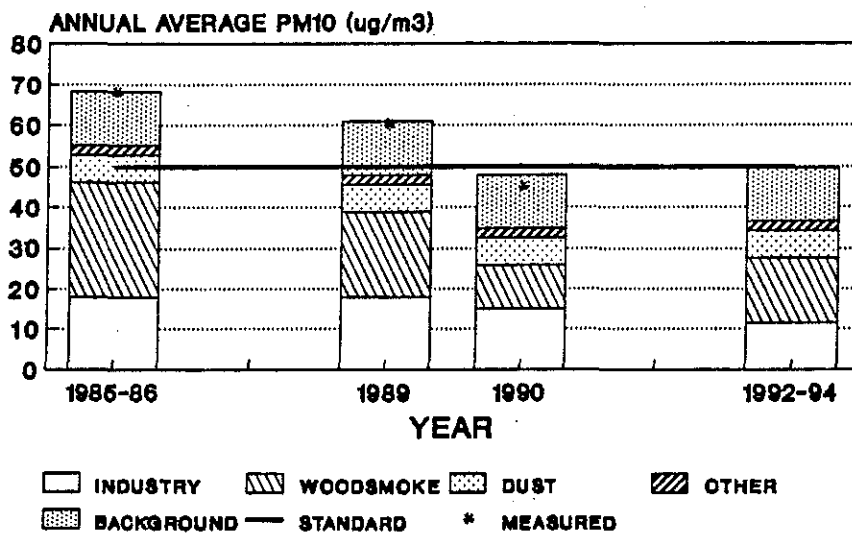
If the PM₁₀ standards are not achieved by the December 31, 1994, Clean Air Act deadline, then the contingency plan will automatically go into effect. The contingency plan and other control measures will reduce PM₁₀ emissions by at least 254 tons per year after 1994, or an additional 29% or more of the reduction provided in the attainment plan.

MODELED MEDFORD PM10 IMPACTS COMPARED TO MEASURED AIR QUALITY LEVELS



WELCH/JACKSON MONITORING SITE

MODELED MEDFORD PM10 IMPACTS COMPARED TO MEASURED AIR QUALITY LEVELS



WELCH/JACKSON MONITORING SITE

Figure 1. Comparison of Actual to Projected PM₁₀ Concentrations.

Issue No. 2: Several people stressed the need for a comprehensive and equitable control strategy and the importance of reducing all sources of PM₁₀, not just the residential woodheating and industrial sources. Other sources such as open burning, slash burning, fugitive dust, and car and truck exhaust also need to be controlled.

Response: The Department agrees that the PM₁₀ control strategies should be as comprehensive as possible and the proposed Medford-Ashland strategies are as broad-based as any PM₁₀ strategies (broader-based than most) in the U.S. Most of the PM₁₀ nonattainment areas are in the western U.S. and have generally relied on fugitive dust or residential woodburning control strategies. The Medford-Ashland PM₁₀ attainment strategy and the contingency plan address industry, residential woodheating, fugitive dust, and open burning. Further slash burning controls are proposed in a separate rule item.

New vehicle tailpipe standards, the Rogue Valley vehicle inspection/maintenance program, and cleaner fuel requirements will continue to reduce motor vehicle emissions. These motor vehicle programs are of most importance for reducing carbon monoxide pollution, which is another serious but less visible wintertime air pollution problem in the Medford area. The carbon monoxide trends in Figure 2 show the substantial reductions in motor vehicle emissions in recent years.

Specifically regarding diesel vehicles, which generally have more particulate emissions but less carbon monoxide emissions than gasoline vehicles, the current federal particulate standard for new trucks and buses is 0.25 grams per brake horsepower hour (g/bhp-hr); new diesel trucks must meet a 0.10 g/bhp-hr level by 1994; EPA has proposed limits for new buses of 0.10 g/bhp-hr in the 1993 model year and 0.05 g/bhp-hr in the 1994 and later model years. Visible smoke limits on gasoline or diesel vehicles can be enforced by city, county or state police.

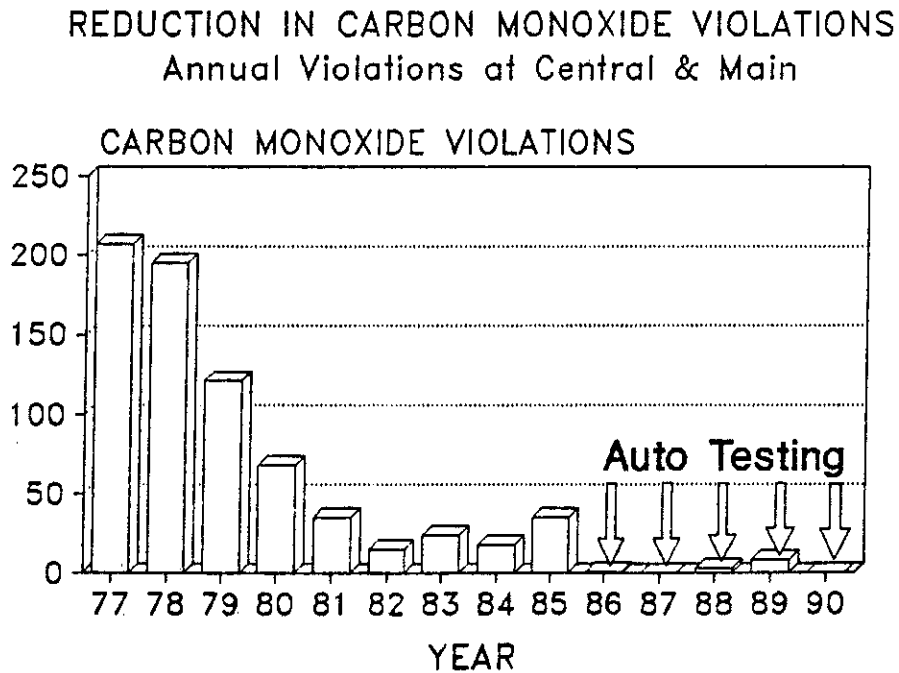
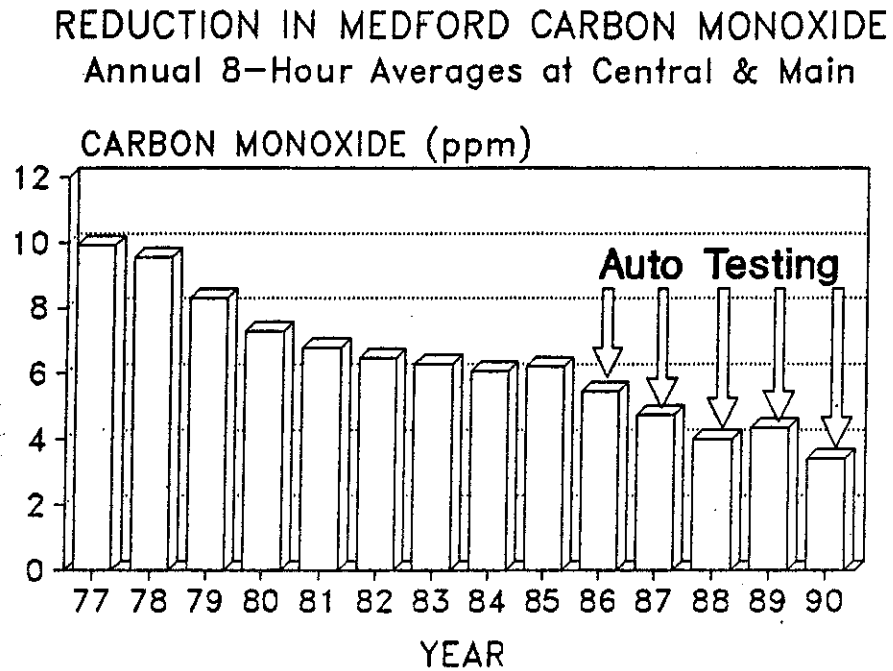


Figure 2. Medford Carbon Monoxide Trends.

Response to Comments

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Regarding an equitable PM₁₀ control strategy, the major emission reductions in the PM₁₀ control strategy necessarily come from woodstove/fireplace users and the wood products industries since these have been the major PM₁₀ emission categories within the Medford-Ashland area. Both groups are concerned that they are being required to do more than their fair share of the PM₁₀ emission reductions. Two criteria can be used to objectively evaluate the overall balance of the control strategy: (1) the relative emission reduction by category in tons per year and pounds per worst case day; and (2) the relative cost-effectiveness of the control measures in dollars per ton of emission reduction (\$/ton).

During 1978-85, the Medford-Ashland Total Suspended Particulate Control Strategy required the wood products industries to reduce total particulate emissions by 3,559 tons per year. About 1,900 tons per year (about seven tons per worst case day) of these industrial emission reductions were in the PM₁₀ size range. During this same period, there was no net reduction in woodburning emissions; in fact, the amount of woodburning (and woodburning emissions) increased dramatically from the mid-1970s to the mid-1980s due to higher oil, gas and electric costs.

During 1986-94, the proposed PM₁₀ control strategy would require additional industrial PM₁₀ emission reductions of 280 tons per year (about one ton per worst case day) and residential woodburning PM₁₀ emission reductions of 622 tons per year (about eleven tons per worst case day).

The combined PM₁₀ effect of the 1978-85 and 1986-94 particulate control strategies is that industries are required to provide the greater annual emission reductions (2,180 versus 622 tons per year) but woodstove/fireplace users are required to provide the greater worst-case-day emission reductions (eleven versus eight tons per worst case day).

Regarding relative cost-effectiveness, the control costs are generally estimated as the annualized cost of control (\$/year), which includes the amortized capital cost and annual operation and maintenance costs, divided by the annual PM₁₀ emission reduction (tons/year). The result is reported as \$/ton of emission reduction. The lower the overall \$/ton of the control strategy, the lower the overall cost to the community to meet air quality health standards.

The new industrial control requirements for boilers and veneer dryers adopted in September 1989 were estimated to

cost 3,000 to \$15,000 per ton of PM₁₀ emission reduction; more typically, the actual costs appear to be in the \$4,000 to \$7,000 per ton range. The costs of woodstove curtailment are estimated at \$2-4 per woodstove home per curtailment day, or a little less than \$2,000 per ton of PM₁₀ emission reduction. The estimated cost of woodstove replacement with a certified woodstove is also less than \$2,000 per ton of PM₁₀ emission reduction. In general, the costs of available additional industrial controls are higher than the costs of available woodstove emission reduction options.

Based on the relative emission reductions and cost-effectiveness, the Department believes that the residential woodburning and industrial control measures are equitable. The proposed strategy includes substantial emission reductions from woodstove/fireplace users and wood products industries; the former provides a greater emission reduction on worst-case days, but the latter provides the greater overall annual emission reduction. The industrial costs are considerably greater than the residential costs, but the Medford-Ashland industries have consistently indicated their willingness to do their part to meet air quality standards as long as other source categories do their part.

Issue No. 3: Several people recommended more stringent restrictions on slash burning. Specific recommendations included: slash burning should not be allowed within 75 miles of the Medford-Ashland area on yellow or red woodheating curtailment days, slash utilization should be increased to minimize or eliminate the need for slash burning, and slash burning should not be allowed at all during the November-February woodheating season.

Response: DEQ is vitally interested in reducing slash burning emissions and impacts. DEQ and the Oregon Department of Forestry with the aid of an advisory committee have developed specific proposals for modifying the Smoke Management Plan (SMP) to further protect the Medford-Ashland area and other PM₁₀ nonattainment areas from slash burning impacts. These proposals include a ban on burning on red days within approximately 25 miles of the AQMA and a total winter ban in a contingency plan. The existing SMP contains a commitment to reduce emissions by about 20% between the years 1984 and 2000. The new SMP proposals will be taken to public hearing in the near future, revised as necessary, and subsequently presented to the Board of Forestry and the Environmental Quality Commission (EQC, Commission) for approval.

Response to Comments

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Issue No. 4: Many people expressed the need for tight enforcement of air pollution requirements on all sources, especially industry, and the need for extensive continuous emission monitoring of industrial processes.

Response: The new industrial rules adopted in September 1989 will not only reduce emissions from veneer dryers and boilers by an additional 40% but will also provide continuous emission monitoring and more extensive source testing on major industrial sources. These additional monitoring requirements are expected to improve operation and maintenance of the pollution control equipment and increase the Department's enforcement capability to ensure that emissions are held to the regulation limits. The new Clean Air Act Title V federal operating permit program for major sources, when implemented in 1994-95, should further improve compliance assurance. Additional DEQ regional enforcement resources are expected with implementation of this program.

Issues No. 5 and No. 6: Several people recommended more stringent controls on large wood-fired boilers, including tighter emission limits, lower size cutoff for large-boiler regulations, increased emission offset ratio from 1.2:1 to 1.5:1 for new sources, and dual fueling capability in order to require use of natural gas on stagnant winter days. Some testimony supported a requirement for a dual-fuel feasibility study prior to December 31, 1994; other testimony supported doing the dual-fuel feasibility study only if PM₁₀ standards were not met by the December 31, 1994, Clean Air Act deadline.

Response: The emission standards adopted by the Commission in September 1989 for large wood-fired boilers are considered to require Best Available Control Technology (BACT) and are substantially tighter than either the federal New Source Performance Standards (NSPS) or the statewide boiler rules. Some of the control equipment to meet the September 1989 limits has already been installed or is in the process of being installed in Medford and White City.

The existing size cutoff between large and small boilers is similar to the federal NSPS size cutoff. The smaller wood-fired boilers in the Medford-Ashland area are a relatively small part of the emission inventory (less than 1%), are generally located some distance from the more critical PM₁₀ problem areas, and would be extremely expensive (\$7,000 to \$11,000 per ton of emission reduction) to control to the very restrictive large-boiler emission limits.

Response to Comments

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The Commission increased the emission offset ratio for new or modified sources in the Medford-Ashland area to 1.2:1 in September 1989. Significant new or modified sources must provide 1.2:1 offsets and demonstrate a net air quality benefit. This is consistent with federal requirements. The only area required by the Clean Air Act to provide 1.5:1 offsets is Los Angeles for ozone-causing emissions; Los Angeles has by far the worst air pollution problem in the U.S.

In some cases, industries in the Medford-Ashland area have controlled emissions below even the more stringent current emission limits. These additional reductions are beyond the reductions projected to meet air quality standards and are available to the industries as emission credits for future plant modifications. The PM₁₀ control strategy assumes that these emission credits will be used by 1994; if not, then air quality should be slightly better than projected.

The proposal includes a requirement for a dual-fueling feasibility study. The Department has added specific criteria to ensure an unbiased evaluation and has included a time schedule to complete the study prior to the end of 1994. This schedule would allow dual-fueling, if determined feasible and needed, to be a part of the contingency plan that would go into effect if PM₁₀ standards are not met by the December 31, 1994, Clean Air Act deadline. Feasibility and need will be determined as part of the normal EQC rulemaking process during 1994-95.

Issue No. 7: Several people recommended more stringent controls on particle dryers similar to the recently adopted veneer dryer controls.

Response: At the time the current particle dryer control equipment was installed in 1983, the particle dryer emission limits were considered technology-forcing requirements. The control efficiency and costs of the 1983 particle dryer control equipment are similar to those for the veneer dryer control requirements adopted in 1989. The Department has proposed to tighten the opacity limits on particle dryers to be consistent with opacity conditions observed during recent source testing demonstrating compliance with the mass emission limits. This will increase the Department's enforcement capability to ensure continuous compliance with the regulation limits.

Issue No. 8: Some people were opposed to including Best Available Control Technology (BACT) industrial requirements in the contingency plan and indicated that the federal Clean Air Act only requires Reasonably Available Control Technology (RACT). The Act requires BACT to be established within 18 months of the time an area is redesignated as a "serious" nonattainment area.

Response: See the discussion in the related agenda item regarding industrial rule revisions. The Department has revised the proposal to separate the RACT and BACT provisions to the minimum Clean Air Act requirements.

Issue No. 9: One person pointed out that mandatory woodheating curtailment should also be required in Phoenix and Talent.

Response: Phoenix and Talent are within the boundaries of the Medford-Ashland AQMA which is the designated PM₁₀ nonattainment area. Mandatory curtailment ordinances have been adopted by the City of Medford, Jackson County, and the City of Central Point for the more densely populated core area of the PM₁₀ nonattainment area. (The Central Point ordinance is subject to approval by voters on November 5, 1991; either Central Point or DEQ will enforce a mandatory curtailment program in Central Point.) Applying mandatory curtailment to these portions of the PM₁₀ nonattainment area is projected to be sufficient to attain the PM₁₀ standards by the Clean Air Act deadline.

If attainment is not reached by the deadline, then the Medford-Ashland AQMA will be redesignated by the U.S. Environmental Protection Agency (EPA) as a "serious" nonattainment area. In such case, the Clean Air Act requires Best Available Control Measures to be implemented no later than four years after designation as a serious nonattainment area. BACM will likely require an expanded and more effective mandatory curtailment program throughout the PM₁₀ nonattainment area (which includes Phoenix and Talent) at that time.

Jackson County is conducting curtailment compliance surveys throughout the PM₁₀ Critical Control Area. Inclusion of Phoenix and Talent in the curtailment program may be necessary if the air quality improvements do not continue on track toward full attainment of PM₁₀ standards by 1992-94.

Issue No. 10: Testimony on the proposed tightening of open burning requirements was mixed. Several people supported the more restrictive 400 ventilation index for the Rogue Basin and the contingency plan provision for a seasonal November-to-February open burning ban if PM_{10} standards are not met by 1994. One person urged more flexibility for agricultural burning related to orchards, including the less restrictive 200 ventilation index during February-to-November.

Response: The Department proposed the 400 index to be consistent with local open burning ordinances and to provide additional assurance that attainment will be reached since the safety margin in the proposed attainment plan is very small (e.g., $0.3 \mu\text{g}/\text{m}^3$ safety margin compared to $50 \mu\text{g}/\text{m}^3$ annual standard). Jackson County has proposed a revision to its ordinance that would allow more flexibility (200 index) for burning orchard prunings during February 1992 and February 1993. The Department is supportive of this temporary relaxation and has proposed additional revisions to the open burning rules to be consistent with the Jackson County ordinance.

Issue No. 11: One person expressed concern that the public comments would have no impact on the rules ultimately adopted and that the public hearings were only informational meetings.

Response: Public testimony has resulted in substantial changes to these PM_{10} proposals as well as to other air pollution proposals in the Medford-Ashland area. For example, changes are proposed in response to testimony to the industrial and open burning rules taken to the September 1990 hearings. Substantial changes were made to the September 1989 industrial rules in response to testimony. Some of these changes tightened the original proposals, other changes provided more flexibility in the adopted rules. However, some of the PM_{10} control strategy elements that are critical to the overall success of the plan are local government programs that have already been through the local public hearing and adoption process.

Response to Comments

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Issue No. 12: EPA requested that the contingency plan (post-1994) emission reduction be calculated as a percentage of the attainment plan (1986-1994) emission reduction, and the contingency plan reduction should be at least 25% of the attainment plan reduction. EPA is otherwise pleased with the quality of the proposal.

Response: The Department has calculated an additional emission reduction of over 254 tons per year from the contingency plan and other post-1994 control measures, compared to an emission reduction of 874 tons per year from the attainment plan. This results in a post-1994 emission reduction of 29% or more of the attainment plan reduction. A discussion of this calculation has been added to the Medford-Ashland addendum (Attachment A).

EQC\RESPONSE.MFR
RPT\AH20089
(10/29/91)

REQUEST FOR EQC ACTION

Meeting Date: November 8, 1991
Agenda Item: P
Division: Planning and Development
Section: Air Quality

SUBJECT:

Adoption: Revised PM₁₀ Control Strategy for the Eugene-Springfield Nonattainment Area.

PURPOSE:

To meet new Clean Air Act requirements.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)

 - Authorize Rulemaking Hearing
 - Adopt Rules
 - Proposed Rules
 - Rulemaking Statements
 - Rules Affecting Land Use
 - Fiscal and Economic Impact Statement
 - Public Notice

 - Issue a Contested Case Order
 - Approve a Stipulated Order
 - Enter an Order
 - Proposed Order
- Attachment A
Attachment B
Attachment G
Attachment C
Attachment D
- Attachment ___



811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696



Meeting Date: November 8, 1991
Agenda Item: P
Page 2

<input type="checkbox"/> Approve Department Recommendation	Attachment <input type="checkbox"/>
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

On February 1, 1991 the commission adopted the Lane Regional Air Pollution Authority (LRAPA) PM₁₀ air pollution control strategies for the Eugene-Springfield nonattainment area as a revision to the State Implementation Plan (SIP). The following control measures constitute the primary focus of the adopted attainment strategy.

- o Mandatory residential woodburning curtailment program within the Eugene-Springfield urban growth boundary. Local ordinances have been adopted which will be enforced by LRAPA.
- o Existing industrial point source emission control requirements.
- o State implemented restrictions on prescribed agricultural and forest burning.

LRAPA had to revise the Eugene-Springfield PM₁₀ control strategy as a result of new Clean Air Act requirements. The EQC is requested to adopt this addendum to the PM₁₀ control strategy as a revision to the State Implementation Plan for the Eugene-Springfield nonattainment area. The revised strategy integrates contingency measures required by the Clean Air Act. These measures are recommended for inclusion in the SIP, and are reflective of EPA requirements, public comment and of comments provided by the Department.

The proposed addendum to the LRAPA control strategy contains local contingency plan commitments that are designed to meet the requirements of the Clean Air Act. Emission control measures (contingency plan) for significant area and point sources of PM₁₀ which do not now have RACM\RACT or better include requirements for residential woodburning, urban fugitive dust, open burning and selected industrial point sources. The contingency plan elements go into effect automatically if the area fails to meet attainment by the Clean Air Act deadline. These new contingency measures include the following:

- o Reasonably Available Control Measures (RACM's) for residential woodstoves, urban fugitive dust and open burning sources. State rules will implement RACM measures for residential woodburning, authorized under House Bill 2175 and passed by the 1991 Oregon legislature, requiring the removal and destruction of uncertified woodstoves upon home sale within the nonattainment area.

Contingency RACM measures for urban fugitive dust requires the use of trackout strips. Construction sites for commercial, industrial or residential subdivisions within the nonattainment area will be required to provide paved trackout strips or mud cleaning stations, on site, to reduce mud trackout onto public roads. RACM for residential open burning prohibits all open burning within the Eugene-Springfield nonattainment area.

- o Reasonably Available Control Technology (RACT) for selected industrial point sources; establishing RACT controls on wood-waste boilers, veneer plants and dryers, particleboard plants and dryers, air conveying systems, metallurgical plants, and kraft pulp mills.

The control strategy also contains:

- o Commitments for evaluation and revision of the attainment strategy if the area fails to attain the standard by the Clean Air Act deadline of December 31, 1994, and has been designated as a "serious" nonattainment area by EPA.

The Department authorized the Lane Regional Air Pollution Authority (LRAPA) to act as EQC hearings officer, and to conduct a public hearing regarding the proposed revisions to the SIP. On October 1, 1991 the LRAPA Board of Directors heard public testimony and adopted their proposed revision to the PM₁₀ control strategy for that area. In response to public and industry comment received at the LRAPA adoption hearing the proposed industrial contingency component of the strategy was modified to drop the establishment of Best Available Control Technology (BACT) in the contingency plan, and to establish Reasonably Available Control Technology (RACT) only. Similar testimony was received by the Department for its PM₁₀ control strategies and industrial rules. The LRAPA industrial contingency plan, as currently proposed, would be consistent with revisions now being proposed by the Department for other nonattainment areas.

Meeting Date: November 8, 1991
Agenda Item: P
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AUTHORITY/NEED FOR ACTION:

Required by Statute: _____ Attachment _____
 Enactment Date: _____
 Statutory Authority: ORS 468.305 Attachment E
 Pursuant to Rule: ORS 468.535 Attachment E
 Pursuant to Federal Law/Rule: _____ Attachment _____
 Other: Attachment _____
 Time Constraints: (explain)

The 1990 Clean Air Act requires states to:

- o Submit revised PM₁₀ control strategies (including contingency plans) by November 15, 1991;
- o Fully implement the attainment strategies by December 10, 1993;
- o Attain PM₁₀ standards by December 31, 1994; and
- o Implement contingency plan by July 1, 1995, if PM₁₀ standards are not met by December 31, 1994.

DEVELOPMENTAL BACKGROUND:

Advisory Committee Report/Recommendation Attachment _____
 Hearing Officer's Report/Recommendations Attachment H
 Response to Testimony/Comments Attachment H
 Prior EQC Agenda Items: (list) Attachment _____
 Other Related Reports/Rules/Statutes: Attachment _____
 Supplemental Background Information Attachment F
 LRAPA Board of Directors Meeting of 8/13/91 (hearing authorization), staff report and minutes; Authorization to act as hearing officer on behalf of the Commission, 9/24/91; LRAPA Board of Directors Meeting of 10/1/91 (adoption), staff report and minutes;

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Implementation of the PM₁₀ control strategy in the Eugene-Springfield nonattainment area involves residents, local governments, the Lane Regional Air Pollution Authority (LRAPA), as well as state and federal agencies. The two most significant groups that will be affected by the contingency plan requirements will be residential woodburning households and selected industrial point sources. Additional sources which will be affected by contingency plan requirements include sources of open burning and urban fugitive dust.

If the Commission chooses to make the industrial contingency requirement tighter than those now proposed by the Department, then the LRAPA strategy would conflict with State statute which requires that LRAPA's rules be at least as stringent as those of the state. LRAPA would then have to revise their strategy, and possibly miss the Clean Air Act deadline for SIP submittal to EPA.

The proposed PM₁₀ control strategy addendum will provide the needed contingency commitments required by the Clean Air Act for area and point pollution sources. The contingency strategies for selected industrial sources were developed in conjunction with the Department and reflect technology that can be reasonably retro-fitted on existing industrial sources.

PROGRAM CONSIDERATIONS:

The Department is concerned about long-term local and state government resources to implement critical residential woodheating elements of the PM₁₀ control strategy, particularly the operation of curtailment and public information programs, as well as financial incentives for replacement of existing woodstoves with cleaner burning units. The Department will continue to explore funding options and may propose new legislation to address this need.

The contingency plan, if required due to failure to meet PM₁₀ standards by the December 1994 deadline, would require new LRAPA work. New industrial work should be able to be integrated into the industrial permitting program activities and emission fee structure as modified to meet Title V requirements. New woodheating work may require additional resources as discussed above.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Defer action to EPA. If a state fails to meet the Clean Air Act PM₁₀ requirements, EPA is required to impose sanctions and ultimately prepare a Federal Implementation Plan (FIP) to address the PM₁₀ nonattainment problem.
2. Adopt the proposed addendum to the Eugene-Springfield PM₁₀ control strategy and LRAPA Title 39 contingency rules, including changes made in response to public testimony.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the second alternative, specifically that the Commission adopt the proposed addendum to the control strategy for the Eugene-Springfield PM₁₀ nonattainment area, and LRAPA Title 39, "Contingency for PM₁₀ Sources in Eugene-Springfield Nonattainment Area" (Attachment A) as a revision to the State of Oregon Clean Air Act Implementation Plan. Adoption is required for the Department and LRAPA to submit a fully approvable PM₁₀ control strategy to the Environmental Protection Agency within the time frame required by the Clean Air Act.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed PM₁₀ control strategies for the Eugene-Springfield nonattainment area are consistent with Goals 2, 3, 4, and 5 of the Strategic Plan. The Department is not aware of any conflict with agency or legislative policy. The proposed strategies and supporting rules are consistent with the Oregon Benchmark goal of increasing the percentage of Oregonians living in areas which meet air quality health standards.

ISSUES FOR COMMISSION TO RESOLVE:

If the Commission chooses to make the state industrial contingency requirements tighter than those now being proposed by the Department, the LRAPA strategy would conflict with state statute which requires that LRAPA's rule be at least as stringent as those of the state. Does the commission concur with the industrial contingency requirements as proposed by the Department?

INTENDED FOLLOWUP ACTIONS:

1. Submit the State Implementation Plan revisions (addendum to the control strategy and LRAPA Title 39) to EPA for approval.
2. Implement the Eugene-Springfield PM₁₀ air pollution control strategy and enforce all mandatory control measures in coordination with LRAPA and other local, state and federal agencies.
3. Monitor emission reductions and progress toward attainment of PM₁₀ air quality standards. If PM₁₀ air quality standards are not met by the December 31, 1994 deadline:

Meeting Date: November 8, 1991
Agenda Item: P
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- a. Immediately implement the contingency plan; and
 - b. Revise the PM₁₀ control strategy within 18 months to include Best Available Control Technology (BACT) for any industrial sources not already meeting BACT, and Best Available Control Measures (BACM) for any area sources (residential woodheating, slash burning, open burning, etc.) not already meeting RACM.
4. Seek long-term funding assistance for local and state residential woodburning emission control programs.

Approved:

Section:

Division:

Director:

John F. Kowalcyk
David Collier
Jul Hansen

Report Prepared By: David Collier

Phone: 229-5177

Date Prepared: October 25, 1991

DLC:e
RPT/AH20089
(10/25/91)

IV: ADDENDUM to the STATE IMPLEMENTATION PLAN for the EUGENE/SPRINGFIELD URBAN GROWTH AREA

PURPOSE OF THE ADDENDUM

The Eugene/Springfield PM₁₀ Control Strategy was adopted by the Lane Regional Air Pollution Authority in March, 1990. At the time of adoption, it was anticipated that additional elements would be needed to meet new requirements of the Clean Air Act (CAA) passed by Congress and signed by the President on November 15, 1990. The Act requires several elements to be included in the State Implementation Plan. Several of those elements have been incorporated into the SIP previously. New elements addressed in this addendum, include the following:

1. Determination that reasonably available control measures (RACM's) for wood- stoves, dust sources and open burning sources are in place where appropriate, as part of the attainment demonstration;
2. Assurances that RACT for significant industrial point sources is applied as appropriate for attainment;
3. Assurance that reasonable further progress is maintained;
4. Assurance that adequate resources are committed to implement attainment strategies;
5. Assurance that new source review includes rules on offsetting, Lowest Achievable Emission Rates (LAER), and full compliance with PM₁₀ emission limits;
6. Commitments for a contingency plan that would automatically go into effect if PM₁₀ standards are not achieved after the final attainment date of December 31, 1994 without further action by LRAPA. This contingency plan provides significant further reduction of PM₁₀ emissions through application of control measures on woodstoves, urban fugitive dust, open burning, and industrial sources of PM₁₀ within the Eugene/Springfield non-attainment area.
7. Record of public involvement during development of additional SIP provisions.

**EUGENE-SPRINGFIELD PM10 SIP
CONTINGENCY ADDENDUM
OCTOBER 1, 1991
2**

LEAD AGENCY DESIGNATION

Governor Roberts has designated Lane Regional Air Pollution Authority as lead organization for implementing, maintaining and enforcing PM10 control strategies in Lane County.

ELEMENTS ALREADY INCORPORATED IN ATTAINMENT STRATEGY

The following control measures are included in the Eugene/Springfield PM₁₀ attainment strategy already adopted and submitted for approval:

1. A mandatory residential wood burning curtailment program within the Eugene/Springfield Urban Growth Boundary.
 - * *Ordinances adopted by local governing bodies, implemented by LRAPA*
2. A ban on the installation or sale of non-DEQ certified woodstoves.
 - * *HB 2175 provides for statewide ban on the sale and installation of used, non-DEQ certified woodstoves.*
3. Existing LRAPA rules on fugitive dust, industrial emissions, open burning.
 - * *Rules pertaining to these sources were considered and were not amended as part of the PM10 attainment strategy.*
4. State implemented rules on prescribed agricultural and forest burning.
 - * *Smoke management programs under state rules are designed to protect Eugene-Springfield from smoke intrusions.*

DETERMINATION OF RACM'S FOR AREA SOURCES

Woodstoves

New EPA RACM guidance requires that the state PM₁₀ SIPs includes a number of strategies to reduce woodstove emissions. These are listed below, and descriptions of how each guidance element is addressed is in italics.

**EUGENE-SPRINGFIELD PM10 SIP
CONTINGENCY ADDENDUM
OCTOBER 1, 1991**

3

1. Establish an episode curtailment program, including: a curtailment plan, communication strategy to implement the plan, a surveillance plan and enforcement provisions (including procedures, penalties, and exemptions).

** The Eugene/Springfield mandatory curtailment program (LRAPA regulations Title 15) fulfills this requirement. This plan is designed to achieve a 70% reduction in woodstove PM₁₀ emissions on days when the PM₁₀ NAAQS may be exceeded.*

2. Establish a public information program to inform and educate citizens about stove sizing, installation, proper operation and maintenance, general health risks of wood smoke, new technology stoves, and alternatives to wood heating.

** The public education program operated by Lane Regional Air Pollution Authority provides comprehensive information on each of the elements of this RACM measure. Extensive use of electronic media printed material, public presentations and outreach are included.*

3. Encourage improved performance of wood burning devices by:

- A. Providing voluntary dryness certification programs for dealers and/or making free wood moisture checks available to wood burners.

- B. Evaluating and encouraging the accelerated changeover of existing devices to new source performance standards or other new technology stoves by such approaches as subsidized stove purchases, tax credits, or other incentives.

** LRAPA instituted a voluntary cordwood dryness certification program through local fire districts, offering free moisture measuring devices for use by the public. Additionally, an educational program directed at firewood dealers to insure their awareness of the benefits of proper fuelwood seasoning, leading to "certification" of local firewood dealers is underway.*

** New state statute creates a fund (with no funding) for the purpose of subsidizing cost of accelerated change-over. Once sources of revenue are identified, LRAPA will initiate programs for accelerated change-over. The fund will be administered by DEQ.*

**EUGENE-SPRINGFIELD PM10 SIP
CONTINGENCY ADDENDUM
OCTOBER 1, 1991**

4

4. Evaluate effectiveness of the woodstove curtailment program.
 - * *Curtailment surveillance is conducted to assess compliance rates in the Eugene/Springfield UGA. Opacity limits are to be implemented during stage I red days, with procedures and penalties identified.*
 - * *In the period between November 1, 1992 and December 31, 1994, LRAPA will undertake adjustments to the curtailment program to achieve the design emissions reductions if data analysis indicates that such improvement is needed. Such measures may include better utilization of weather data, declaring no burning days earlier, more vigorous enforcement, and enhanced public education.*

5. Provide inducements that would lead to reductions in the stove and fireplace population or use by:
 - A. Discouraging the resale of used stoves through taxes, fees, or other incentives.
 - B. Discouraging the availability of free (or very inexpensive) firewood by increasing cutting fees or limiting the cutting season.
 - C. Encourage a reduction in the number of wood burning devices.
 - * *The Willamette National Forest (WNF) supplies roughly 1/3 of the firewood burned in the Eugene/Springfield non-attainment area. WNF has completed an environmental assessment of its firewood program which shows the amount of firewood taken annually since 1984 has declined by 65%, from 34,000 cords to 11,000 cords. WNF plans call for continued firewood availability at or below this reduced level indefinitely.*
 - * *Sole source exemptions in the curtailment program are scheduled for sunset after the 1995-96 season.*
 - * *The 1991 legislature enacted a ban on the sale and installation of non-DEQ certified used woodstoves. As of September 29, 1991, no person shall advertise for sale, offer to sell, or sell a used woodstove that was not certified by the Department of Environmental Quality as new on or after July 1, 1986, under the Oregon Woodstove Certification Program.*

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- * *House Bill 2175 has charged the State Building Codes Agency to amend their administrative rules, prohibiting the installation of non-certified used woodstoves.*

Forestry Slash Burning

EPA guidance for RACM for prescribed slash burning is patterned after Oregon's smoke management program.

- * *Forestry burning is regulated under Oregon law (ORS 477.515) which requires that the State Forester and the Department of Environmental Quality jointly approve a plan to manage smoke from slash burning in areas they designate. Oregon Department of Forestry and the DEQ jointly approve a plan to manage smoke from slash burning in areas they designate. This Smoke Management Plan contains designated areas which are to be protected from smoke intrusions from burning on forest lands.*

Agricultural Burning

EPA guidance for RACM for prescribed agricultural burning is patterned after Oregon's smoke management and alternate disposal program.

- * *Agricultural burning is regulated by the DEQ, with Department of Agriculture. A smoke management program is designed to protect the Eugene-Springfield non-attainment area from intrusions. HB 3343 recently enacted by the '91 Legislature phases down agricultural burning, which should lead to less impact.*
- * *The Eugene/Springfield Air Quality Maintenance Area (AQMA) has been designated one of the areas to be protected from smoke intrusions. PM10 emissions from agricultural burning have not been shown to be a significant contributor to PM10 non-attainment, though smoke episodes have long been a problem each summer in the Eugene-Springfield non-attainment area. The provisions of the smoke management program exceed Federal requirements for Reasonably Available Control Measures (RACM's) for prescribed burning smoke management programs.*

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Urban Fugitive Dust

LRAPA's existing fugitive dust rules generally follow EPA guidance for RACM.

In Conclusion:

The existing Eugene-Springfield PM10 non-attainment strategies, together with new statutes to be implemented by DEQ, meet or exceed appropriate RACM requirements for area sources to demonstrate attainment prior to December 31, 1994. Attainment before the deadline places Eugene/ Springfield into the moderate non-attainment area category of Clean Air Act '90.

RACT FOR INDUSTRIAL POINT SOURCES

EPA PM10 RACM guidance also required that RACT be applied to the extent needed to demonstrate attainment.

- * *The analysis to evaluate candidate attainment strategies was performed according to EPA modeling guidelines and protocols. The analysis showed that with some exceptions, local industrial sources currently meet or exceed RACT. Moreover, PM10 emissions from industrial point sources had substantially less impact on ambient PM10 concentrations during the heating season than did residential wood combustion. Some areas of the non-attainment area are impacted significantly, but those areas tended to not be the same areas where actual non-attainment occurs, according to the modeling analysis.*
- * *In addition, a cost/benefit comparison of alternate strategies showed that substantial reduction of woodstove emissions through intermittent curtailment, alone, would achieve the needed air quality improvements at much lower cost than would additional point source control.*
- * *Accordingly, the attainment demonstration does not include additional industrial controls beyond existing standards.*

In Conclusion:

Additional point source RACT beyond what is already in place is not needed for the attainment demonstration. It is determined that the Eugene/Springfield PM10 SIP meets EPA guidelines for application of RACT for attainment demonstration.

REASONABLE FURTHER PROGRESS

Part D of Title I of the Clean Air Act Amendments of 1990 (section 171) requires that State Implementation Plans for PM₁₀ make Reasonable Further Progress (RFP) towards attainment of the National Ambient Air Quality Standards (NAAQS). The Act further specifies that RFP means annual incremental reductions of PM₁₀ emissions necessary to attain the NAAQS by the attainment date. RFP documentation is required every 3 years, beginning July 1994.

In Conclusion:

The Authority believes that the scheduled implementation of the provisions of the Eugene/Springfield PM₁₀ SIP and attainment of the NAAQS with the Eugene/Springfield non-attainment area fulfills the RFP requirement of the Act.

RESOURCE COMMITMENTS

A voluntary residential wood burning program has been implemented by LRAPA for the last five years. This includes daily meteorological forecasting, and air quality monitoring; daily advisories to six radio stations, four television stations, and two newspapers.

Public information programs include public service announcements, public speaking, and printed material. Compliance surveys are conducted throughout the heating season. Approximately \$28,000 and 0.7 FTE are provided each year. Beginning in 1991, the budget provides additional funding for enforcement during no-burn episodes.

In Conclusion:

LRAPA has included in its program budget sufficient resources for FY92 to operate public information programs, the daily wood burning advisory, mandatory curtailment program including field surveillance and enforcement, and progress reporting.

REVIEW AND PERMITTING OF NEW SOURCES

New Source Review rules (LRAPA title 38) and Air Contaminant Discharge Permit rules (LRAPA title 34) identify the procedures for reviewing and

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permitting new sources. EPA guidance is due May, 1992. If necessary, additional New Source Review rules will be adopted following EPA guidance no later than July, 1992, and incorporated as a further addendum to the Eugene/Springfield PM₁₀ SIP.

CONTINGENCY PLAN COMMITMENTS

The Clean Air Act requires that the State Implementation Plan include contingency measures for significant sources of PM₁₀. These measures are to take effect without any further action by LRAPA if the area fails to attain the PM₁₀ standard after the attainment date required by the Act.

This addendum will provide the needed contingency commitments to meet this requirements for moderate areas. Accordingly, the following measures, judged to be RACM/RACT or better, are included as contingency measures which will only take effect upon publication by EPA in the Federal Register that the Eugene/Springfield area has failed to attain the PM₁₀ air quality standard by the required date. EPA could make this determination if monitoring data shows the area to be out of compliance, and will not be in attainment until after December 31, 1994.

Emission control measures (contingency plan) for significant area and point sources of PM₁₀ which do not now have RACM/RACT or better include requirements for residential wood burning, urban fugitive dust, open burning, and selected industrial point sources. These contingency plan elements go into effect automatically. The following elements are included:

1. RACM FOR AREA SOURCES

A. Woodstoves

- * *HB 2175, passed by the 1991 Oregon legislature, requires that after December 31, 1994, all non-DEQ certified woodstoves, except antique and cookstoves, be removed and destroyed upon sale of a home in any PM₁₀ non-attainment area that does not meet PM₁₀ standards by that date. State rules implementing this statute are contained in OAR 340, Division 34. The replacement requirement will increase the current normal replacement rate of non-DEQ certified stoves by 3-5% per year.*

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B. New dust controls at urban building sites and on open bodied trucks.

- * *Trackout strips and covering of open bodied trucks within the non-attainment area will be added to existing dust control measures.*

C. Open Burning.

- * *All open burning is banned within the Eugene/Springfield non-attainment area.*

In Conclusion:

The contingency plan provides for application of RACM for all significant area sources of PM10 within the non-attainment area. Contingency standards for fugitive dust and open burning are in LRAPA Title 39. State contingency rules affecting woodstoves are in OAR 340-34-200.

2. RACT FOR INDUSTRIAL POINT SOURCES

Contingency standards for industrial point sources were made in conjunction with the Department of Environmental Quality. They reflect technology that can reasonably be retro-fitted to existing industrial sources, taking into account technological and economic feasibility. The contingency standards for the most part reflect state rules for the Medford-Ashland non-attainment area, and satisfy EPA RACT guidelines. One notable exception is the contingency standard for pulp mills. A detailed RACT analysis was not possible due to time constraints imposed by the Clean Air Act. Contingency standards for the only pulp mill in a PM10 non-attainment area in Oregon are equivalent to federal NSPS standards. These control measures would be implemented over a period of two years, if EPA determines that the Eugene/Springfield non-attainment area does not meet NAAQS after 1994. In most cases, the LRAPA industrial contingency rules are equivalent to those included in the state's contingency plan. Industrial sources addressed in the contingency plan include:

- * *Wood-waste boilers;*
- * *Veneer plants and dryers;*

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- * *Particleboard plants and dryers;*
- * *Air conveying systems;*
- * *Kraft pulp mills;*

Of those, the individual source categories which would be required to reduce emissions to the contingency limits are as follows:

- * *Wood-waste boilers at a plantsite over 35 million BTU (to current Medford standards);*
- * *Plywood plants and veneer drying (to current Medford standards);*
- * *Particleboard plants and dryers (to current Medford standards);*
- * *Air conveying systems over 10 tons/year emissions (to baghouse technology);*
- * *Kraft pulp mills including recovery furnaces, lime kilns, smelt dissolving tanks (To NSPS standards).*

In Conclusion:

The contingency plan provides for RACT or better controls for all significant industrial sources of PM10. LRAPA contingency rules are in Title 39 (Appendix A).

PLAN REVISION PROVISIONS

Moderate non-attainment areas that fail to attain the standard after December 31, 1994 will be designated as "serious non-attainment areas". Accordingly, if EPA determines that the Eugene/Springfield area fails to attain the PM10 NAAQS after December 31, 1994, LRAPA will identify BACM and BACT based upon technology analysis at that time. BACM/BACT will be required to be fully implemented not later than 4 years after redesignation to "serious", if Eugene/Springfield fails to attain PM10 standards after December 31, 1994.

If, through program evaluation, it is determined that deficiencies exist in implementing the woodstove curtailment attainment strategy prior to December 31, 1994, corrective

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measures to enhance the program will be undertaken. These steps will include public education, earlier no-burning determinations, better forecasting.

In the event that the Eugene/Springfield area fails to meet Reasonable Further Progress milestones, or the applicable PM₁₀ attainment deadline, then the Environmental Protection Agency will first notify in writing, DEQ, LRAPA, local governments, and industrial organizations. Within 30 days of notification, LRAPA will complete a written analysis of control strategy commitments, evaluating the adequacy of implementation. Any deficiencies in implementation will be corrected through rulemaking, if necessary, within six months of the original deficiency notification.

Additionally, affected parties will be notified of the requirement to implement expeditiously the contingency measures, if necessary.

As the designee, LRAPA will submit a plan revision that meets all relevant Clean Air Act and EPA requirements within 18 months of a notification from EPA that the area has failed to meet the attainment deadline and has been reclassified to "serious".

PUBLIC INVOLVEMENT UPDATE

The Advisory Committee of the Lane Regional Air Pollution Authority has reviewed the contingency rules, and minutes of the advisory committee meeting are attached. In addition, a public hearing will be held on this addendum in Springfield on October 1, 1991. A public hearing notice will be published in the Eugene Register Guard 30 days prior to the hearing date (and published in the Secretary of State Bulletin at least 15 days prior to adoption by EQC).

Industrial Rules

Summary of Changes

Title 39

Section 39-001: Purpose

Eliminates references to BACT

Section 39-015: Definitions

Deleted LAER, Charcoal Producing Plant, Hardboard, and Hogged Fuel definitions, re-defined Average Operating Opacity, and revised Particulate Matter

Section 39-020: Compliance Schedule

Revised to 30 month schedule
Added option for Agency to adjust interim milestones

Section 39-025: Wood Waste Boilers

Deleted rule for Boilers ≤ 35 mm BTU
> 35 mm BTU changed from LAER to 0.05 gr/dscf, changed from 5% opacity to 10% with max 20% if source tested.

Section 39-040: Kraft Pulp Mills

Changed pulp mill contingency standards from BACT to NSPS

Section 39-045: Charcoal Producing Plants

Deleted entirely

Section 39-050: Air Conveying Systems

Changed cutoff from 3 tons to 10 tons
Added 5% opacity limit for > 10 tons

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 39

Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area

Section 39-001 Purpose

Section 172 of the Clean Air Act, as amended, requires that specific measures be undertaken in a non-attainment area if the area fails to attain the national primary ambient air quality standard by the applicable attainment date. Such measures are to take effect without further action by LRAPA. The purpose of these rules is to establish contingency measures for significant industrial and area sources of PM10 which will become effective in the Eugene-Springfield PM10 nonattainment area if the area fails to attain the national primary ambient air quality standard for PM10 by December 31, 1994.

Section 39-005 Relation to Other Rules

Sections 39-001 through 39-060 shall apply in addition to all other LRAPA rules. The adoption of these rules shall not, in any way, affect the applicability of all other LRAPA rules, and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent conflict, the most stringent rule shall apply.

Section 39-010 Applicability

Sections 39-001 through 39-060 shall apply to the Eugene-Springfield PM10 non-attainment area upon publication by EPA of notice in the Federal Register that the area has failed to attain the national ambient air quality standard for PM10 after December 31, 1994.

Section 39-015 Definitions

As used in Sections 39-001 through 39-060, unless otherwise required by context:

1. "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 air stream.
2. "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.
3. "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.
4. "Contingency Requirements" means the requirements of Sections 39-001 through 39-060.
5. "Department" means the Oregon Department of Environmental Quality.

6. "Design Criteria" means the numerical as well as narrative description of the basis of design including, but not necessarily limited to, design flow rates, temperatures, humidities, descriptions of the types and chemical species of contaminants, uncontrolled and expected controlled mass emission rates and concentrations, scopes of any vendor-supplied and owner-supplied equipment and utilities, and a description of any operational controls.
7. "EPA" means the United States Environmental Protection Agency.
8. "EPA Method 9" means the method for Visual Determination of the Opacity of Emissions From Stationary Sources as promulgated by the U.S. Environmental Protection Agency in Title 40 of the Code of Federal Regulations, Part 60, Appendix A, Method 9.
9. "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.
10. "General Arrangement." in the context of the compliance schedule requirements in this division, means drawings or reproductions which show, as a minimum, the size and location of equipment served by the emission-control system, the location and elevation above grade of the ultimate point of contaminant emission to the atmosphere, and the diameter of the emission vent.
11. "Kraft Mill" or "Mill" means any industrial operation which uses for a cooking liquor an alkaline sulfide solution containing sodium hydroxide and sodium sulfide in its pulping process.
12. "Lime Kiln" means any production device in which calcium carbonate is thermally converted to calcium oxide.
13. "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).
14. "Particleboard" means mat-formed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.
15. "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 Test Manual. Particulate matter emission determinations shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ method 7, each run shall 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 shall be sampled isokinetically, shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Wood waste boilers shall be tested with DEQ Method 5; veneer dryers, wood particle dryers and fiber dryers shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8; pulp mills shall be tested with DEQ method 5, except that water shall be used instead of acetone as the clean-up solvent.
16. "Plywood" means a flat panel built generally of an odd number of thin sheets of veneers of wood in which the grain direction of each ply or layer is at right angles to the one adjacent to it.

17. "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.
18. "Veneer Dryer" means equipment in which veneer is dried.

Section 39-020 Compliance Schedule for Existing Sources

1. Except as provided in Subsection 2 of this rule, compliance with applicable contingency requirements for a source that is located in the Eugene-Springfield non-attainment area prior to the date the contingency requirements first apply shall be demonstrated as expeditiously as possible, but in no case later than the following schedules:
 - A. No later than three months of the date the contingency requirements first apply, the owner or operator shall submit Design Criteria and general specifications for emission control systems for Authority review and approval;
 - B. No later than three months of receiving the Authority's approval of the Design Criteria, the owner or operator shall submit to the Authority a General Arrangement and copies of purchase orders for any emission-control devices, and apply for Authority to Construct the Facility;
 - C. No later than eight months of receiving the Authority's approval of the Design Criteria, the owner or operator shall submit to the Authority vendor drawings as approved for construction of any emission control devices and specifications of any other major equipment in the emission control system in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;
 - D. No later than nine months of receiving the Authority's approval of the Design Criteria, the owner or operator shall begin construction of any emission control devices;
 - E. No later than sixteen months of receiving the Authority's approval of Design Criteria, the owner or operator shall complete construction in accordance with the Design Criteria;
 - F. No later than twenty four months of receiving the Authority's approval of Design Criteria, but no later than thirty months from the date the contingency requirements first apply, the owner or operator shall demonstrate compliance with the applicable contingency requirements.
 - G. The dates in subsections A through F may be changed only upon written approval of the Authority.
2. Subsection 1 of this rule shall not apply if the owner or operator has demonstrated, within six months of the date the contingency requirements first apply, that the source is capable of being operated and is operated in continuous compliance with applicable contingency requirements; the Authority has agreed with the demonstration in writing; and the applicable contingency requirements have been incorporated into the air contaminant discharge permit issued to the source.

Section 39-025 Wood-Waste Boilers

No person shall cause or permit the emission into the atmosphere from any wood-waste boiler that is located on a plant site where the total heat input capacity

from all woodwaste boilers is greater than 35 million BTU/hr unless the boiler(s) are equipped with emission control equipment which:

1. Limits emissions of particulate matter to 0.05 grains per standard cubic foot, corrected to 12% CO₂;
2. Limits visible emissions such that the opacity does not exceed 20% for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the ACD permit for each affected emission point.

Section 39-030 Veneer Dryers

No person shall operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed:

1. An average operating opacity of 10%; and
2. A maximum opacity of 20%, unless the permittee demonstrates by source test that the emission limits in subsections 3 through 6 of this section can be achieved at higher visible emissions than specified in subsections 1 and 2 of this section in which case the emissions shall not exceed the visible air contaminant limitations of LRAPA Section 32-010.3.b. Allowable opacity limits shall be included in the Air Contaminant Discharge Permit for each affected emission point.
3. 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct natural gas or propane fired veneer dryers;
4. 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for steam heated veneer dryers;
5. 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%;
6. 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%;
7. In addition to subsections 5 and 6 of this section, 0.20 pounds per 1,000 pounds of steam generated.

Section 39-035 Particleboard Plants and Wood Particle Dryers

1. No person shall 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 shall cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed 10% opacity for more than an aggregate of 3 minutes in any one hour, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) can be achieved at high visible emissions, but in no case shall emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

Section 39-040 Kraft Pulp Mills

No person shall cause or permit the emission of particulate matter from kraft pulp mills in excess of the following:

1. Recovery furnaces;
 - A. 0.044 gr/dscf, corrected to 8% O₂, and,
 - B. 35% opacity.
2. Lime Kilns
 - A. Gas fired, 0.067 gr/dscf, corrected to 10% O₂
 - B. Liquid fossil fuel fired, 0.13 gr/dscf, corrected to 10% O₂
3. Smelt dissolving tanks, 0.2 lb/ton of black liquor solids (BLS), dry weight.

Section 39-050 Air Conveying systems

1. No person shall cause or permit the emission of particulate matter in excess of 0.1 grains per standard cubic foot from any air conveying systems emitting less than or equal to 10 tons per year of particulate matter to the atmosphere at the time of adoption of this rule.
2. All air conveying systems emitting greater than 10 tons per year of particulate matter to the atmosphere at the time adoption of this rule shall be equipped with a control system with a collection efficiency of at least 98.5%.
3. No person shall cause or permit the emission of an air contaminant which is equal to or greater than 5% opacity from any air conveying system subject to this section.

Section 39-055 Fugitive Dust

1. Construction sites for commercial, industrial or residential subdivisions within the Eugene-Springfield non-attainment area shall provide paved trackout strips or mud cleaning stations on site to reduce mud trackout onto public roads.

Section 39-060 Open Burning

No person shall cause or permit open burning within the Eugene-Springfield non-attainment area.

STATEMENT OF NEED FOR PROPOSED SIP AMENDMENTS

Pursuant to ORS 183.335(2) and LRAPA Rules and Regulations Titles 13 and 14, the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) and adopt regulations for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

Legal Authority

ORS 183, 468.535, LRAPA Rules and Regulations Titles 13 and 14, the Federal Clean Air Act Amendments of 1990.

Need for Amendments

In March, 1990, the Lane Regional Air Pollution Authority adopted a PM10 State Implementation Plan (SIP) for the Eugene/Springfield non-attainment area. This SIP has been forwarded to the Oregon Environmental Quality Commission for approval and submittal to EPA. With the Clean Air Act Amendments of 1990, the Eugene-Springfield area was designated as an existing PM10 non-attainment area. The new Act has added several new SIP requirements which will require amendments to the current Eugene-Springfield SIP.

The current Eugene-Springfield SIP meets most of the Act's requirements, except for the following:

1. Determination that reasonably available control measures (RACM's) for woodstoves, urban fugitive dust sources, prescribed open burning sources, and Reasonably Available Control Technology (RACT) for industrial point sources are in place where appropriate, as part of the attainment demonstration.
2. Assurance that adequate resources and personnel are available to carry out the attainment strategies and that the state has responsibility to see that the strategies are implemented.
3. Adoption of a contingency plan which will cause further additional emission reductions automatically if the EPA administrator declares that the area is in non-attainment after December 31, 1994. The contingency must contain as a minimum Best Available Control Measures (BACM) for woodstoves, urban fugitive dust, prescribed open burning and Reasonably Available Control Technology (BACT) standards for industrial point sources. Rules to implement the contingency plan must be adopted concurrently, such rules to be implemented upon activation of the contingency plan.

As required by the Act, these SIP amendments are due for submittal to EPA by November 15, 1991.

STATEMENT OF NEED FOR PROPOSED SIP AMENDMENTS
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Principal Documents Relied Upon

1. Federal Clean Air Act Amendments of 1990
2. LRAPA Rules and Regulations, Titles 13 and 14
3. Eugene-Springfield PM10 SIP, March 1990
4. LRAPA Staff Report to LRAPA Board of Directors, August 13, 1991
5. Proposed LRAPA Title 39
6. Proposed DEQ SIP Amendments
7. Proposed DEQ Rule Amendments
8. ORS 183 and 468, et. seq.

FISCAL AND ECONOMIC IMPACT STATEMENT

Background

The proposed SIP amendments prescribe particulate emission standards for certain existing industrial, fugitive and open burning sources, to be implemented upon determination by EPA that the Eugene-Springfield area has failed to attain the PM₁₀ NAAQS after December 31, 1994. This document is a summary of the estimated costs associated with meeting the proposed standards if they are implemented.

The proposed standards are considered Best Available Control Technology as defined by EPA guidance for PM₁₀ non-attainment areas. Preferred technologies applied to the known existing affected sources within the non-attainment area are used for this analysis. The actual technologies selected by individual affected sources may be different at the time of earliest possible application, and some affected sources may achieve the proposed emission limits prior to activation of the contingency measures. Thus, the actual range of costs may vary widely from the estimates given here.

Affected sources

No additional emission reductions are required from industrial sources UNLESS the Eugene/Springfield non-attainment area does not meet PM₁₀ standards by December 31, 1994. If it does not, the contingency plan requires the implementation of BACT. The BACT requirement will affect the following sources:

- * 18 wood waste boilers >35 mm BTU heat input
- * 3 direct-fired veneer dryers
- * 3 particleboard dryers
- * 2 air conveying systems

Control technology

Many control technologies are available. For the purpose of this discussion, the following technologies were chosen to estimate costs:

1. Boilers--Wet electrostatic precipitator (E-TUBE)
2. Veneer dryers--Wet electrostatic precipitator (E-TUBE)
3. Particleboard dryers--Wet electrostatic precipitator (E-TUBE)
Electronic Filter Bed (EFB)
4. Air conveying systems--Baghouse filter
5. Pulp mills--electrostatic precipitators on recovery furnaces, lime kilns and smelt dissolving tanks

These represent alternatives generally considered economically feasible for the desired level of particulate control.

Cost Estimates

Capital cost to install the preferred technology on hogged-fuel boilers >35 mm Btu (approximately 30,000 lbs of steam/hr.) is estimated at \$12,520,000, based on 18 units. Costs range from \$500,000 to control a 30,000 lbs/hr. boiler to \$2,650,000 for a boiler rated at 240,000 lbs/hr (DEQ figures--see Table I). Annual Operating and Maintenance costs are estimated at \$820,000, based recent operating cost data from existing installations in the area.

Capital cost to control wood-fired veneer dryers will be in the range of \$250,000 to \$300,000 each for the six dryers located in the Eugene/Springfield NAA. Reductions in this per-unit price may be realized for multiple-dryer installations. Annual operating costs are estimated at approximately \$40,000 per unit, based on operational data from installations in the Medford area.

Capital cost to install controls on the three uncontrolled particleboard dryers in Springfield will be approximately \$550,000 each, or \$1,650,000 total for the plant site. Annual operating and maintenance costs are estimated at \$30,000, based upon annual costs of a similar installation at the same plant site.

Baghouse control of cyclones (air conveying systems) >3 tons per year is estimated at \$90,000 per unit. Two systems are located within the NAA. Annual operating costs are estimated at \$6,000, based on numerous similar installations.

The existing control systems on the pulp mill recovery furnaces are capable of meeting the proposed contingency standard now. However, using an estimated

15-year life for the current precipitators, it is likely that the equipment will require replacement prior to the time specified by the contingency plan (1999). If the normal service life of the existing controls were to extend beyond 1999, and deterioration is such that it is unable to meet the contingency standards, an incremental cost will be incurred by the facility for the early replacement of the control units. If the date of implementation moves beyond 1999, the incremental cost to implement the contingency is reduced, reaching zero at the end of the useful life of the existing ESP's. The same rationale is used for the control estimates on the lime kilns and dissolved smelt tank vents. Annual operating costs are assumed to be similar to existing controls; thus there would be negligible incremental operating costs associated with the contingency measures.

The fugitive dust control requirements for construction sites and covering dusty loads is estimated at approximately \$1.00/sq.ft, or \$800 to \$1000 per site, based on the approximate cost of laying temporary asphalt trackout strips at major construction sites. The cost of covering dusty loads on open-bodied trucks is nominal. This may be a standard requirement before the earliest implementation date, in which case, the incremental costs would be negligible.

Table I

Estimated costs for BACT-Industrial point sources

Boilers:	# of units	Output-Lbs steam/hr.	Est. Cost	O&M
	4	30,000	\$500,000	\$30,000
	6	50,000	720,000	40,000
	7	100,000	1,000,000	55,000
	1	240,000	2,650,000	75,000

Capital costs for all affected hogged-fuel boilers are \$12,520,000

Operating and Maintenance costs are \$820,000 annually for all boilers

Veneer dryers:

wood fired: \$250,000 ea. X 6 = \$1,500,000

Operating and Maintenance costs are \$25,000 ea. X 6 = \$150,000

Particleboard rotary dryers:

45,000 acfm X \$12/acfm to control \$540,000 ea X 3 = \$1,620,000

Operating and Maintenance costs are \$30,000 ea X 3 = \$90,000

Air conveying systems:

Baghouse cost varies from manufacturer to manufacturer, and for various applications. \$90,000 is average. There are two known air conveying systems >3 tpy.

Capital cost is \$180,000

Operating costs are generally \$6,000/year

Pulp mills:

Existing precipitators on the recovery furnaces, lime kilns and dissolved smelt tank vents will meet contingency standards now, but may require early replacement, if the contingency is implemented soon after 1999. Costs of lost life on existing precipitators on the recovery furnaces is directly related to the rate of deterioration, if any, below the level required to meet the contingency standard. Costs decline to zero at year 1997, based on an expected 15-year life.

Operating and maintenance costs are considered neutral or negative, due to some incremental improvement in operation and maintenance technology.

EUGENE/SPRINGFIELD PM10 SIP

ADDENDUM TO FISCAL IMPACT STATEMENT

Costs--Pulp Mill Electrostatic Precipitator Replacement

Information on projected costs associated with proposed contingency standards for pulp mills is general in nature, and based on the assumption that the incremental capital costs depend in part upon the remaining life of the existing precipitators at the time the contingency standards would take effect (e.g., time of installation).

The units in service are not currently scheduled for retirement; that decision is dependent on an ongoing analysis of operational and maintenance costs. The assumptions in the following analysis use industry's estimates of capital costs, inflation rates, and estimated remaining life of the existing units. Estimated remaining life represented in this analysis is, in the opinion of LRAPA, the maximum expected from these units. Actual costs may be somewhat lower than represented here, but would be expected to be no higher.

Supplemental information supplied by industry provides a scenario that assumes six years' premature replacement of control equipment [Electrostatic Precipitators (ESP's) on the recovery furnaces and lime kilns; scrubbers on the smelt dissolving tanks]. It also indicates that meeting the proposed contingency standard will require larger ESP's than needed to meet the current limits for replacement ESP's.

Costs--Recovery Furnace Electrostatic Precipitator Replacement

A large part of the cost of replacement is "lost opportunity" costs, or the cost of spending money that will then not be available for income producing projects.

Replacement of the existing ESP with a similarly sized unit is estimated at \$30 million. A unit that will meet the more stringent contingency standards is calculated at \$40 million. The replacement would occur in 1998 (the earliest date the contingency standards would apply), six years prior to the end of the normal lifespan of the existing unit. Industry anticipates a 15% return on capital, or \$6 million (.15 X \$40 million) per year for each year of useful life remaining at the time of replacement, and a 4% annual inflation rate. Total net cost is \$35.4 million.

Costs--Lime Kiln Electrostatic Precipitator Replacement

A similar case is made for the ESP on the lime kiln, only costs are lower due to the size of the unit. Net opportunity cost is estimated at \$7.2 million, and savings from inflation at \$2.1 million, a net cost of \$5.1 million.

**EUGENE/SPRINGFIELD PM10 SIP
ADDENDUM TO FISCAL IMPACT STATEMENT**

-2-

LRAPA is not certain that replacement of this unit is necessary to meet contingency standards. Past performance indicates that the unit is capable of operating within the prescribed limits. Average emissions from the unit are 0.008 gr/dscf over the last three years, well below the 0.035 gr/dscf contingency standards. Industry has recorded excursions above this level; however, it has not been determined whether the current unit can reliably operate below the 0.035 limit, or whether a newer, larger unit would operate consistently below the contingency limit.

Some savings will likely occur with the new units; increased efficiency may reduce power and maintenance costs, and reduced emissions will reduce permit fees and costs for reclaimed process materials. There may be some residual value of the old equipment, i.e., transformers and components and scrap.

Additionally, current state laws provide for tax incentives in the form of tax credits equal to a total of one half of the qualifying cost of the facility taken over ten years. It is also possible that the "loss" incurred by the early retirement of the system could be written off the corporate tax liability.

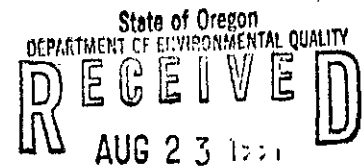
08/29/91

SED 424
(Rev. 10/1/87)

NOTICE OF PROPOSED RULEMAKING HEARING

(Statement of Need and Fiscal Impact must accompany this form.)

AGENCY: Lane Regional Air Pollution Authority and
Department of Environmental Quality
(Department)



The above named agencies give notice of hearing.

AIR QUALITY DIVISION

HEARING TO BE HELD:

Date: 10/01/91 Time: 12:15 p.m. Location: City Council Chambers
Springfield City Hall
225 North 5th Street
Springfield, Oregon

Hearings Officer(s): Donald R. Arkeil

Pursuant to the statutory authority of ORS 183 and 465 and LRAPA Rules and Regulations Titles 13 and 14, the following action is proposed:

ADOPT: Proposed new LRAPA Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area"

AMEND: Eugene-Springfield PM10 State Implementation Plan, adopted March 1990

Prior Notice Given

No Prior Notice Given

SUMMARY: In March, 1990, the Lane Regional Air Pollution Authority adopted a PM10 State Implementation Plan (SIP) for the Eugene-Springfield non-attainment area. This SIP has been forwarded to the Oregon Environmental Quality Commission for approval and submittal to EPA. With the Clean Air Act Amendments of 1990, the Eugene-Springfield area was designated as an existing PM10 non-attainment area. The new Act has added several new SIP requirements which will require amendments to the current Eugene-Springfield SIP.

The current Eugene-Springfield SIP meets most of the Act's requirements, except for the following:

1. Assurance that reasonably available control measures (RACM's) for woodstoves, urban fugitive dust sources, prescribed open burning sources, and Reasonably Available Control Technology (RACT) for industrial point sources are in place where appropriate, as part of the attainment demonstration.
2. Assurance that adequate resources and personnel are available to carry out the attainment strategies and that the state has responsibility to see that the strategies are implemented.
3. Adoption of a contingency plan which will cause further additional emission reductions automatically if the EPA administrator declares that the area is in non-attainment after December 31, 1994. The contingency must contain as a minimum Best Available Control Measures (BACM) for woodstoves, urban fugitive dust, prescribed open burning and Reasonably Available Control Technology (BACT) standards for industrial point sources. Rules to implement the contingency plan must be adopted concurrently, such rules to be implemented upon activation of the contingency plan.

As required by the Clean Air Act, these SIP amendments are due for submittal to EPA by November 15, 1991.

REC
AUG 23 1991

AIR QUALITY DIVISION

**NOTICE OF INTENT TO ADOPT AMENDMENTS TO
OREGON'S AIR QUALITY IMPLEMENTATION PLAN**

In accordance with Titles 13 and 14 of the Lane Regional Air Pollution Authority (LRAPA) Rules and Regulations, the Board of Directors is proposing:

To amend the Eugene-Springfield PM10 State Implementation Plan, adopted by the LRAPA Board of Directors in March 1990, to satisfy requirements of the federal Clean Air Act Amendments of 1990.

To adopt proposed new LRAPA Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area," to satisfy requirements of the federal Clean Air Act Amendments of 1990.

WHO IS AFFECTED: Industrial sources of fine particulate matter, certain sources of urban fugitive dust, residents who conduct open burning, and owners of wood-burning stoves.

PUBLIC HEARING:

Public hearing on the above SIP amendment adoption will be held before the LRAPA Board of Directors at its regular meeting of Tuesday, October 1, 1991.

Location: City Council Chambers Time: 12:15 p.m.
Springfield City Hall
225 North 5th Street
Springfield, OR

Copies of the proposed SIP amendments and LRAPA rules, as well as Statements of Need and Fiscal Impact, are available for review at the LRAPA office located at 225 North 5th, Suite 501 (Springfield City Hall building), Springfield, OR 97477 until September 30, 1991. The public may comment on the proposed SIP amendments and rules by calling the LRAPA business office, 726-2514; and written comment may be submitted until September 30, 1991, to 225 North 5th, Suite 501.

To Be Published: Wednesday, August 28, 1991.

RECEIVED
SEP 03 1991

LANE REGIONAL AIR POLLUTION AUTHORITY

Affidavit of Publication

STATE OF OREGON, COUNTY OF LANE - ss

I, Derek Adams being duly sworn, depose and say that I am the... Advertising Director... of the Springfield News, a newspaper of general circulation, as defined by ORS 193.010 and 193.020; printed and published at Springfield in the aforesaid county and state: that the

LRAPA

Notice of Intent to Adopt Amendments to Oregon's Air Quality Implementation Plan.

..... a printed copy of which is hereto annexed, was published in the entire issue of said newspaper for..... successive and consecutive weeks in the following issues:

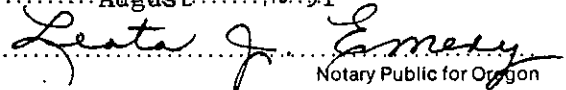
August 28, 1991

THE SPRINGFIELD NEWS

By: 

Subscribed and sworn to me this 29th day of

..... August 19. 91


Notary Public for Oregon

(My Commission expires March 3, 1993.....)

NOTICE OF INTENT TO ADOPT AMENDMENTS TO OREGON'S AIR QUALITY IMPLEMENTATION PLAN

In accordance with Titles 13 and 14 of the Lane Regional Air Pollution Authority (LRAPA) Rules and Regulations, the Board of Directors is proposing:

To amend the Eugene-Springfield PM10 State Implementation Plan, adopted by the LRAPA Board of Directors in March 1990, to satisfy requirements of the federal Clean Air Act Amendments of 1990.

To adopt proposed new LRAPA Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area," to satisfy requirements of the federal Clean Air Act Amendments of 1990.

WHO IS AFFECTED: Industrial sources of fine particulate matter, certain sources of urban fugitive dust, residents who conduct open burning, and owners of wood-burning stoves.

PUBLIC HEARING: Public hearing on the above SIP amendment adoption will be held before the LRAPA Board of Directors at its regular meeting of Tuesday, October 1, 1991.

Location: City Council Chambers
Springfield City Hall
225 North 5th Street
Springfield, OR
Time: 12:15 p.m.

Copies of the proposed SIP amendments and LRAPA rules, as well as Statements of Need and Fiscal Impact, are available for review at the LRAPA office located at 225 North 5th, Suite

501 (Springfield City Hall building), Springfield, OR 97477 until September 30, 1991. The public may comment on the proposed SIP amendments and rules by calling the LRAPA business office (226-2514) and written comment may be submitted until September 30, 1991, to 225 North 5th, Suite 501.

28 (739)

Legal Notice Advertising

- LANE REGIONAL AIR DONALD R ARKELL
- 225 N 5TH STREET, #501
- SPRINGFIELD OR 97477

- Tearsheet Notice
- Duplicate Affidavit

AFFIDAVIT OF PUBLICATION

STATE OF OREGON, }
COUNTY OF LANE, } ss.

WENDY L. WALSH

I, _____, being first duly sworn, depose and say that I am the Advertising Manager, or his principal clerk, of the Eugene Register-Guard, a newspaper of general circulation as defined in ORS 193.010 and 193.020; published at Eugene in the aforesaid county and state; that the

NOTICE OF INTENT

a printed copy of which is hereto annexed, was published in the entire issue of said newspaper for ONE successive and consecutive DAY in the following issues:

AUGUST 28, 1991

NOTICE OF INTENT TO ADOPT AMENDMENTS TO OREGON'S AIR QUALITY IMPLEMENTATION PLAN

In accordance with Titles 13 and 14 of the Lane Regional Air Pollution Authority (LRAPA) Rules and Regulations, the Board of Directors is proposing:

To amend the Eugene-Springfield PM10 State Implementation Plan, adopted by the LRAPA Board of Directors in March 1990, to satisfy requirements of the federal Clean Air Act Amendments of 1990.

To adopt proposed new LRAPA Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area", to satisfy requirements of the federal Clean Air Act Amendments of 1990.

WHO IS AFFECTED: Industrial sources of fine particulate matter, certain sources of urban fugitive dust, residents who conduct open burning, and owners of wood-burning stoves.

PUBLIC HEARING: Public hearing on the above SIP amendment adoption will be held before the LRAPA Board of Directors at its regular meeting of Tuesday, October 1, 1991.

Location: City Council Chambers, Springfield City Hall, 225 North 5th Street, Springfield, OR.

Time: 12:15 p.m.

Copies of the proposed SIP amendments and LRAPA rules, as well as Statements of Need and Fiscal Impact, are available for review at the LRAPA office located at 225 North 5th, Suite 501 (Springfield City Hall building), Springfield, OR, 97477 until September 30, 1991. The public may comment on the proposed SIP amendments and rules by calling the LRAPA business office, 726-2514; and written comment may be submitted until September 30, 1991, to 225 North 5th, Suite 501.

No. 11601 — August 28, 1991.

Wendy L. Walsh
Subscribed and sworn to before me this AUG. 30, 1991

Shannon Pool
Notary Public of Oregon

My Commission Expires: 11-13-93

AFFIDAVIT

NOTICE OF INTENT TO ADOPT AMENDMENTS TO OREGON'S AIR QUALITY IMPLEMENTATION PLAN

In accordance with Titles 13 and 14 of the Lane Regional Air Pollution Authority (LRAPA) Rules and Regulations, the Board of Directors is proposing: To amend the Eugene-Springfield PM10 State Implementation Plan, adopted by the LRAPA Board of Directors in March 1990, to satisfy requirements of the federal Clean Air Act Amendments of 1990. To adopt proposed new LRAPA Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area," to satisfy requirements of the federal Clean Air Act Amendments of 1990.

WHO IS AFFECTED: Industrial sources of fine particulate matter, certain sources of urban fugitive dust, residents who conduct open burning, and owners of wood-burning stoves.

PUBLIC HEARING: Public hearing on the above SIP amendment adoption will be held before the LRAPA Board of Directors at its regular meeting of Tuesday, October 1, 1991.

Time: 12:15 p.m.
Location: City Council Chambers
Springfield City Hall
225 North 5th Street
Springfield, OR

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Affidavit of Publication

State of Oregon
County of Lane

I, Peter Morales, being first duly sworn, depose and say that I am Publisher of The Cottage Grove Sentinel, a newspaper of general circulation, as defined by ORS 193,010, and 193,020, printed and published at Cottage Grove in the aforesaid county and state; that

NOTICE OF INTENT TO ADOPT AMENDMENTS TO OREGON'S AIR QUALITY IMPLEMENTATION PLAN of intent to adopt amendments to _____
In accordance with Titles 13 and 14 of the Lane Regional Air Pollution Authority (LRAPA) Rules and Regulations, the Board of Directors is proposing: To amend the Eugene-Springfield PM10 State Implementation Plan, adopted by the LRAPA Board of Directors in March 1990, to satisfy requirements of the federal Clean Air Act Amendments of 1990. To adopt proposed new LRAPA Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area," to satisfy requirements of the federal Clean Air Act Amendments of 1990.

of which is hereto annexed, was published once a entire issue of said newspaper for 1 successive and 8/28/91 weeks in the following issues:

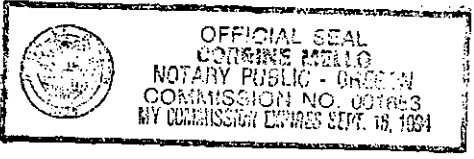
WHO IS AFFECTED: Industrial sources of fine particulate matter, certain sources of urban fugitive dust, residents who conduct open burning, and owners of wood-burning stoves.

PUBLIC HEARING: Public hearing on the above SIP amendment adoption will be held before the LRAPA Board of Directors at its regular meeting of Tuesday, October 1, 1991.
Location: City Council Chambers
Springfield City Hall
225 North 5th Street
Springfield, OR
Time: 12:15 p.m.

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a.28 (739)

Peter Morales
Subscribed and sworn to before me this 28 day of Aug, 19 91
Corrine Mello
Notary Public for Oregon
(My commission expires) 9/16/94



OREGON BULLETIN



VOLUME 31, No. 4
Issue Date: October 1, 1991

This issue contains Administrative Rule Orders and Notices of Proposed Rulemaking officially filed
August 16, 1991, 8:00 a.m. through September 13, 1991, 5:00 p.m.



Published by
PHIL KEISLING
Secretary of State

NOTICES OF PROPOSED RULEMAKING HEARING - Continued

DATE: 10-23-91 **TIME:** 3 PM **LOCATION:** Mental Health & Developmental Disability Services Division
Maxwell Jones Conf. Rm. 124
2575 Bittern St. NE
Salem, OR 97310

HEARINGS OFFICER: Burl Oliver
STATUTORY AUTH: ORS 414.085, 430.041 and 430.640(1)(h)
ADOPT: OARs 309-34-060 through 309-34-100
SUMMARY: The Medicaid Payment for Children's Psychiatric Day Treatment Services rule has been developed to address the transfer of the DARTS program from CAD to the Mental Health & Developmental Disability Services Division. The new rules incorporate the requirements of the former CSD rules and change references to the Children's Services Division to MHDDSD.
LAST DATE FOR COMMENT: 10-23-91
CONTACT PERSON: Sandy Youngers
ADDRESS: Mental Health & Developmental Disability Services Division, 2575 Bittern St. NE, Salem, OR 97310
TELEPHONE: 378-2671

Chapter 340 Environmental Quality, Department of

DATE: 10-1-91 **TIME:** 12:15 PM **LOCATION:** City Council Chambers
225 North 5th Street
Springfield, OR

HEARINGS OFFICER: Donald R. Arkell
STATUTORY AUTH: ORS 183 and 465 and LRAPA Rules and Regulations Titles 13 and 14
ADOPT: Proposed new LRAP Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-Attainment Area"
AMEND: Eugene-Springfield PM10 State Implementation Plan, Adopted March 1990
SUMMARY: In March, 1990, the Lane Regional Air Pollution Authority adopted a PM10 State Implementation Plan (SIP) for the Eugene-Springfield non-attainment area. This SIP has been forwarded to the Oregon Environmental Quality Commission for approval and submittal to EPA. With the Clean Air Act Amendments of 1990, the Eugene-Springfield area was designated as an existing PM10 non-attainment area. The new Act has added several new SIP requirements which

will require amendments to the current Eugene-Springfield SIP.

The current Eugene-Springfield SIP meets most of the Act's requirements, except for the following:

1. Assurance that reasonable available control measures (RACM's) for woodstoves, urban fugitive dust sources, prescribed open burning sources, and Reasonably Available Control Technology (RACT) for industrial point sources are in place where appropriate, as part of the attainment demonstration.

2. Assurance that adequate resources and personnel are available to carry out the attainment strategies and that the state has responsibility to see that the strategies are implemented.

3. Adoption of a contingency plan which will cause further additional emission reductions automatically if the EPA administrator declares that the area is in non-attainment after December 31, 1994. The contingency must contain as a minimum Best Available Control Measures (BACM) for woodstoves, urban fugitive dust, prescribed open burning and Reasonably Available Control Technology (BACT) standards for industrial point sources. Rules to implement the contingency plan must be adopted concurrently, such rules to be implemented upon activation of the contingency plan. As required by the Clean Air Act, these SIP amendments are due for submittal to EPA by November 15, 1991.

LAST DATE FOR COMMENT: 9-30-91
CONTACT PERSON: Donald R. Arkell, Director
ADDRESS: Lane Regional Air Pollution Authority, 225 North 5th, Suite 501, Springfield, OR 97477
TELEPHONE: 726-2514

DATE: 11-12-91 **TIME:** 12:15 PM **LOCATION:** City Council Chambers
Springfield City Hall
225 North 5th St
Springfield, OR

HEARINGS OFFICER: Donald R. Arkell
STATUTORY AUTH: ORS 183 and 468
AMEND: LRAPA Title 34, "Permits", Table A
SUMMARY: It is proposed to increase permit fees for air contaminant sources in order to fund a staff position to assist in development and maintenance of emission inventory and to work with local sources in a continuous emissions monitoring

program to satisfy permitting requirements of the 1990 Clean Air Act Amendments. The proposed increase would raise permit program cost recovery from the current 51% TO 86% by generally doubling fees for Air Contaminant Discharge Permits.

LAST DATE FOR COMMENT: 11-11-91
CONTACT PERSON: Donald R. Arkell, Director
ADDRESS: Lane Regional Air Pollution Authority, 225 North 5th, Suite 501, Springfield, OR 97477
TELEPHONE: 726-2514

DATE: 10-23-91 **TIME:** 10 AM to noon **LOCATION:** DEQ Hearing Room 3A
811 SW 6th Avenue
Portland, OR

HEARINGS OFFICER: Brooks Koenig
STATUTORY AUTH: ORS 459.236; SB66, 1991 Legislature
AMEND: OARs 340-61-115 and 61-120
SUMMARY: Implements \$.35 per-ton solid waste disposal fee increase required by 1991 SB66. Both domestic solid waste and out-of-state waste disposed of in Oregon are subject to the fee increase.
LAST DATE FOR COMMENT: 10-31-91
CONTACT PERSON: Deanna Mueller-Crispin
ADDRESS: Dept. of Environmental Quality, 811 SW 6th Avenue, Portland, OR 97204
TELEPHONE: 229-5808

Chapter 345 Energy Facility Siting Council

Pursuant to ORS 469.330 and OAR 345-20-020, Notice is hereby given that PowerLink Corporation and the Port of Morrow have filed a notice of intent to file an application for a site certificate to construct and operate a cogeneration energy facility near Boardman, Oregon. The notice of intent was deemed filed by the Oregon Department of Energy on August 28, 1991. PowerLink and the Port of Morrow intend to file an application for a site certificate in March 1992.

Public Information Hearing:

The Oregon Department of Energy will hold an informational public hearing on Wednesday, October 9, 1991, in Boardman, Oregon, at the Riverside High School Auditorium, 210 NE

(2) in determining air purity standards, the commission shall consider the following factors:

(a) The quality or characteristics of air contaminants or the duration of their presence in the atmosphere which may cause air pollution in the particular area of the state;

(b) Existing physical conditions and topography;

(c) Prevailing wind directions and velocities;

(d) Temperatures and temperature inversion periods, humidity, and other atmospheric conditions;

(e) Possible chemical reactions between air contaminants or between such air contaminants and air gases, moisture or sunlight;

(f) The predominant character of development of the area of the state, such as residential, highly developed industrial area, commercial or other characteristics;

(g) Availability of air-cleaning devices;

(h) Economic feasibility of air-cleaning devices;

(i) Effect on normal human health of particular air contaminants;

(j) Effect on efficiency of industrial operation resulting from use of air-cleaning devices;

(k) Extent of danger to property in the area reasonably to be expected from any particular air contaminants;

(l) Interference with reasonable enjoyment of life by persons in the area which can reasonably be expected to be affected by the air contaminants;

(m) The volume of air contaminants emitted from a particular class of air contamination source;

(n) The economic and industrial development of the state and continuance of public enjoyment of the state's natural resources; and

(o) Other factors which the commission may find applicable.

(3) The commission may establish air quality standards including emission standards for the entire state or an area of the state. The standards shall set forth the maximum amount of air pollution permissible in various categories of air contaminants and may differentiate between different areas of the state, different air contaminants and different air contamination sources or classes thereof. [Formerly 449.733]

468.300 When liability for violation not applicable. The several liabilities which may be imposed pursuant to ORS 448.305, 454.010

to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter upon persons violating the provisions of any rule, standard or order of the commission pertaining to air pollution shall not be so construed as to include any violation which was caused by an act of God, war, strife, riot or other condition as to which any negligence or wilful misconduct on the part of such person was not the proximate cause. [Formerly 449.723]

468.305 General comprehensive plan. Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state. [Formerly 449.732]

468.310 Permits. By rule the commission may require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state. The permits shall be issued as provided in ORS 468.065. [Formerly 449.727]

468.315 Activities prohibited without permit; limit on activities with permit. (1) Without first obtaining a permit pursuant to ORS 468.065, no person shall:

(a) Discharge, emit or allow to be discharged or emitted any air contaminant for which a permit is required under ORS 468.310 into the outdoor atmosphere from any air contamination source.

(b) Construct, install, establish, develop, modify, enlarge or operate any air contamination source for which a permit is required under ORS 468.310.

(2) No person shall increase in volume or strength discharges or emissions from any air contamination source for which a permit is required under ORS 468.310 in excess of the permissive discharges or emission specified under an existing permit. [Formerly 449.731]

468.320 Classification of air contamination sources; registration and reporting of sources. (1) By rule the commission may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution and may require registration or reporting or both for any such class or classes.

(2) Any person in control of an air contamination source of any class for which registration and reporting is required under subsection (1) of this section shall register

(a) One member of the governing body of each participating county, to be designated by the governing body of the county.

(b) One member of the governing body of each participating city and of each nonparticipating city of 25,000 or more population located within a participating county.

(c) Where regional air pollution authorities cover only one county, one additional member for each 35,000 population over 25,000 in a participating city, not to exceed three members from the city, to be designated by the governing body of the city.

(d) One member of the governing body of a participating city of less than 25,000 population, to be designated jointly by the governing bodies of participating cities, each with less than 25,000 population, located in a participating county, but the combined population of such cities must be at least 5,500.

(e) One or more additional members, if the board would otherwise consist of an even number of members, or less than the minimum number required by subsection (1) of this section, to be selected by members designated under paragraphs (a) to (d) of this subsection, such member or members also to be a member of the governing body of a participating city or county.

(2) A member designated under paragraphs (a) to (d) of subsection (1) of this section shall hold office at the pleasure of the governing body by which he was designated. The member or members designated under paragraph (e) of subsection (1) of this section, if any, shall serve for a term of two years. The term of any member shall terminate at any time when he is no longer a member of the governing body of the city or county by which he was designated or, if appointed under paragraph (c) or (d) of subsection (1) of this section, when he is no longer a member of the governing body of a participating city or if designated under paragraph (e) of subsection (1) of this section, when he is no longer a member of the governing body of a participating city or county.

468.525 Board where population requirement waived. ORS 468.520 applies to the designation of the members of the board of directors of a regional air quality control authority formed under a waiver authorized by ORS 468.510. However,

there shall be no maximum number of members and, in lieu of the members designated as provided in ORS 468.520 (1)(b) to (d), members representing cities within the region shall be designated as follows:

(1) One member of the governing body of each participating city and of each nonparticipating city, having a population of 2,000 or more and located within a participating county, not to exceed five members. If the number of such cities exceeds five, the governing bodies of the cities described by this subsection shall jointly select five members from the governing bodies of such cities.

(2) One member of the governing body of a participating city of less than 2,000 population, to be designated jointly by the governing bodies of participating cities, each having a population of less than 2,000.

468.530 Advisory committee; duties; members; terms; chairman; meetings. (1) The board of directors of the regional authority shall appoint an advisory committee which shall advise the board in matters pertaining to the region and particularly on methods and procedures for the protection of public health and welfare and of property from the adverse effects of air pollution.

(2) The advisory committee shall consist of at least seven members appointed for a term of three years with at least one representative from each of the following interests within the region.

- (a) Public health agencies;
- (b) Agriculture;
- (c) Industry;
- (d) Community planning;
- (e) Fire suppression agencies; and
- (f) The general public.

(3) The advisory committee shall select a chair-person and vice-chairperson and such other officers as it considers necessary. Members shall serve without compensation, but may be allowed actual and necessary expenses incurred in the discharge of their duties. The committee shall meet as frequently as it or the board of directors considers necessary.

(4) Notwithstanding the provisions of subsection (2) of this section, the board of directors of the regional authority shall adopt by rule a method for establishing the initial terms of office of advisory committee members so that the terms of office do not all expire on the same date.

468.535 Function of authority. (1)

When authorized to do so by the commission, a regional authority formed under ORS 468.505 shall exercise the functions relating to air pollution control vested in the commission and the department by ORS 468.035, 468.065, 468.070, 468.090, 468.120, 468.295, 468.310, 468.320, 468.325, 468.335, 468.340 and 468.875 to 468.897 insofar as such functions are applicable to the conditions and situations of the territory within the regional authority. The regional authority shall carry out these functions in the manner provided for the commission and the department to carry out the same functions. Such functions may be exercised over both incorporated and unincorporated areas within the territory of the regional authority, regardless of whether the governing body of a city within the territory of the region is participating in the regional authority.

(2) No regional authority is authorized to establish or alter areas or to adopt any rule or standard that is less strict than any rule or standard of the commission. The regional authority must submit to the commission for its approval all air quality standards adopted by the regional authority prior to enforcing any such standards.

(3) Subject to ORS 468.540, 468.545 and 468.565, when a regional authority is exercising functions under subsection (1) of this section, the commission and the department shall not exercise the same functions in the same territory. The regional authority's jurisdiction shall be exclusive. The regional authority shall enforce rules and standards of the commission as required to do so by the commission.

(4) The commission and the regional authorities may regulate, limit, control, or prohibit by rule all air contamination sources not otherwise exempt within their respective jurisdictions. However, field burning and forest land burning shall be regulated by the commission and fire permit agencies as provided in ORS 468.450, 468.460 to 468.480, 476.380, 477.505 to 477.550 and 478.960.

468.540 Assumption, retention and transfer of control over classes of air contamination sources. (1) The commission may assume and retain control over any class of air contamination source if it finds that such control is beyond the reasonable capabilities of the regional authorities be-

AGENDA ITEM NO. 6**LRAPA Board of Directors Meeting****August 13, 1991**

TO: Board of Directors

FROM: Donald R. Arkell, Director

SUBJ: **PM-10 STATE IMPLEMENTATION PLAN**

Background

In March, 1990, The Lane Regional Air Pollution Authority adopted a PM-10 State Implementation Plan (SIP) for the Eugene/Springfield area. This SIP has been forwarded to the Oregon Environmental Quality Commission for approval and submittal to EPA. With The Clean Air Act Amendments of 1990, the Eugene-Springfield area was designated as an existing PM-10 nonattainment area. The Act has added several new SIP requirements which will require amendments to the current Eugene-Springfield SIP.

PM-10 Control Strategy Requirements--NEW Clean Air Act

- * Assurance that reasonably available control measures (RACM's) for woodstoves, dust sources and open burning sources are in place where appropriate, as part of the attainment demonstration.

We satisfy this requirement already. The mandatory curtailment program on the books is the biggest piece of woodstove RACM, and full attainment is demonstrated with curtailment, and restrictions on installation of used, uncertified woodstoves, with nothing further than existing restrictions on fugitive dust emissions and smoke from prescribed open burning.

- * Adoption of reasonably available control technology (RACT) for industrial sources where RACT is necessary to ensure attainment before December 31, 1994.

Modeling data which support the attainment strategy suggests that industrial RACT is not needed for attainment in the Eugene/Springfield area.

**STAFF REPORT, PM10 SIP
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- * Adoption of a contingency plan that provides by rule, significant additional emission reductions that will be automatically effective if attainment is not reached by the December 31, 1994 deadline.

Significant further emission reductions will be needed for a contingency plan. These will include application of Best Available Control Measures (BACM), which includes tighter restrictions on woodstoves, urban fugitive dust, and open burning, as well as Best Available Control Technology (BACT) on existing industrial sources of PM-10. This is the most significant change which must be made, since there are no contingency provisions in the existing PM10 SIP for Eugene/Springfield.

Schedule for Submitting Contingency Plan

The contingency plan is due to be adopted by the EQC by November 15, 1991. This means that local adoption must precede the November date by a sufficient period of time to allow orderly process. We project October adoption by LRAPA.

Some elements of the contingency plan are to be according to federal guidelines and new State legislation. Some of these guidance documents and legislation have just been, or are in the final stages of being finalized. This proposed rulemaking will not include, for example, additional woodstove provisions which were recently passed by the Legislature. These will be implemented at the state level.

For information, only, these will include:

- * Backup state authority to enforce the mandatory woodheating curtailment program.
- * Prohibiting the resale and installation of used noncertified woodstoves statewide.
- * Establishment of an administrative process for the Department of Environmental Quality to provide loans and grants to accelerate the replacement of noncertified woodstoves and fund local programs aimed at controlling woodsmoke. (No source of funding was provided.)

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- * Requirement to remove a noncertified woodstove in any PM-10 nonattainment area that fails to reach attainment by December 31, 1994, upon sale of the property.

Industrial RACT/BACT Requirements

The new Clean Air Act requires that industrial sources of PM-10 in PM-10 non-attainment areas apply reasonably available control technology. EPA guidance indicates that RACT is required if industrial PM-10 emissions are a significant part of nonattainment area emissions. As indicated earlier, the attainment demonstration is made based on woodstove curtailment, only; thus, RACT from industrial sources is not needed as part of the basic attainment plan.

However, BACT must be part of the contingency plan that is implemented automatically if, after December 1994, an area fails to attain the PM-10 standard by the December, 31, 1994 deadline. This means that, if non-attainment is determined after 1994, additional strict industrial controls will automatically take effect.

These rules must be adopted now, as part of a contingency plan, which would not take effect until or unless EPA declares, after 1994, that the Eugene-Springfield area is in non-attainment for PM10.

LRAPA staff has been working closely with DEQ to develop proposals for all of the PM10 non-attainment areas of the state. We believe that, because contingency measures are in response to federal requirements and there appear to be enough similarities among the non-attainment areas, the RACT requirements affecting industries can, for the most part, be uniform. Some industrial source categories may have unique characteristics which would cause us to depart from this uniformity.

Earlier, in July, LRAPA sent a package out to the affected source categories with invitation for comment prior to introducing rules to the LRAPA Advisory Committee and Board of Directors. We've had some contact with affected industries, particularly charcoal manufacturing, asphalt and gravel production, and woodstove manufacturing. The rules proposed here reflect, to the extent possible at this time, the results of those discussions.

**STAFF REPORT, PM10 SIP
AUGUST 13, 1991**

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Area Source Requirements

Also proposed are rules which would, as automatic contingencies: prohibit all open burning within the urban growth boundary; require covering of dusty loads on open-bodied trucks; and require track-out strips or cleaning stations at commercial, industrial or residential construction sites. Adoption of these rules as contingencies would not preclude LRAPA from adopting such provisions at some future date, regardless of attainment status.

Director's Recommendation

It is recommended that the board authorize public hearing on the proposed contingency rules at the October 8 board meeting.

PROPOSED REGULATION TO ENACT CONTINGENCY MEASURES TO BE IMPLEMENTED UPON FAILURE TO ATTAIN THE AIR QUALITY STANDARDS SET FORTH IN THE CLEAN AIR ACT AMENDMENTS OF 1990

Background

Measurements of airborne particulate matter (PM-10) in the Eugene/Springfield area indicate that the 24-hour National Ambient Air Quality Standard (NAAQS) was exceeded on numerous occasions during the winter of 1985, and on several days since then. Accordingly, the metropolitan area is considered a nonattainment area and has developed a control strategy to reduce airborne emissions designed to bring the area into compliance with federal standards no later than December 31, 1992.

The control strategy for the Eugene/Springfield Urban Growth Area includes the following basic attainment strategy elements. Additionally, a part of the plan to demonstrate attainment must include contingency measures to be implemented if the area is not determined to be in attainment by December 31, 1994. This list of strategy concepts includes existing PM10 attainment strategies, several additional strategies included as federal RACM's and candidate contingency measures which will be automatic if PM10 standards are exceeded after December 31, 1994.

General Provisions

The following emission reduction strategies will be implemented as the foundation of the plan:

A. Wood Burning Controls

1. Wood burning public education program.
2. Voluntary cordwood seasoning program
3. Mandatory wood burning curtailment to achieve a 70% compliance rate.
5. Phase out of curtailment exemptions for sole source households in 1995.
6. Ban on the installation of used, non-certified woodstoves.

B. Fugitive Dust Control

1. Existing rules to employ reasonable precautions to abate fugitive dust from all sources.

C. Open Burning Controls

1. Prohibition of all open burning within the city limits of Eugene and Springfield, enforced by city ordinances.

D. Prescribed Agricultural and Slash Burning

1. Creation of additional protection zones around the nonattainment area wherein slash burning will be prohibited during air stagnation periods if there is any chance of smoke impact.

PROPOSED CONTINGENCY MEASURES

The provisions of this section are to be effective upon determination by EPA that the Eugene/Springfield Urban Growth Area (UGA) is not in attainment with National Ambient Air Quality Standards after December 31, 1994.

Best Available Control Measures

Best available control measures (BACM) will be required to be implemented as the foundation of this control strategy. They include:

A. Wood burning controls

1. Voluntary fuelwood seasoning requirements on all firewood sold within the Eugene/Springfield UGA (non-regulatory local program)
2. Removal of noncertified woodstoves upon sale of the property (new statute--state or local enforcement)
3. 20% opacity limit on all chimneys, except during startup and refueling (new statute--state or local enforcement)
4. Ban on sale of uncertified used stoves (new statute--state or local enforcement)
5. Home weatherization and woodstove replacement for low- income households (non-regulatory, fund created by new statute)

B. Urban Fugitive Dust Measures

1. Requirements to cover haul trucks (local regulatory enforcement)
2. Construction sites within the nonattainment area required to have asphalt trackout strips to reduce trackout (local regulatory enforcement)

C. Open Burning

1. Prohibit all open burning within the nonattainment area (local regulatory enforcement)

D. Industrial Emission Controls

1. Require installation of BACT Emission control systems (local regulatory enforcement--summary table attached)

**PROPOSED CONTINGENCY PARTICULATE EMISSION
STANDARDS FOR INDUSTRIAL SOURCES IN THE
EUGENE/SPRINGFIELD NON-ATTAINMENT AREA**

Source	Units	Current Standard	Contingency Standard ⁽²⁾
Wood waste boilers <35MM Btu input	gr/dscf opacity %	0.2/0.1 40/20	0.2/0.1 ⁽¹⁾ 20
Wood waste boilers >35MM Btu input	gr/dscf opacity %	0.2/0.1 40/20	0.030 10
Plywood plants/veneer Drying operations	lbs/ksq. ft. opacity %	1 20	1 20
Steam/gas dryers	lbs/ksq. ft. opacity %	-- 10/20	0.30 5/10
Wood fired- <20% H ₂ O ⁽⁴⁾	lbs/ksq. ft. opacity %	-- 10/20	0.40 5/10
Wood fired- >20% H ₂ O ⁽⁴⁾	lbs/ksq. ft. opacity %	-- 10/20	0.45 5/10
Particleboard plants	lbs/ksq. ft. opacity %	3 20	3 20
Wood dryers	lbs/ksq. ft. gr/dscf opacity %	-- 0.10 20	0.40 0.10 20
Air conveying systems ⁽⁶⁾ ≤3 tons/yr	gr/scf opacity %	0.1 20	0.10 20
Air conveying systems ⁽⁶⁾ >3 tons/yr	gr/scf % CE ⁽⁸⁾ opacity %	0.1 -- 20	<0.005 ⁽⁷⁾ 98.5 20
Pulp Mills Recovery furnaces	gr/dscf % CE ⁽⁸⁾ lb/ton Opacity %	0.13 -- 4.0 35	0.021 99.78 2.0* 20*
Lime Kilns	lb/ton gr/dscf Opacity %	1.0 0.20 20	.5* .035 g .070 o 10*
Smelt Tanks	lb/ton Opacity %	0.5 20	.12 10*

Non-Ferrous smelting	gr/dscf opacity %	-- 20	0.0006 10
Charcoal Manufacturing	lb/ton char opacity %	10 20	5 20
Sources listed in (9)	Fugitive PM	Plan and implement	No change

Notes:

- (1) gr/dscf: Existing sources (prior to June 1, 1970)/New sources (constructed or modified after June 1, 1970).
- (2) Proposed "Contingency Standard" meets both the Reasonably Available Control Technology (RACT) and the Best Available Control Technology (BACT) criterion.
- (3) Boilers >30 MM Btu input subject to NSPS must meet 0.056 gr/dscf.
- (4) Woodfired <20% H₂O means direct wood-fired dryer, fuel <20% moisture (wet basis).
Woodfired >20% H₂O means direct wood-fired dryer, >20% moisture (wet basis).
- (5) Hardboard standard includes emissions from wood dryers but excludes press/cooling vents.
- (6) "Air conveying system" means an air moving device, such as a fan or blower, associated ductwork, cyclone or other collection device for moving material entrained in a moving airstream. Size classification refers to annual air discharge.
- (7) Reference: 0.005 reflects minimum control achievable for bag filter.
- (8) "CE" means Control Efficiency of emission control device.
- (9) Large sawmills, all pulp and plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, stationary asphalt plants and stationary rock crushers (as described in OAR 340-20-155, Table 1).

* Estimated to correlate with BACT determination.

MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY
BOARD OF DIRECTORS MEETING
TUESDAY--AUGUST 13, 1991
SPRINGFIELD CITY COUNCIL CHAMBERS
225 North 5th Street
Springfield, Oregon

ATTENDANCE:

Board George Wojcik, Chair--City of Springfield; Debra Ehrman--City of Eugene; Randy MacDonald--City of Eugene; Bill Morrisette--City of Springfield; Paul Nicholson--City of Eugene
(ABSENT: Marie Frazier--Lane County; Darrel Williams--City of Cottage Grove)

Staff Don Arkell--Director; Ralph Johnston; Kim Partridge; Sharon Allen; Merrie Dinteman

Other Brent Anderson

OPENING: Wojcik called the meeting to order at 12:20 p.m.

MINUTES: The minutes of the June 11, 1991 meeting were approved as submitted.

EXPENSE REPORT: Following brief discussion, MSP (Ehrman/Morrisette)(unanimous) approval of expense reports for July 1, 1990 through June 30, 1991 and July 1 through July 31 1991, as presented.

PUBLIC PARTICIPATION: None.

ADVISORY COMMITTEE: Arkell reported that the June committee meeting had met in early August and had discussed the addendum to LRAPA's PM10 SIP. The committee's comments were incorporated into the proposed PM10 amendments to be discussed later on today's agenda. The committee also discussed LRAPA's long-range planning.

REQUEST FOR AUTHORIZATION OF PUBLIC HEARING, PROPOSED AMENDMENT TO PM10 SIP FOR EUGENE-SPRINGFIELD: Arkell explained that, with the federal Clean Air Act Amendments of 1990, Eugene-Springfield has been declared as an existing non-attainment area for PM10. The Act has added several new SIP requirements which will require amendments to the current Eugene-Springfield State Implementation Plan (SIP). These amendments must be submitted to EPA for approval by November 15, 1991.

The control strategy requirements of the new Clean Air Act include:

1. Assurance that reasonably available control measures for woodstoves, urban fugitive dust sources and prescribed open burning sources are in place where appropriate, as part of the attainment demonstration.

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2. Adoption of reasonably available control technology (RACT) for industrial sources where RACT is necessary to ensure attainment before December 31, 1994.
3. Adoption of a contingency plan that provides, by rule, significant additional emission reductions, representing Best Available Control Measures (BACM) that will be automatically effective if attainment is not reached by the December 31, 1994 deadline.

LRAPA expects Eugene-Springfield to be in attainment by next year. LRAPA's current plan meets the RACM criteria, except for restrictions on sale and installation of uncertified woodstoves. New state legislation takes care of that. The current rules meet RACM criteria for urban fugitive dust. LRAPA has no jurisdiction over field or slash burning practices; however, the state's rules which cover prescribed open burning are consistent with RACM criteria and are referenced in proposed LRAPA SIP amendments. LRAPA's SIP must be approved by the Oregon EQC in time for submittal to EPA on November 15.

Because the federal law requires contingency plans to respond immediately to possible non-attainment after 1994, LRAPA must have the contingency rules in place. These rules require RACM. New state law provides BACM for woodstoves. The state's smoke management plans for field and slash burning represent BACM. The proposed Title 39 contains rules designed to place BACT on industrial, fugitive dust and open burning sources of PM10, as follows:

1. Industrial sources of PM10 would be required to apply Best Available Control Technology instead of Reasonably Available Control Technology.
2. Urban fugitive dust sources would be addressed by requiring open-bodied trucks to cover loads and require track-out strips to knock dirt off trucks before they enter the roadways.
3. Backyard burning would be banned completely within the Eugene-Springfield non-attainment area.

Discussion

Board members questioned whether adequate woodstove controls could be achieved by adding devices to chimneys rather than replacing the whole stove, upon sale of the home. Arkell explained that the law specifically requires DEQ/EPA-certified wood-burning devices, and there are no certified retrofit devices. Regarding how the removal of old stoves from houses being sold would be enforced, Arkell suggested that realtors might be the logical people to make sure home owners know about this requirement.

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Arkell stated that the Hardboard Plants section on the proposed particulate emissions standards table in the staff report would be deleted. He explained that there are currently no such sources in the Eugene-Springfield non-attainment area, and any which might wish to come into the area would need to go through New Source Review. All applicable controls would be required as a part of that process.

Board members asked what the impact would be on industrial sources. Arkell said that boilers would be required to install baghouses or precipitators to control emissions or to switch from wood to a different boiler fuel such as oil or gas. He indicated that some local industries are already thinking of multi-fuel capacity; combinations of oil and wood or gas and wood. Wood fuel prices are up so far and the supply so uncertain at this time that it is less expensive and more reliable to burn oil or gas than wood. Kingsford would probably not be affected by the contingency standards. The company feels that they already have BACT, and they are working with LRAPA on an assessment of all charcoal-producing facilities in the country to determine what the best available controls are.

Arkell explained that the concern is that, as growth continues in the community, the area might fall out of compliance again at some point in the future. He added that, if the agency adopts the contingency standards, it is still possible to adopt additional industrial controls without the contingency.

****MOTION****

MSP (Morrisette/MacDonald) scheduling of October meeting for October 1 instead of October 8. This is to allow as much time as possible to make any changes necessary as a result of public hearing.

****MOTION****

MSP (Morrisette/MacDonald) authorization of public hearing on proposed PM10 SIP amendment and proposed Title 39 on October 1, 1991.

DIRECTOR'S REPORT: Arkell briefly covered a few items of interest.

1. **Permit Fees.** The current LRAPA budget provides for additional permit fees to fund an additional position that was authorized to help put together the infrastructure for the federal permit program required by the new Clean Air Act. DEQ has been authorized to increase its fees by over 200% to sustain its current program. LRAPA staff will propose a significantly lower increase in rule amendments to be presented to the board in the next couple of months. These fees will take effect as soon as the rules are adopted.

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In addition, as a separate requirement, HB 2175 will place a \$13/ton emissions fee on major industrial sources beginning next fiscal year (1992/93).

In connection with the Clean Air Act requirements, staff is continuing help industry understand what the new federal law means by holding workshops for the local regulated community that are affected.

2. **Indirect Sources.** Morrisette asked about the indirect source permit issued for the McKenzie Crossing shopping center in Springfield. Arkell explained that, for any proposed facility which would attract motor vehicle traffic, LRAPA looks at the effects construction and operation would have on the surrounding area, separately from the long-term carbon monoxide levels in the Eugene-Springfield metropolitan area. If LRAPA sees a potential long-term problem, monitoring may be required as part of the permit. If the area continues to grow, there may be some mitigating measures required in order to prevent violations of CO standards.
3. **Woodstove Curtailment Program.** There was some discussion of the enforcement program for the woodstove curtailment program and how LRAPA deals with repeat offenders.
4. **Volatile Organic Compounds.** Nicholson asked whether users of solvents could be required to take the used solvents back for reconditioning and reuse. He is concerned because he suspects that many operations simply flush the used solvents down the drain and into the city sewer systems. Arkell explained that LRAPA's program deals specifically with evaporation at this time, from sources such as dry cleaners, degreasing operations and gasoline stations. Such disposal is mainly considered a water quality concern; however, Arkell said it is actually also an air quality concern, because after these materials go into the water, they will eventually evaporate into the air. He added that, because these substances are on the national toxics list, LRAPA will begin to deal with them as part of the agency's air toxics program.

OLD BUSINESS:

1. **LRAPA Intergovernmental Agreement.** The draft agreement was sent to the county and each of the participating cities. The Oakridge City Council has already passed the agreement. Cottage Grove has reviewed it and approves of it, and the council will act on it as soon as LRAPA asks them to. Lane County counsel has some questions about the method of appointment of board

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members. Arkell said he has not yet heard from either Eugene or Springfield.

2. Long-Term Planning. Arkell said staff had sent a memo to the board in early July with a compilation of suggestions received from the advisory committee, board and staff. Staff would like to discuss this to provide program direction for the next few years. Arkell said LRAPA needs a local agenda to follow in addition to the state and federal agendas. He indicated staff still would like to have a joint planning session with the board and advisory committee some time this fall.

MacDonald indicated that the transportation-related issues are of interest to him. He also would like to be a short-term standard for such things as field and slash burning, since the 24-hour standard does not allow short-term smoke intrusions to be recorded as such.

NEW BUSINESS: None.

ADJOURNMENT: There being no further business, the meeting adjourned at 1:22 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, September 10, 1991, at 12:15 p.m. in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman
Recording Secretary

September 24, 1991

Donald R. Arkell, Director
Lane Regional Air Pollution Authority
225 North Fifth, Suite 501
Springfield, OR 97477

Re: Proposed Amendments to
Eugene-Springfield PM₁₀
Control Strategy

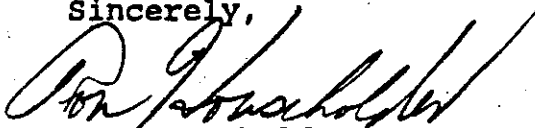

Dear Mr. Arkell:

We have reviewed your proposed amendments to the Eugene-Springfield PM₁₀ Control Strategy and proposed new LRAPA Title 39. Enclosed are comments primarily related to stringency and compatibility with state rules as well as approvability by EPA. A few comments just relate to improving readability.

The stringency and approvability related comments must be addressed prior to the public hearing. Please work with John Kowalczyk and his staff to resolve these issues. Contingent upon your resolving these issues and announcing the agreed upon changes at the public hearing, we authorize you to act as hearings officer on behalf of the Environmental Quality Commission.

I would like to commend you and your staff on the work you have done to keep on track with this important Clean Air Act requirement to submit revisions to the PM₁₀ control strategy. Our goal is to submit the Eugene-Springfield PM₁₀ Control Strategy Addendum, along with the revisions to the PM₁₀ Control Strategies developed by DEQ, to the Commission for adoption at the November 7-8, 1991 meeting. This will allow us to meet the November 15, 1991 deadline in the Clean Air Act.

Sincerely,


Ron Householder
Acting Administrator
Air Quality Division



RH:ADG:a
LTR\AH17086
Enclosure

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

EUGENE-SPRINGFIELD PM₁₀ CONTROL STRATEGY
AND PM₁₀ NONATTAINMENT AREA CONTINGENCY REQUIREMENTS

DEQ COMMENTS ON LRAPA PROPOSAL AUTHORIZED FOR
PUBLIC HEARING ON OCTOBER 1, 1991

September 24, 1991

A. Addendum to the Eugene-Springfield Control Strategy

1. Purpose of Addendum

- a. Item 6: The discussion of contingency plan requirements is not entirely accurate. The contingency plan must provide for additional emission reductions, but does not necessarily have to require BACM/BACT. The BACM/BACT requirement would apply after the area is redesignated as serious. LRAPA would have 18 months to adopt BACM/BACT which must be implemented within 48 months of redesignation as serious. EPA informal guidance suggests that an additional emission reduction of 25% of the amount of the reduction in the control strategy should be targeted. (We suggest the emission reductions anticipated from each contingency requirement be identified in the addendum in terms of lbs/yr, without referring to the 25% explicitly as it is informal guidance.

The strategies prepared by DEQ include BACT for industry in the contingency plan, but this is to satisfy the BACM/BACT requirement, not the contingency requirement.

- b. Lead Organization Delegation.

A new element of the 1990 CAAA and a part of the EPA completeness checklist which is not addressed in the addendum is the Lead Organization Delegation required under section 174. The control strategy must indicate that Governor Roberts has designated LRAPA as lead organization for implementing, maintaining and enforcing PM₁₀ control strategies in Lane County. See section 4.14.6.7 of the proposed addendum to the Medford-Ashland PM₁₀ strategy for an example of wording. A letter for the Governor's signature has been prepared and is being forwarded to her office.

c. Provisions for Revising the Plan

EPA will be looking for a provisions indicating how the plan is to be revised when they prepare their Technical Support Document. A section must be included to satisfy EPA during the review process. The boiler plate language in section 4.14.6.10 of the proposed addendum to the Medford Ashland PM₁₀ strategy can be used.

2. Elements Already Incorporated In Attainment Strategy

Item 2 needs to be clarified. First, it should apply only to the sale of new stoves. Second, the statement in italics should be reworded. As written, it implies that the strategy was adopted without legal authority.

3. Determination of RACM's For Area Sources

a. Woodstoves

Can the first "*" under item 3 be clarified? What will the "certification" program involve? When is it expected? Is it still volunteer?

The second "*" under item 3 overstates the likelihood that money will be available through the fund. The statement should indicate that the 1991 Legislature did not provide a source of revenue for the fund, but authorized DEQ to seek revenue. DEQ hopes that a limited pilot program will be funded to demonstrate the program. If this is successful, additional funding may be sought from the 1993 Legislature.

In the second "*" under item 4, how will LRAPA determine if improvement is needed?

The first "*" in item 5 is redundant with the 4th "*" and should be deleted.

In the fourth "*" change the implementation date from November 5 to September 29.

b. Agricultural Burning

In the second "*", the reference to "forestry smoke management" should be changed to "agricultural burning smoke management".

c. Urban Fugitive Dust

The RACM description should be reworded as it implies that EPA based the guidance on LRAPA rules. For consistency, a sentence in italics should be added to describe LRAPA's fugitive dust rules. A statement that the rules meet or exceed the guidance should be added.

3. RACT for Industrial Point Sources

Some statement of the existing level of industrial control is suggested. Even though the modeling showed that additional industrial control is not needed, some sources meet or exceed RACT already. The existing wording may mislead readers into thinking industry is not controlled.

The modeling and cost/benefit analysis should be included as an Appendix to the Addendum unless it is already part of the base strategy.

4. Reasonable Further Progress

The last sentence is unclear and should be dropped or clarified. Since the addendum states that meeting the deadline satisfies the RFP requirement, it is not necessary to say that RFP reporting is "meaningless".

5. Contingency Plan Requirements

a. General

The second and third paragraphs are mixing the CAA requirement to promulgate BACM for serious areas and the requirement to include contingency plans in the control strategies for moderate areas. See the discussion under Section A.1.a. of this memo above. Also, in the second paragraph, EPA (technically) could determine that the area failed to attain the 24-hr standard prior to 1995, although it is not required to make the determination until 6 months after 12/31/94.

In the fourth paragraph, as grammatical note, insert "requirements for" after "sources of PM₁₀ include".

Emission reductions expected from contingency measures if implemented should be indicated for each source category.

b. Woodstoves

Opacity limits are not required under HB 2175. This is only a condition of receiving stove replacement money, not a general requirement. All of the opacity language in this section should be deleted. Also, the citation to the OAR should read "OAR 340, Division 34".

c. BACM/BACT for Industrial Point Sources

We suggest that the third sentence be clarified so that it does not imply that the area will fail to attain the standard by the deadline.

The appendix number is missing for Title 39.

B. Title 39: PM₁₀ Nonattainment Area Contingency Requirements

1. Applicability (39-010)

This rule is adequate as is. There are two differences from the DEQ definition to consider:

- a. The DEQ rules apply to any PM₁₀ nonattainment area which misses the deadline while the LRAPA rules apply only to Eugene-Springfield. These rules will have to be amended in the future to include Oakridge, or they could be amended now and made generic. If they are changed, the 1994 date should be changed to the applicable attainment date. See proposed OAR 340-21-210 for wording.
- b. The DEQ rules apply to areas outside the nonattainment area that have a significant impact on the nonattainment area. This provision was included in the state rule to address a source in the Klamath Falls area. Inclusion in Eugene-Springfield is optional. Note that "Significant Impact" is a defined term in proposed OAR 340-21-215(17).

2. Definitions (39-015)

a. 39-015(15) "Particulate Matter"

The definition must be amended because the 1 hour minimum sampling time and 31.8 dscf minimum sampling volume do not apply to Method 8. The proposed state rule OAR 340-21-215(14) is to be amended as well. The following amendments to the definition are suggested:

"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 shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run shall have ~~having~~ a minimum sampling time of one hour~~-each~~, a maximum sampling time of eight hours~~-each~~, and a minimum sampling volume of 31.8 dscf~~-each~~. For sources tested using DEQ Method 8, each run shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Wood waste boilers and charcoal producing plants shall be tested with DEQ Method 5; veneer dryers, wood particle dryers and fiber dryers shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8; Pulp mills shall be tested with DEQ method 5, except that water shall be used instead of acetone as the clean-up solvent.

b. Additional Definitions needed. These definitions are being added to the state-wide rules based on EPA comments on enforceability. EPA will not approve the rules without these or equivalent changes.

- (1) "Average Operating Opacity" - see proposed OAR 340-25-305(1)
- (2) "EPA Method 9" - See OAR 340-25-305(4)
- (3) "Maximum Opacity" - see proposed OAR 340-25-305(9)

3. Compliance Schedule (39-020)

This rule is adequate as is. Note in section (2) the LRAPA proposed rule is more stringent than the DEQ proposed rule in OAR 340-21-220(2). In the DEQ proposed rule, the source must make the demonstration within 6 months, but can receive the modified permit later. In the LRAPA proposed rule, the source must receive the modified permit within 6 months.

4. Wood-Waste Boilers (39-025)

- (a) Rule 39-025(1) must apply when the heat input from all boilers at the plant have a combined heat input of less than or equal to 35 MM Btu/Hr. See proposed OAR 340-21-225(1) for wording.

(b) Rule 39-025(2) must apply when the heat input from all boilers at the plant have a combined heat input of greater than 35 MM Btu/Hr. See proposed OAR 340-21-225(2) for wording. Paragraph (B) must include a statement that limits will be included in the permits to meet EPA objections on enforceability. See proposed OAR 340-21-225(2)(b) for wording.

5. Veneer Dryers (39-030)

(a) Section (1) - design opacity - should be deleted. This was deleted from the state rule because of EPA objections that could not be resolved. The design issues can still be addressed through the design criteria in the compliance schedule.

(b) In section (3), Delete the exemption for emissions with uncombined water. This is addressed in Method 9. Include a statement that limits will be in the permits to meet EPA objections on enforceability. See proposed OAR 340-30-021(1)(b) for wording.

6. Particleboard Plants (39-035)

A 10% opacity limit must be added. See OAR 340-30-030(2) for suggested wording. However, note that the 3 minute/hour exemption is to be deleted from the proposed state rule and must not be included in the LRAPA rule.

7. Air Conveying Systems (39-050)

The 3 ton per year applicability test in sections (1) and (2) must be tied to a 12-month period beginning on or after 1/1/90, not the date contingency requirements first apply. See OAR 340-21-250(1) and (2) for wording.

8. Fugitive Dust (39-055)

This rule is adequate as is. However, the DEQ rule requires sources to develop site specific plans to implement the requirements. It is suggested that the 39-055 be revised to include a site-specific planning requirement. See OAR 340-30-043 for wording.

C. Other Issues:

DEQ has proposed rules to implement the residential wood heating provisions of HB-2175, including backup curtailment authority, a ban on the sale of uncertified used stoves, and a woodstove destruction contingency requirement. As

proposed, these rules do not delegate the programs to LRAPA in Lane County, although the backup curtailment rules would authorize DEQ to contract with LRAPA to enforce a DEQ curtailment program in Lane County. Does LRAPA want to run these programs locally? If so, the proposed DEQ rule will need to be modified and new LRAPA rules will need to be proposed.

AGENDA ITEM NO. 5

LRAPA Board of Directors Meeting

October 1, 1991

TO: Board of Directors
FROM: Donald R. Arkell, Director
SUBJ: **PM10 STATE IMPLEMENTATION PLAN--
CONTINGENCY PLAN**

Background

In March, 1990, The Lane Regional Air Pollution Authority adopted a PM10 State Implementation Plan (SIP) for the Eugene/Springfield area. This SIP has been forwarded to the Oregon Environmental Quality Commission for approval and submittal to EPA. The Clean Air Act Amendments of 1990 designated existing PM10 nonattainment areas which can attain standards before December 31, 1994 as "moderate areas." Most nonattainment areas in the country, including Eugene-Springfield, fall into this category. Areas which cannot attain standards until after December 31, 1994 are designated "serious nonattainment areas." We believe most of the SIP requirements for moderate attainment have been satisfied. The new Act has added several new elements which will require amendments to the current Eugene-Springfield SIP.

Delegation of Authority

Governor Roberts has, or will designate LRAPA as the organization to develop, adopt and enforce PM10 control strategies in Lane County. DEQ has been designated as the responsible organization for PM10 for the rest of the state.

PM10 Control Strategy Requirements for Moderate Areas--NEW Clean Air Act

- * Assurance that Reasonably Available Control Measures (RACM's) for woodstoves, dust sources and open burning sources are in place, where appropriate, as part of the attainment demonstration.

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We satisfy this requirement already. The mandatory curtailment program on the books is the biggest piece of woodstove RACM, and full attainment is demonstrated with woodstove use curtailment and restrictions on installation of used, uncertified woodstoves, and with nothing further than existing restrictions on fugitive dust emissions and smoke from prescribed open burning.

- * Adoption of Reasonably Available Control Technology (RACT) for industrial sources, where RACT is necessary to ensure attainment before December 31, 1994.

The plan demonstrates compliance with the woodstove strategy alone. That is to say, some industrial sources are controlling with RACT through existing regulations. Other industrial source categories do not have RACT.

- * Adoption of a contingency plan that provides, by rule, significant additional emission reductions that will be automatically effective if attainment is not reached by the December 31, 1994 deadline. Moderate areas which are not in attainment after December 31, 1994 will be designated serious areas.

Significant further emission reductions will be needed for a contingency plan (about 25%). These will include tighter restrictions on woodstoves, urban fugitive dust, and open burning, as well as new controls on existing industrial sources of PM-10. This new requirement is the most significant change which must be made, since there are no contingency provisions in the existing PM10 SIP for Eugene/Springfield.

PM10 Control Strategy Requirements for Serious Nonattainment Areas--New Clean Air Act

- * Assurance that Best Available Control Measures (BACM) are in place for woodstoves, fugitive dust sources and open burning, where appropriate, as part of the attainment demonstration. EPA guidance has not been written, but BACM is not discretionary in serious nonattainment areas.

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- * Adoption of Best Available Control Technology (BACT) for industrial sources, where BACT is necessary to ensure attainment demonstration. EPA guidance has not been written, but BACT is not discretionary in serious nonattainment areas.

As currently proposed, the contingency plan would skip over RACT and go right to BACT.

Schedule for Submitting Contingency Plan for Eugene-Springfield

Completed PM10 SIPs for all initial moderate areas are required to be submitted to EPA by November 15, 1991. In order for the State of Oregon to meet this schedule, local adoption must precede the November date by a sufficient period of time to allow orderly process.

Elements of the contingency plan are based upon draft federal guidelines, insofar as they may be locally implemented. New state legislation adds other provisions that will be implemented as part of the base plan by DEQ. Two examples are: enforcement of the ban on sale of uncertified woodstoves; and state backing for the mandatory curtailment. These will be implemented at the state level.

In addition, the state will also establish an administrative process to provide loans and grants to accelerate the replacement of non-certified woodstoves and fund local programs aimed at controlling wood smoke. No source of funding was provided by the legislature for this fund, but the DEQ was authorized to seek and obtain funding where it is available. Also included is a statewide contingency, in any PM10 nonattainment area of the state, for enforcement of removal of uncertified residential woodstoves upon sale of a house.

Other Provisions of the New Clean Air Act

Industrial RACT requirements for moderate areas. As stated earlier, the new Clean Air Act requires that industrial sources in PM10 nonattainment areas apply Reasonably Available Control Technology for attainment. EPA guidance allows discretion to require RACT where industrial PM10 emissions are a significant part of nonattainment area emissions, and where needed to demonstrate attainment.

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As indicated earlier, industrial emissions are significant in the nonattainment area, but the attainment demonstration is made based on woodstove curtailment, only; thus, RACT on industrial sources will not be required by federal guidelines as part of the basic attainment plan.

If, however, nonattainment occurs after 1994, a contingency plan with significant additional emission reductions must take effect automatically. Thus, rules must be adopted now, as part of this contingency plan, which would not take effect until or unless EPA declares, after 1994, that the Eugene-Springfield area is in nonattainment for PM10. In addition, to activate the contingency, the area would be redesignated as a serious area, and all the requirements for serious areas must be implemented as expeditiously as practicable, but no later than 48 months after redesignation.

LRAPA staff has been working closely with DEQ to develop proposals for all of the PM10 nonattainment areas of the state. We believe that, because contingency measures are in response to federal requirements, and there appear to be enough similarities among the non-attainment areas, the BACT requirements affecting industries can, for the most part, be uniform. Some industrial source categories may have unique characteristics which would cause us to depart from this uniformity.

Earlier, in July, LRAPA sent a package out to the affected source categories with invitation for comment prior to introducing rules to the LRAPA Advisory Committee and Board of Directors. We've had contact with affected industries, particularly charcoal manufacturing, asphalt and gravel production, and pulp mills. The rules proposed here reflect, to the extent possible at this time, the results of those discussions.

Area Source Requirements

Also proposed are rules which would, as automatic contingencies: prohibit all open burning within the urban growth boundary; require covering of dusty loads on open-bodied trucks; and require track-out strips or cleaning stations at commercial, industrial or residential construction sites. Adoption of these rules as contingencies would not preclude LRAPA from adopting such provisions at some future date, regardless of attainment status.

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Public Comment, To Date

Notice of this hearing was published in the Cottage Grove Sentinel, the Eugene Register Guard, the Springfield News and the Secretary of State's Bulletin. In addition, the proposal has been submitted to the state and local A-95 clearing-houses and has been reviewed by DEQ and EPA. Staff has also held a number of meetings with industrial representatives regarding these proposed contingency rules.

To date, LRAPA has received written comments on the proposed rules from EPA and from DEQ. These are attached for your review. Their comments can be summarized as follows:

1. It is not necessarily a federal requirement that the contingency plan contain BACT/BACM control measures, as implied in the initial LRAPA discussion of the proposed rules.

LRAPA Response:

Staff concurs with the comment and will clarify the discussion to note that the federal BACM/BACT requirements must apply after the area is redesignated as serious, and not necessarily as part of a contingency plan for a moderate area. This proposal, however, would incorporate BACT requirements and the contingency into one set of strategy recommendations, thus giving industry an 18-month jump to implement the fall-back, if necessary, after 1994.

2. Definitions for "Average Operating Opacity," "EPA Method 9," "Maximum Opacity," "Fuel Moisture Content by Weight Greater than 20%," and "Fuel Moisture Content by Weight Less than 20%" must be added.

LRAPA Response:

Staff concurs with the comment and proposes adding the definitions to the proposed rule.

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3. EPA has determined that thirty (30) months is the maximum time frame allowable for implementation of contingency measures, instead of the forty-eight (48) months in the proposal.

LRAPA Response:

Staff will propose a 30-month maximum time limit, as required.

4. Several minor changes in wording are needed for clarification.

LRAPA Response:

Staff concurs and will propose the changes as needed.

5. Several DEQ comments addressed "possible" changes that could be made, but which were not required.

LRAPA Response:

Staff has determined that the original language of the proposed rules is the best approach for LRAPA at this time. This includes:

- A. Geographic applicability of contingency rules;
- B. Time limits for providing modified permits to sources which must add controls if the contingency is necessary;
- C. Fugitive dust rules;
- D. Delegation of program to ban the sale of uncertified used woodstoves.

Director's Recommendation

EPA is still formulating guidance and providing us comments on a continuing basis. Since some of the guidelines still in development will probably affect the approach LRAPA takes in complying with Clean Air Act requirements, staff is unable at this time to make a firm recommendation.

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Staff will present amended drafts of the proposed SIP amendment and proposed Title 39 for discussion at the October 1 public hearing. Following the hearing, public comments and board discussion will be incorporated into final proposals.

It is the director's recommendation that the board defer action and reconvene on October 8 to take action on the proposed SIP amendment and contingency rules.

DRA/mjd

MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY
BOARD OF DIRECTORS MEETING
TUESDAY--OCTOBER 1, 1991
SPRINGFIELD CITY COUNCIL CHAMBERS
225 North 5th Street
Springfield, Oregon

ATTENDANCE:

Board George Wojcik, Chair--City of Springfield; Debra Ehrman--City of Eugene; Marie Frazier--Lane County; Randy MacDonald--City of Eugene; Paul Nicholson--City of Eugene; Darrel Williams--City of Cottage Grove
(ABSENT: Bill Morrisette--City of Springfield)

Staff Don Arkell--Director; Ralph Johnston; Kim Partridge; Mike Crocker; Merrie Dinteman

OPENING: Wojcik called the meeting to order at 12:25 p.m.

MINUTES: MSP (Ehrman/Williams) approval of minutes of the September 10, 1991 meeting, as submitted.

PUBLIC PARTICIPATION: None.

ADVISORY COMMITTEE: There was nothing new to report.

PUBLIC HEARING, PROPOSED AMENDMENTS TO EUGENE-SPRINGFIELD PM10 SIP (CONTINGENCY PLAN): Before beginning the discussion, Wojcik polled board members to determine how many would be available for a meeting on October 8, if a final decision could not be made at this time regarding the proposed contingency plan. Since there would not be enough board members available for a quorum on the 8th, it was determined that a decision should be made following this public hearing and discussion, in order to comply with the very short time line for submittal required by EPA.

Background Don Arkell presented background information to explain what is being proposed, as well as the overall schedule for LRAPA/DEQ submittal to EPA.

Following the passing of the Clean Air Act of 1990, Oregon's governor proposed the areas of Oregon to be designated as Class I nonattainment areas, called "initial moderate nonattainment areas." Eugene-Springfield is currently classified as a moderate nonattainment area for PM10. This designation was based on air quality data gathered over the past five or six years. The Clean Air Act of 1990 placed some additional requirements on PM10 SIPs, including the need for a contingency plan to take effect if the area does not attain the standards by December 31, 1994. In addition, if Eugene-Springfield does not meet the standards by the deadline, the area will be redesignated as a "serious" nonattainment area. Among the new requirements is the installation of Best Available Control Technology (BACT) for industrial sources and Best Available Control Measures (BACM) for area sources. BACM/BACT

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would be identified within 18 months; and the controls would be in place within 30 months following identification. If the area were to still be out of compliance by 2001, EPA would require a 5% reduction in PM10 emissions each year.

Violations of the 24-hour PM10 standard experienced in Eugene-Springfield have been in the wintertime. We meet the annual PM10 standard. The major contributor to wintertime PM10 levels is home wood heating. Arkell presented a table which illustrated the relative contributions of various sources during a worst-case day. Of 31.9 tons total on a day which exceeds the standards, 21 tons are woodstove-related, and 6 tons are from large hogged-fuel boilers. The strategy being employed to meet the standards by the deadline is the mandatory wood heating curtailment program within the Eugene-Springfield urban growth boundary. Indications are that the wood smoke component is getting smaller.

An approvable contingency plan must achieve approximately 25% additional reductions below the standard to give the area a cushion to avoid standard exceedances. Most industrial PM10 sources are currently at or near RACT. Those which are still being evaluated include large hogged-fuel boilers, veneer dryers, particleboard dryers and pulp mills. It is anticipated that the 25% additional reductions of PM10 could be achieved through RACM/T on wood heating and large hogged-fuel boilers. The proposed plan contains control measures to be put into place only if the area is unable to meet attainment by the deadline with the wood heating strategy alone.

Consensus among board members was that the best course to follow would be to achieve the standard by the deadline and avoid having to require BACT later on.

MacDonald asked whether LRAPA could provide some kind of incentives to help mitigate the cost of installing the added controls now, before the attainment date. Arkell replied that the EPA guidance for best control, due out next year, should help to clarify what options are open to local sources. Major sources potentially subject to BACT should keep abreast of BACT technology to provide as much lead time as possible. The dates in the Clean Air Act are outside deadlines, and any area can proceed more expeditiously if it is practicable to do so.

The contingency plan originally proposed, both by LRAPA and DEQ, would combine contingency and BACT rules as a package. In meetings and hearings around the state, DEQ has found that major interested parties do not favor that concept. Industry would rather wait until a redesignation is made, because there would be better information available at that time regarding what BACT requirements are. Environmentalists suggest that there may be better technology later on, and BACT standards

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might be even more stringent than proposed here. DEQ is revising its own proposal to divide contingency/BACM requirements. LRAPA has agreed, in principle, that LRAPA and DEQ rules and contingency plans should be as uniform, statewide, as possible, to avoid potential inequity or unequal treatment of affected sources. Thus, LRAPA should consider revising its BACT to RACT. If the proposal is revised, the RACT standards for most industries would be similar to what is in their permits now. For those sources which are subject to the RACT, the standards would be less restrictive than those originally proposed as BACT.

Public Hearing

Wojcik opened the public hearing at 12:54 p.m. One person presented oral testimony.

Jim Holm, 1717 Minda Drive, Eugene (copy of written testimony is a part of these minutes, by reference). Mr. Holm testified as a representative of the Lane Boiler Owners' Association (LBOA). His testimony emphasized that industry is not the major cause of PM10 non-attainment; that additional controls would not improve air quality appreciably; that BACT is unnecessary and a great economic burden on struggling companies. Holm stated that LBOA is committed to working with LRAPA to attain the standards and offered two suggestions to help avoid the contingency by meeting attainment on schedule.

1. A more aggressive approach to the woodstove contribution during an episode, such as phasing out current uncertified woodstoves.
2. Consider industrial fuel switching during a predicted episode. Fuel switching is occurring now among local industries and is being driven by economics.

In addition, Holm requested that the board approve the contingency plan with RACT instead of BACT.

Wojcik pointed out that state law now prohibits the purchase, sale or installation of an uncertified woodstove. He asked if Holm had further specific suggestions in addition to what is included in the legislation.

Holm stressed the fact that "certified" means clean-burning under ideal conditions. What can be done about the person who puts green or wet wood into the stove? There is still a potential for significant emissions from improperly operated certified woodstoves.

Regarding fuel switching, Wojcik asked whether industries which do not have the capability to switch fuels would be willing to shut boilers down completely during an episode to avoid exceedance of the standards. Holm responded that his

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company, Cascade Handle, would probably be willing to do that, since it is a small company and the use of steam is short-lived. It would not be a major impact on smaller companies, compared with the cost of installing permanent control equipment. Some larger companies might not be able to shut down boilers during episodes because they use steam on a continuous basis to operate the entire plant.

MacDonald asked whether the proposed contingency rules require fuel switching for hogged-fuel boilers. Arkell said the rules specify a mandatory reduction in grain loading, but how the reduction is achieved is up to the individual company. He added that some industries are going to alternative fuels, already. In order to assure that fuel switches are permanent, Air Contaminant Discharge Permits would be modified. Another option is to burn cleaner-burning fuels throughout the winter-time, rather than requiring disruption of operations on a day-to-day basis. This requirement could be tailored to the individual sources through the permitting process.

Frazier asked Holm whether LBOA would be interested in putting up some funding for removal of old, uncertified stoves. Holm said he could not give a direct answer to that question; however, LBOA had discussed the possibility of using the earnings from an interest-bearing account to start removing those stoves, over time.

Written correspondence received just prior to the board meeting from Eugene Water & Electric Board, Stone Forest Industries and Weyerhaeuser Company are a part of these minutes, by reference. Representatives from EWEB and Weyerhaeuser were present to provide additional information, if needed.

Arkell placed into the record affidavits of publication of notice in the Cottage Grove Sentinel, the Eugene Register Guard, and the Springfield News. He said that all notice and review requirements had been met.

There was no further oral testimony. Wojcik closed the public hearing at 1:10 p.m.

Discussion

MacDonald clarified that the issue to be decided was whether or not to proceed with RACM/T in the contingency plan, instead of BACM/T at this time, and to leave BACM/T to be determined later, if the region doesn't achieve attainment of the standards by the deadline.

Arkell explained that, because the numbers for RACT have not yet been generated, the risk is that one or another of the sources which might be affected by the rules might object because they have not seen the numbers. He stated that staff

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is still looking at large hogged-fuel boilers, particleboard dryers, veneer dryers and pulp mills as possible sources which would require additional controls to achieve RACT. Other sources are already at RACT or BACT. Staff could change the proposal to require RACT instead of BACT, just as DEQ is doing. The time for compliance with RACT would probably be shorter than the 48 months in the original proposal, because the control requirements are less restrictive. DEQ is considering 24 months instead of 48. LRAPA staff has reviewed several compliance schedules implemented recently in Lane County which have achieved lower emissions, and they have taken about a year. Staff's initial suggestion would be 24 to 30 months time span as an outside time for compliance. Frazier asked whether this could be set at three years. Arkell responded that this could be written into the rules if the board wished. He added that the length of time for compliance demonstration could be extended if an individual company ran into circumstances beyond its control (such as delay in equipment delivery by vendor).

Wojcik asked whether staff has done any type of industry survey regarding the effects of installing RACT on a permanent, year-round basis, versus shutdown during air pollution episodes as a measure to control emissions and avoid going over the standard. He is interested in what it would cost to curtail operation and then restart, compared with the cost of installing additional control equipment. Arkell said this has not been done. He stated that this idea has been around for a long time and that it relies on accuracy of prediction. EPA has discouraged this as a viable strategy for attainment, and it is questionable whether EPA would approve it as a contingency. He stated that industrial curtailment could be used as a local initiative to help avoid standard exceedance, but not as part of an approvable SIP.

MacDonald asked whether field burning smoke impacts are considered to affect Eugene-Springfield's attainment status. Arkell said that 24-hour violations have only occurred in the wintertime, but the area is not far below the annual standard. Significant field burning smoke during the summer could conceivably push the annual arithmetic mean up above the annual standard. If summertime levels go up far enough to raise the annual level, field burning would become a target for required emission reductions. He explained further that LRAPA cannot simply place nephelometers where the smoke impacts occur. It must be a reference-method monitoring technique in order to count toward standard exceedances.

MacDonald introduced the following options for action by the board:

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1. Pass the contingency plan with BACT, as proposed.
2. Pass the contingency plan with RACT, with numbers to be developed by staff, and a tighter-than-proposed time line. The most restrictive RACT would be the same as BACT. The scenario faced by most affected sources would be that the RACT requirements would be better (less restrictive) than BACT requirements.
3. Delay decision until more information is available. There is not much time for delay. A decision must be made within the next two weeks.

**** MOTION ****

MSP (MacDonald/Ehrman)(unanimous) approval of the proposed amended Eugene-Springfield PM10 SIP contingency plan and amendment of the BACT/M requirements to RACT/M requirements.

MacDonald commented that he understands industry's concern, and he would also like to see the most economical and effective possible BACT developed at a later date.

Arkell said that staff is comfortable with this approach. The contingency was being rushed without the benefit of the types of modeling and analysis done for the SIP itself. This contingency plan and rules are based on emissions, only, and not on ambient impacts. In March of 1992, EPA's guidance on BACT is to be ready.

**PERFORMANCE
EVALUATION FOR
LRAPA DIRECTOR,
DON ARKELL:**

Darrel Williams presented the results of a composite evaluation prepared from the evaluations submitted by individual board members. He said Arkell's overall performance is at the upper end of the scale for all areas which were rated. Arkell is doing a good job in leading the organization. Williams specifically mentioned Arkell's farsightedness regarding air quality issues on local, regional and national levels and their effects on Lane County.

Wojcik asked for volunteers to serve on a committee to evaluate Arkell's compensation package and make recommendations for salary adjustment. LRAPA's personnel policy now requires annual merit review instead of biannual. Arkell has not had a merit review for two and a half years. Randy MacDonald and Marie Frazier both volunteered to serve on the committee. Debra Ehrman had left a few minutes earlier and was drafted as the third member. The committee will get compensation package information from the LRAPA fiscal manager and will arrange a committee meeting.

OLD BUSINESS:

Arkell reminded the board that public hearing has been scheduled for November 12 on proposed increases to LRAPA's permit fee schedule. He said staff is still working on regulation changes for asbestos and excess emissions and that those

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proposals will be brought before the board soon for hearing requests.

There was some concern as to whether or not there would be enough board members available for a quorum on November 12, because the annual League of Oregon Cities and League of Oregon Counties conferences are scheduled for the same week. Marie Frazier will still be attending the county conference on November 12; however, the city representatives should all be back following the end of the conference on Monday, November 11. The city representatives present agreed that, barring some other conflict, they should all be able to be at the November 12 meeting.

Arkell suggested that, if there were a situation where a public hearing has been scheduled and there would not be a quorum, the board can designate the director as hearings officer to hold the hearing and take testimony. Staff would then prepare a hearings officer's report and summary of testimony for presentation at the next board meeting, and the board could make its decision based on that information. This is the procedure followed when LRAPA serves as hearings officer for the Environmental Quality Commission at LRAPA rule making hearings.

NEW BUSINESS:

MacDonald asked that the issue of dust from leaf blowers be added to the topics to be discussed at the November 6 joint meeting with the Advisory Committee. Frazier asked that the group also discuss problems associated with manure. Arkell said staff will add those two subjects to the list. Staff is in the process of writing issue papers on each of the topics which were given high priority by the board and advisory committee.

ADJOURNMENT:

There being no further business, the meeting adjourned at 1:55 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, November 12, 1991, at 12:15 p.m. in the Springfield City Council Chambers.

A joint board/advisory committee long-range planning session is scheduled for Wednesday, November 6, 1991, at 6:00 p.m. in the library meeting room of Springfield City Hall. Dinner will be provided.

Respectfully submitted,

Merrie Dinteman

Merrie Dinteman
Recording Secretary

DEQ LAND USE EVALUATION STATEMENT
FOR RULEMAKING

PROPOSED EUGENE-SPRINGFIELD PM₁₀ CONTROL STRATEGY
AS A REVISION TO THE STATE IMPLEMENTATION PLAN

(1) Explain the purpose of the proposed rules.

The purpose of the proposed revision to the State Implementation Plan (SIP) is to assure that the Eugene-Springfield area attains the PM₁₀ standards within the time frames prescribed by the federal Clean Air Act Amendments of 1990. The control strategy includes a compilation of existing and proposed state and local rules and commitments which become federally enforceable upon adoption of the SIP revisions by the Environmental Quality Commission and approval of the SIP revisions by the U.S. Environmental Protection Agency.

(2) Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? Yes No

(a) If yes, identify existing program/rule/activity:

The control strategy includes concurrently proposed new industrial PM₁₀ emission standard rules and other related house-keeping measures which affect a land use program identified as "Issuance of Air Contaminant Discharge Permits (ACDP)".

No other concurrently proposed new provisions of the control strategy are:

- (1) Specifically referenced in the statewide planning goals; or
- (2) Reasonably expected to have significant effects on:
 - (a) resources, objectives or areas identified in the statewide planning goals, or
 - (b) present or future land uses identified in acknowledged comprehensive plans.

(b) If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules? Yes No

If no, explain: Not Applicable.

(c) If no, apply criteria 1. and 2. from the other side of this form and from Section III Subsection 2 of the SAC program document to the proposed rules. In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

Not Applicable.

(3) If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not Applicable.

[Signature]
Division

[Signature]
Intergovernmental Coor.

10-21-91
Date

LANE REGIONAL



(503) 726-2514

225 North 5th, Suite 501, Springfield, OR 97477

AIR POLLUTION AUTHORITY

Donald R. Arkell, Director

MEMORANDUM

To: Environmental Quality Commission

From: Donald R. Arkell, Hearings Officer *DL*

Subject: **Eugene-Springfield PM10 SIP Contingency and LRAPA Title 39, Public Hearing, October 1, 1991**

SUMMARY OF PROCEDURE

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Pollution Authority at 1:41 p.m. on October 1, 1991 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA received designation from DEQ to conduct the hearing for the Oregon Environmental Quality Commission, contingent upon LRAPA's addressing DEQ comments regarding stringency and approvability of the plan. Those comments were addressed by LRAPA in the amended proposal, and this was a concurrent EQC/LRAPA hearing.

The purpose of the hearing was to receive testimony concerning proposed adoption of an addendum to the Eugene-Springfield PM10 SIP which will meet new 1990 Clean Air Act requirements. Accompanying the SIP addendum were proposed regulations, LRAPA Title 39, "Contingency for PM10 Sources in Eugene-Springfield Non-attainment Area."

One person provided oral testimony at the hearing (from written comments attached to this report), and three industrial sources provided written testimony. Following is a summary of the comments received.

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SUMMARY OF ORAL TESTIMONY

Jim Holm, speaking on behalf of Lane Boiler Owners Association (LBOA). Holm said that when the SIP was developed, modeling data indicated industry on an annual basis accounted for approximately 35% of the total ambient PM10 in the local airshed. During days of exceedance, industry is approximately 10% of the episode. Modeling determined that woodstove emissions were the major area source, contributing approximately 85% during an episode, which is why the SIP includes a mandatory woodstove curtailment program. The SIP adopted earlier this year did not even require RACT for industry in order to achieve attainment with the PM10 standard. LBOA members question why LRAPA should now seek to require BACT in order to meet the standard.

Local economic conditions have caused some companies to either go out of business or significantly reduce production. With this economic climate, LBOA members are struggling just to maintain their current level of business. Many of the member companies have switched to natural gas instead of hogged fuel, which will reduce PM10 emissions from this source category. The proposed contingency would require LBOA members to participate in capital outlay which would not have a return on investment of the type required for BACT, and which would not result in an appreciable reduction in PM10 concentrations.

LBOA's specific suggestions were:

- A. That there be a more aggressive approach to the woodstove contribution to PM10 levels, before the attainment deadline, such as phasing out older, inefficient stoves, as population increases.
- B. That LRAPA consider industry fuel switching potential during a predicted episode.

LBOA urged the LRAPA board to approve the Contingency Plan with RACT instead of BACT.

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SUMMARY--WRITTEN COMMENTS

1. **Stone Forest Industries.** The imposition of more stringent controls on industrial sources is neither warranted nor justified. It will impose a financial burden on industry and the community, with no resultant environmental benefit.

Specific concerns include:

- A. Inability of veneer dryers to consistently meet the proposed opacity standard, even with BACT.
- B. Use of new source top-down BACT procedures for new sources results in use of inappropriate criteria to establish BACT for existing pulp mills. Top-down BACT procedures have been challenged successfully in federal court.
- C. The Clean Air Act only requires RACT as contingency measures for industrial sources, unless the source is a significant contributor to adverse ambient air quality problems.

Stone Forest Industries urged the LRAPA board not to adopt industry BACT and to consider additional emission reductions as adding to the success of the existing local program.

2. **Eugene Water and Electric Board.** In order to comply with the BACT requirements in the proposed contingency, EWEB would have to make substantial changes to the operation of the steam plant. EWEB is investigating the feasibility of installing natural gas burners to expand fuel options, and other emission controls and upgrades. A BACT contingency would impact the direction EWEB chooses to go. EWEB offered the following comments:
 - A. The utility requested timely information on the woodstove curtailment strategy's effectiveness in meeting the PM10 ambient standard on time.

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- B. If the contingency appears necessary, EWEB requests the maximum lead time possible to plan and prepare for compliance with the new standards, including early definition of BACT.
 - C. The costs for back-end controls on wood-fired boilers cited in the LRAPA Fiscal and Economic Impact Statement are likely underestimated. EWEB estimates the cost of installing a wet ESP on the large boiler #3 to be \$3.5 million, with annual maintenance costs of \$140,000.
3. **Weyerhaeuser Company.** The recovery furnaces and other sources operated by Weyerhaeuser in Springfield already meet the proposed standards on an average basis. The company feels strongly that the contingency plan is flawed, and specific changes in the values of the standards are recommended. Weyerhaeuser's voluntary hogged-fuel boiler emission reductions will reduce particulate emissions from the current 271 lb/hr to 100 lb/hr by 1993.

New electrostatic precipitators (representing BACT) were installed in 1982 on the recovery furnaces, at a cost of \$16 million. Weyerhaeuser feels that the performance of that equipment from 1983 to date should be used to determine the contingency limit for the recovery furnaces. A top-down BACT for a new pulp mill should not be the definitive argument for setting the standard for the existing pulp mill in Springfield. Even though the company is averaging 0.021 grains, which is also BACT for a new pulp mill in Oregon, Weyerhaeuser feels that this is not an appropriate standard for the following reasons:

- A. Consistent compliance today would be difficult. At the time of contingency, it would be even more difficult.
- B. The high capital cost of meeting standards based on BACT for a new pulp mill are not justified for the existing pulp mill.
- C. The degree of variability in the compliance testing protocol exceeds the facility's margin of compliance. The facility could find itself in non-compliance simply as a result of the test procedure.

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- D. Day-to-day variability in the process and in the performance of emission control equipment makes consistent compliance at the BACT levels problematic.
- E. Existing recovery furnaces would have difficulty meeting the proposed standards if they were based on BACT for a new facility.

Weyerhaeuser submitted emissions standards which would be the best they could achieve with existing equipment: 0.044 gr/scf for recovery furnaces; 0.045 gr/scf for lime kiln on gas; 0.090 gr/scf for lime kiln on oil; 0.12 lbs/TBLS #3 dissolving tank vents; 0.17 lbs/TBLS #4 dissolving tank vents. The company also recommended that the opacity standard and control equipment efficiency be removed from the contingency plan for recovery furnaces, kilns, smelt tanks, cyclones, etc., stating that only standards which impact mass emissions will help with the PM10 problem.

Weyerhaeuser stated that their efforts and investments to date achieve emissions levels that already meet LRAPA's goals. The contingency plan, as proposed, would require that control equipment be replaced sooner than anticipated, because the more restrictive limits would be in effect several years sooner. Weyerhaeuser believes that LRAPA should plan to demonstrate the benefit of reduced pulp mill standards on ambient conditions if the contingency plan and more stringent standards are ever needed.

LRAPA BOARD OF DIRECTORS RESPONSE TO TESTIMONY

After hearing public comments and staff's report of recent revisions of the state's proposal to go to RACM/T instead of BACM/T, the board agreed that requirement of BACM/T would be premature at this time, both because it might not be necessary in Eugene-Springfield and because the EPA has not yet developed BACT guidance. Most sources of PM10 in the non-attainment area are currently at RACT or BACT. It is believed that the contingency standards would apply to large wood-fired boilers, pulp mills, particleboard dryers and veneer dryers. Board members agreed that the level of control required by the SIP should achieve the desired emissions reductions with the lowest possible financial impact on PM10 sources. The board delegated responsibility to the LRAPA

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director and staff to work with industry, DEQ and EPA to determine RACT for those PM10 sources which are not already at that level of control.

ACTION OF THE LRAPA BOARD OF DIRECTORS

Because of the short time line for submitting LRAPA's SIP addendum to EQC and then to EPA by the November 15 deadline, the board agreed that a decision should be reached at this time, rather than take the extra step of waiting for staff preparation of an amended package.

The board voted unanimously to adopt the SIP addendum and rules, amended to reflect the technical comments received from EPA and DEQ; that the contingency standards reflect RACT, rather than BACT; and that, if EPA declares the Eugene-Springfield area to be a serious PM10 nonattainment area, new BACM/BACT determinations would be made within 18 months, based upon EPA guidance.

DRA/MJD



Eugene Water & Electric Board

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October 1, 1991

Chuck Gottfried
Lane Regional Air Pollution Authority
225 N. 5th Suite 501
Springfield OR 97477

Dear Chuck:

EWEB is pleased to offer the following comments on LRAPA's proposed amendments to the Eugene-Springfield State Implementation Plan (SIP). Your proposal to adopt a contingency plan for additional emission reductions should those projected in the current SIP fail to bring the area into attainment with the PM-10 standard will have a profound impact on EWEB.

As you know, two of EWEB's Hilyard Steam Plant boilers are fired by hogged fuel. Data from recent source tests and the continuous emission monitoring program indicate that the boilers are in compliance with limits established in the Air Contaminant Discharge Permit. These limits include a PSEL of 380 tons per year (plus other values), a grain loading of 0.20 and an opacity NTE 40% for more than three minutes.

LRAPA proposes contingency measures that include Best Available Control Technology (BACT) for industrial sources like the steam plant. As defined by LRAPA, BACT will limit emissions to LAER, a grain loading of 0.03 and 5% opacity. In order to comply with these stringent new limits, EWEB will need to make substantial changes to the operation of its steam plant.

Earlier this year, the EWEB Commissioners accepted a plan for the steam system that laid out a clear course for the future of the steam plant based on an assessment of major strategic concerns, establishment of clear business objectives, supporting strategies, recommended actions and future contingencies. Installation of natural gas burners to expand fuel options and installation of emission controls and other upgrades to boiler #3 are two of the many recommended actions that will be further investigated by staff at the direction of the Board.

The direction EWEB heads with the steam plant could be impacted by the contingency plan rules proposed by LRAPA. We offer the following comments for your consideration:

1. EWEB would appreciate receiving on a regular basis timely information on the progress of the mandatory wood stove curtailment program toward meeting the PM-10 standard.

Commissioners
Sarah Handrickson
Jack Delay
Susie Smith
Mac Dyer
Dorothy Anderson
General Manager
Randv L. Berggier

2. Should it appear that the contingency plan may go into effect, EWEB requests the maximum lead time possible to plan and prepare for compliance with the new standards, including early definition of BACT.

3. It is highly likely that the costs cited in the Fiscal and Economic Impact Statement for back end controls on wood fired boilers are underestimated. Based on research we've performed in conjunction with the steam system plan development, EWEB estimates the cost of installing a wet ESP on the large boiler #3 to be \$3.5 million with annual maintenance costs of \$140,000.

EWEB is committed to complying with all current and future regulatory requirements as they apply to its facilities and operations. We appreciate the opportunity to provide our comments on these proposed rules.

Sincerely,



Laurie Power
Environmental Manager

LANE BOILER OWNERS ASSOCIATION, INC.

P.O. Box 1485
Springfield, Oregon 97477-0164

October 1, 1991

LRAPA Board
225 N. 5th. Suite 501
Springfield, Oregon 97477

Ladies and Gentlemen:

Lane Boiler Owners Association (LBOA) was incorporated in 1980 to address continued concerns with industrial air pollution. Part of the original SIP was that the local boiler operators formulate this group. Our sharing of technology, expertise and exchange of dialogue has been a successful result of what the SIP had originally intended. We have also appreciated a meaningful dialogue with LRAPA in the development and implementation of programs that effect our local air shed.

LBOA is comprised of approximately fifteen companies both public and privately owned within Lane County. These companies combined represent approximately \$6,093,200.00 of local property taxes with a payroll of about \$59,272,474.00. Our membership of fifteen does not represent all of the boiler operations in Lane County.

Our reason for being here today is to give you some input on the impact on our members if the contingency plan to the State Implementation Plan is passed as proposed. When the SIP was developed, modeling data indicated industry on an annual bases was approximately 35% of the total PM10 particulate in the local air shed. During those days of exceedance, industry is approximately 10% of the episode.

These percentages are significant because they indicate that this industry is categorized as a major source to the overall emissions, however they are a relatively small contributor during an episode. In fact, the modeling indicates that during an episode, if industry was completely shut down, the area would still be out of compliance with the national standards. It was determined in the modeling that wood stoves was the major area source contributing approximately 85% during an episode. This is why the existing SIP has a mandatory wood stove curtailment program.

Today's data does not reflect current emissions. The local economic conditions have reduced this industry's production. Many of the member companies have switched to natural gas. Currently LRAPA states that RACT is not needed to meet compliance, however in this Contingency Plan LRAPA has targeted the need for BACT in order to meet compliance. We question this thought progression especially in knowing that a future episode would not be triggered by this industry but by the wood stoves.

As you are well aware, this is a struggling industry. With regard to the permit fee increase alone, one of our membership can recall when two years ago the fee was less than \$500.00, it then progressed to \$3,000.00 and, today with the new Clean Air Act Amendment, it is now at \$15,000.00. This is a 3,000 percent increase. We have witnessed together mill closures, reduction in work force and corporate buy outs. We do not anticipate any real growth, at best we are all working diligently to preserve what we do have and to continue to be a meaningful employment, payroll and tax income opportunity for this community.

This Contingency Plan is asking this industry to participate in a capital outlay that will not have a

return on equipment of this type. Furthermore, there will not be an appreciable percent reduction in emissions with regard to future episodes. LRAPA's cost projection for installation and maintenance of BACT controls for our group are considered by us as being low. This "low", however represents 12.5 million dollars. Individual plant site preparation alone is nearly an impossible cost projection to calculate. Some of this industry's plant site locations just don't have the space to provide for this type equipment.

BACT for this industry and this community would be too expensive to meet. Based on the data developed in the SIP, wood stoves will be what forces our area into non-attainment. Because of this important fact we ask that you listen to some alternative options.

We suggest that there be a more aggressive approach to the wood stoves contribution during an episode. Establish a plan to take into consideration for the population growth and deal with the housing industry with regard to the construction of homes and the wood stove burning potential in these homes, i.e. fireplaces and wood stove installation. Begin an aggressive program to phase out current wood stoves that are not certified. Consider the fuel switching potential with regard to industry during a predicted episode.

In closing we sincerely ask that rather than approve this Contingency Plan with the BACT, that you pursue the RACT. We realize that additional emission controls are on the various pollution authority's agenda for this industry -at this point in time it is a given. We ask that you move to impose the RACT in this plan as a reasonable compromise.

Respectfully Submitted for the Lane Boiler Owners Association,


Kathryn D. Barry
Administrative Coordinator

Testimony Relating to
New Industrial PM-10 Contingency
Emission Standard Rules
October 1, 1991

Before commenting on the proposed PM-10 SIP contingency rules, I wish to compliment the L.R.A.P.A. staff in preparing such an excellent information packet addressing the revisions. It was extremely informative and helpful.

Members of the L.R.A.P.A Board - the decisions you are about to make in reference to the PM-10 State Implementation Plan strategy will have profound impacts on Lane County. Not only will your decisions impact the very quality of air we breathe, but they will also directly impact the viability of industrial sources in the community and the ability of the community to provide the financial base essential for its very survival. Before adopting the proposal before you, we urge you to take a long hard look at each element of the proposal.

In Oregon, Stone Forest Industries (SFI) operates plants in Grants Pass, White City, Albany and Springfield. We have made a commitment to these communities and to the State of Oregon. It is our intent to remain an active participant in this county and the State. We are proud of our environmental record and operate in an environmentally sound manner. It is out of this strong commitment to the community and to operate in a responsible environmental manner that we urge you not to adopt the industrial contingency measure as proposed. The imposition of more stringent control on industrial sources is neither warranted nor justified. It will impose a financial burden on industry and the community with no resulting environmental benefit.

Specifically, our concerns are:

- 1- Veneer dryer emission limitations. The existing regulations were developed through due process and recognized the inherent difficulties of absolute control of VOC emissions generated when drying wood. Everyone familiar with veneer drying recognizes there are many variables in drying wood. Not only does the specie affect the amount of VOCs generated, but also the type of VOCs generated. Variabilities such as these directly effect the efficiency of control. This recognized problem gave birth to the current averaging concept and allowed imposition of very restrictive opacity limits. Existing regulations have worked very well. Adopting the proposed standard will do nothing to improve ambient air quality. It will, however, subject every veneer dryer in the affected area to periods of unavoidable noncompliance thereby subjecting them to continual enforcement action.

To our knowledge no veneer dryer in Oregon, or for that matter nationally, is able to meet a five percent maximum opacity standard at all times. Proposed revisions to the State veneer dryer regulations effectively changes the 5% average concept to a 5% maximum opacity concept.

- 2- Pulp mill top-down BACT Review- we strongly object to the concept of top-down BACT review. E.P.A. tried to implement this concept through S.I.P. "guidance" and failed. The concept of imposing arbitrary top-down controls through the guidance process was recently overturned in Federal Court. To continue to require adherence to this illegal principle is contrary to sound regulation development and sets forth unwarranted precedence.

Although some individuals may suggest or recommend that we, as a community, continue to operate on E.P.A. guidance from Region X, we urge you to look at some of the shortfalls of this approach. Guidance documents are not prescribed legislation. These have not been through due process, such as afforded in this hearing. Guidance is not recognized in the Clean Air Act as a control strategy. Those issuing the guidance do not have a vested interest in this community. They are neither aware of the local problems from an environmental standpoint nor are they aware of the impact these regulations will have on the communities. You are the individuals responsible for providing guidance in this community--not those in Seattle or Region X.

Best Available Control Technology (BACT) is not required on industrial source as part of the Clean Air Act unless the industry is a significant contributor to adverse ambient air quality problems. Only Reasonably Available Control Technology (RACT) is required. It is our understanding that review of technical data, which is compiled by your own staff, clearly demonstrates that many, if not all, of the industrial control strategies outlined have minimal to insignificant ambient air impact.

Before you take action which imposes significant hardship on local industry, I urge you to give existing industrial controls a chance to succeed. Get everyone to the existing required level of control before pushing forward to new levels of control. To do otherwise unfairly rewards those who consistently drag their feet or do nothing. Enhanced monitoring and compliance, and new permit provisions contained in the CAA will all add to the success of the existing program.

In summary, I assure you Stone Forest Industries is not trying to avoid environmental responsibility. In contrast, as responsible members of the community we want to see the existing program succeed. If changes must be made, give them due and honest consideration and implement only those necessary to address the problem.

Please examine your objectives and make sure each and every change made by the Board, is in line with these objectives.

To act in a precipitous or careless manner at this point will impose financial hardship on the community with no resultant environmental improvement.



Dennis Spencer
Regional General Manager
Stone Forest Industries

DS/vlf

Weyerhaeuser
Paper Company

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September 30, 1991

Mr. Don Arkell
Lane Regional Air Pollution Authority
225 North 5th, Suite 501
Springfield, Oregon 97477

Dear Don:

We are writing to advise you of our concerns regarding the PM10 Contingency Plan LRAPA has drafted to comply with the 1990 Clean Air Act requirements. We generally accept the need to develop a contingency plan to assure clean air, in case the wood stove program fails to meet the federal ambient standard. On an average basis our recovery furnaces and other sources are already meeting the proposed standards. We still feel very strongly that the contingency plan is flawed and specific changes in the values of the standards are required.

The goal of the contingency plan is to reduce PM10 emissions by another 25%, if the wood stove program fails. Our voluntary hogged fuel boiler emission reductions will reduce particulate emissions from 271lb/hr to 100lb/hr by 1993. This improvement is yielding benefits right now. Emissions have already been lowered to 164lb/hr and will step down to 122lb/hr in 1992 and 100lb/hr in 1993.

Many of our comments relate to the recovery furnace impact of the contingency plan. Our furnaces are already operating at a higher standard than any other pulp facility in the state. New electrostatic precipitators were installed in 1982 that allowed us to meet a more stringent standard for emissions. Our standard is 0.07 grains/DSCF compared to the state standard of 0.13 grains/DSCF.

The contingency plan will require us to meet an achievable standard, taking into consideration the economic impact of the control equipment. In 1982 Weyerhaeuser invested \$16,000,000 for Recovery ESPs (electrostatic precipitators) to achieve the current 0.07 grain loading limit. The best available control equipment was installed in 1982, and the performance of that equipment from 1983 to date should be used to determine the contingency limit for our recovery furnaces.

The EPA guidance document from John Calcagni (April 2, 1991) states on page 5 that, "States having areas that are reclassified

as serious must submit SIP's for the areas containing best available control measures (BACM) which includes the application of best available control technology to existing stationary sources. While best available control technology applies to existing stationary sources, there is no indication from the statutory language or legislative history that Congress intended to adopt either the statutory or regulatory definitions of "best available control technology" (BACT) under the prevention of significant deterioration program for PM-10 non-attainment purposes."

A top down BACT for a new pulp mill should not be the definitive argument setting the standard for our existing pulp mill in Springfield. This is consistent with the EPA guidance document. The BACT for Halsey's new pulp mill should only be one source of information to determine the Springfield contingency standard.

We are currently averaging 0.021 grains/DSCF, which is also BACT for a new pulp mill in Oregon. Even though we are averaging 0.021 grains, this is not an appropriate standard for the following reasons:

1. Weyerhaeuser must be in 100% compliance with the standard 100% of the time. Failure to achieve compliance with the new standard would result in excessive fines, poor public relations and high capital alternatives to reach compliance.
2. The high capital cost of meeting standards based on BACT for a new pulp mill are an undue burden and are absolutely not justified for our existing pulp mill. High capital costs to meet new environmental standards will make our linerboard mill less competitive. Three factors have already combined to reduce our competitive position: a) high chip costs resulting from sawmill shutdowns and timber harvest reductions, b) rising energy costs, and c) attractive freight rates for Southern mills trying to compete in our markets.
3. The natural variability of the reference test method, EPA method 5, is +/- 0.012 grains/DSCF at the 95% confidence limits (sigma is 0.006 grains.) This means that if the actual emission level is 0.021 grains, there is only a 95% probability that the tested emissions would be less than 0.033 grains. Given the degree of variability in the testing protocol, a facility could find itself in noncompliance simply as a result of the test procedure. We find this unacceptable and believe that LRAPA and ODEQ might find a standard difficult to defend if it did not include allowance for variability of the test method.
4. There is day-to-day variability in the process and variability in the performance of emission control equipment. A good maintenance program reduces this variability, but

never eliminates it.

- Our existing recovery furnaces would have difficulty meeting the proposed standards if they were based on BACT for a new facility. There are several high capital design improvements that have developed since #3 and #4 furnaces were installed in 1964 and 1970. These are discussed in some detail in the attachment.

Weyerhaeuser has already installed the Best Available Control Technology. What we have in place matches the type of equipment that would be required for a new pulp mill in Oregon.

We have reviewed emission test data for our Recovery ESPs, Kiln ESPs and dissolving tank vents. Our recommended standards below are based on average emissions plus an offset for the historical variability of emission results. The following emission standards are the best we can achieve with existing equipment. There will be an economic penalty if these standards are implemented, because the life of the control equipment is impacted. (See economic impact attachment.)

Source	Emission Period Studied	LRAPA Proposed grains/DSCF	Weyerhaeuser Recommendation grains/DSCF	ODEQ Basis Percent Reduced
Recov ESPs	'83-'91	0.021	0.044	66%
Kiln ESP	'85-'91	0.035 (gas)	0.045 (gas)	70%
		0.070 (oil)	0.090 (oil)	40%
		<u>lbs/TonBLS</u>	<u>lbs/TonBLS</u>	
#3 DT Vents	'89-'91	0.12	0.12	64%
#4 DT Vent	'89-'91	0.12	0.17	49%

Please remove the opacity standard and control equipment efficiency from the contingency plan for recovery furnaces, kilns, smelt tanks, cyclones, etc. Only the standards which impact mass emissions will help with the PM10 problem. (This is discussed further in the attachment.)

Please check the units on smelt tank emissions. The units above are consistent with the BACT for Halsey.

We feel that our efforts and investments to date achieve emission levels that already meet LRAPA's goals. A contingency plan that includes Weyerhaeuser's recommendations would impose significant additional cost for us. Specifically, we would have to expend considerable sums of money to augment maintenance to sustain current emissions as the control equipment gets older. The recommended standards will cause the control equipment to be replaced sooner than if the old limits stayed in place because we

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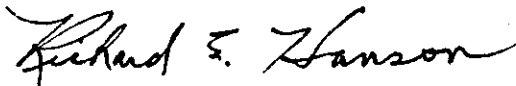
will reach the more restrictive limits several years sooner. This will take capital from projects that provide a significant return on investment. This lost opportunity will cost us about \$5,500,000 per year in 12 years or so. The economic impact of various alternatives is attached for your information.

Weyerhaeuser made an extra effort and invested significant incremental capital in 1982 to reduce PM10 emissions from the recovery furnaces. This effort and investment should be considered in the overall economic impact of the contingency plan. Because of our low emissions, tall stack, and high stack exit temperature and velocity, the LRAPA PM10 dispersion modelling showed that Weyerhaeuser has no significant impact on ambient PM10 emissions at the current emission standards. In fact, based on LRAPA's base year emission inventory data, 70% of PM10 emissions are from wood stoves and 24% are from industry. Only 2% of the total PM10 emissions are from the Weyerhaeuser pulp mill and this is with our existing standards. The voluntary powerhouse emission reductions discussed earlier account for 2.2% of total PM10 emissions. If the contingency plan and more stringent standards are ever needed, LRAPA should plan to demonstrate the benefit of reduced pulp mill standards on ambient PM10 conditions. We do not feel LRAPA has shown any significant ambient benefit of reducing pulp mill standards to date.

The ESPs were designed to be able to put all of the flue gas through one side and still meet the 0.07 grain loading standard. This permits maintenance on the other side of the unit. Recently, we had one side isolated for six days to permit a major rapper replacement. If the contingency plan is implemented, Weyerhaeuser must be assured that ESP maintenance will still be allowed under the upset rules.

Thank you for the opportunity to provide comment on the contingency plan. We appreciate Lane Regional Air Pollution Authority's efforts to achieve compliance with the federal standard for fine particulate pollution. Please let us know if there are any further comments or questions. We will be glad to assist LRAPA in acquiring any additional data needed to complete the planning process.

Sincerely,



Rich E. Hanson
Vice President and Mill Manager

REH:ns

Attachments

DETAILED COMMENTS—Proposed Contingency for Recovery Furnaces:

LRAPA proposed the following contingency for Recovery furnaces, 0.021 grains/DSCF, 99.78% ESP efficiency, and 10% opacity.

1. We feel strongly that a visibility standard does not belong in a contingency plan for PM10--the opacity standard should be dropped from the contingency plan.

Opacity could be used to trigger source testing for compliance. But enforcement for the contingency grain loading standard (which should be a 24hr standard to correspond to the time basis for the 150ug/m3 ambient 24hr standard) should be based on source testing.

2. We feel strongly that control equipment efficiency does not belong in the contingency plan--it should be dropped from the plan.

The clean air act encourages process changes to comply with standards. By requiring control equipment efficiency standards, a manufacturer could be penalized if he reduced the PM10 loading to control equipment.

Comparison of Older Recovery Furnaces to Newer Units

Corrosion and the impact on ESP efficiency is more of a problem on older units than newer units for the following reasons:

1. Corrosion of the ESP is accelerated on older recovery furnaces. The corrosion problems are the reason the ESP must be over-designed to meet emission limits over the life of the unit.

Our #3 furnace is a DCE unit with direct contact evaporator. Moisture is much higher in the flue gas to the ESP compared to modern designs. Conversion to a newer design would cost about \$15,000,000. The incremental moisture and normally lower flue gas temperatures to the ESP cause corrosion problems in the ESP. The DCE adds 46,000 lb/hr water to the flue gas going to the ESP (200,000 ton/yr of water to the ESP.)

Our #4 furnace is a newer, low odor unit with an older design laminaire air heater. The laminaire air heater must be water washed once/week. The moisture from the washing process increases corrosion in the ESP.

The new (1982) ESPs were designed with a heated shell on the sides and roof. The purpose of the heated shell was to increase the life of the structure supporting the ESP components. The goal is to keep metal temperatures above 200 degrees F.

2. Flue gas volume is significantly higher in older furnaces. This impacts ESP efficiency and ESP capital cost.

The additional moisture on the #3 DCE furnace increases flue gas volume significantly. Black liquor is evaporated from 50% to 65% solids in the DCE unit. Water vapor from this evaporation step goes to the ESP.

New recovery furnaces fire higher solids black liquor. Springfield fires 65% solids black liquor. New furnaces fire 80 to 85% solids black liquor. Our lower solids firing increases the flue gas volume and moisture content to the ESP. Feasibility of retrofitting high solids firing to our furnaces has not been fully investigated. Cost has not been estimated, but would probably be near \$3,000,000.

3. The corrosion problems since startup of the new ESPs in 1982 are well understood. Corrosion is accelerated for the reasons above.

The rigid frame wire racks have proven more reliable than the older design wire and weight system. We are experiencing wire failures. The wires can't be replaced, so ESP performance will fall off.

We have experienced significant problems with bearings on the mechanical rappers on our Wheelabrator-Frye ESPs. The moisture and corrosive nature of our flue gas destroys the rapper bearings. When the bearings begin to seize up, ESP components are lifted off the notches that provide proper spacing between anode and cathode. As problems are discovered by monitoring the ESPs, they are corrected. We are currently rebuilding the rapper assemblies on the #3 ESP.

When the rappers begin to fail, the rapping/cleaning efficiency falls off because the impact of the hammers is reduced. This has a negative impact on ESP efficiency.

We have experienced heavy corrosion in the outlet section of #3 ESP.

4. The additional moisture and higher flue gas volumes from our older recovery furnaces contribute to the variability in ESP performance. This variability should be considered in developing the contingency limit for the recovery furnaces.
5. The variability of the test method is also a factor.

The standard deviation of EPA method 5 testing is 0.006. Therefore, the 95% confidence limits are +/-0.012 grains/DSCF. Because we are operating our ESPs at such low emission rates already, we are sure that the natural testing variability of EPA method 5 contributes to the variability of the results. This variability should also be considered in developing the contingency standard.

6. Are there any opportunities to improve current ESP performance?

Each ESP has two chambers (east and west) with 3 sections per chamber and one transformer dedicated to each section. Rapping is already

optimized to minimize the impact of rapping on ESP outlet emissions.

Operating at increased power applied to the ESPs is not an option based on startup experience on the ESPs. We had several transformer failures at high power loads on startup. The units are already operating at high power loads.

Increasing power doesn't automatically reduce particulate emissions. The power is backed down when arcing and sparking occurs or when the ESP is heavily loaded.

DETAILED COMMENTS—Proposed Contingency for Other Pulp Mill Sources

As above, we feel that opacity and control equipment efficiency standards are inappropriate for hogged fuel boilers, smelt tanks and lime kilns.

The grain loading contingency standard for hogged fuel boilers is acceptable and achievable (with new secondary collectors). Because this is the standard that the Medford hogged fuel boilers will have to meet in the SIP, it should be acceptable for Springfield in the contingency plan.

Rather than the proposed contingency standard of 0.035 grains for natural gas and 0.070 grains for oil, we recommend a standard of 0.045 grains for gas and 0.090 grains for oil. We feel that the Kiln ESP, which was installed in 1977, is the best control technology for PM10 on a lime kiln. The 0.045/0.090 grain loading standard would be a challenging standard for us. We should be able to meet the standard based on emission data since 1985. The current standard is 0.15 grains/DSCF.

We feel that #3 dissolving tank vents are currently meeting the proposed contingency standard of 0.12lbs/TonBLS. (Note that the contingency units on this standard need to be corrected to be consistent with the units in Larry Miller's ODEQ BACT for Halsey.) The #3 DT vents have twice the scrubbing capacity, compared to #4 DT since #3 furnace has two vents. We feel that the #4 DT venturi scrubber, which was installed in 1970, is still the best available control technology. We recommend a 0.17lb/TonBLS standard for #4 DT vent based on recent historical performance.

A 0.12lb/TonBLS standard for #3 DT would be 64% more stringent than the existing limit. The existing limit is 0.5lb/adt. The 0.12lb/TonBLS limit is equivalent to 0.18lb/adt.

A 0.17lb/TonBLS limit would be 50% tighter than the existing limit for #4 DT vent.

ECONOMIC IMPACT SUMMARY

The following is a summary of economic impact on the Weyerhaeuser Pulp Mill for the LRAPA PM10 Contingency Plan.

LRAPA asked for feedback on the economic impact of various alternatives for the pulp mill in the contingency plan. The contingency plan must be achievable and economically justified.

The first ESPs on #3 and #4 furnace were replaced in 1982. The original units lasted only 12 years on #4 furnace and 18 years on #3 furnace. The replacement ESPs had several design features to insure excellent performance over an extended life. Rigid frame wire racks were used to improve long term performance and reliability. A heated shell approach was used to increase the useful life of the ESPs. ESPs were installed with one transformer per section with six sections and two chambers per ESP. This design allowed for routine maintenance, while achieving full compliance, by putting all the flue gas through one side of the precipitator. Our ability to achieve full compliance while putting flue gas through only one side of the ESP will be impacted by the contingency standards.

The contingency plan will be very expensive for us. We feel that the most likely scenario is that pollution control equipment will need to be replaced at least four years ahead of schedule for a limit of 0.044 grains (NSPS) and eight years ahead of schedule for the proposed limit of 0.021 grains. This will take capital away from the pool of capital projects, which return a minimum of 15% per year on new capital. Many projects return much more.

A critical assumption to this economic analysis is, "How is the life of the ESPs impacted by the contingency if implemented?" With the enhanced design features of the new 1982 ESPs, they should last 25 to 30 years. If the replacement schedule was impacted by the contingency plan, a replacement or major upgrade could be required in 1998. This would decrease the life by nine years.

An example of these economics for Recovery Precipitator replacement follows. Cost estimates are our best guess at this time, based on historical information. (Note M = \$1000)

ECONOMIC IMPACT 0.021 GRAINS ON RECOVERY

The economic life with respect to depreciation is 20 years for the ESPs. The useful life is expected to be 25 years or more.

This analysis assumes ESPs would have been replaced after 25 years anyway, in 2007; but the contingency plan requires replacement in 1998. So, ESPs are replaced 9 years earlier. Economic impact is as follows. The capital project cost is \$40MM in 1998. Additional penalty is lost opportunity for other 15% return on investment projects of \$48MM. A savings of \$14.7 is realized

because doing the project 9 years earlier saves 9 years of inflation. The last penalty shown is lost linerboard production during construction. If the construction was scheduled and implemented as in 1982, this could be reduced substantially.

Replace ESPs (precipitators) in 1998 (Escalate \$16MM in 1982 at 4% inflation)	\$ 30MM

Increase size of ESPs because contingency standard is more restrictive than NSPS	\$ 40MM (\$10MM increment)
Replace ESPs in 1998. (add 4th field, factor cost by 4/3)	
Lost opportunity over 9 years at 15%	(\$ 54MM)
Capital savings due to inflation at 4%/yr	\$ 16.9MM
Lost linerboard production	(\$ 3MM)

Net incremental cost of 0.021 grains	\$ 40MM

ECONOMIC IMPACT OF 0.044 GRAINS ON RECOVERY

This assumes contingency plan is implemented, but ESP replacement is not required in 1998; we limp along until 2003 due to a higher limit.

Replace ESPs (precipitators) in 2003, 4 years before normal replacement. (Escalate \$16MM in 1982 at 4% inflation)	\$ 36.5MM
Lost opportunity over 4 years at 15%	(\$ 22MM)
Capital savings due to inflation at 4%/yr	\$ 6.2MM

Net incremental cost of 0.044 grains	\$16MM

ECONOMIC IMPACT OF MAJOR UPGRADE OF ESPs IN 1998

Increase size of ESPs because contingency standard is more restrictive than 0.07grains (cost is higher than above because of difficulty of working around existing equipment)	\$ 14MM
Lost opportunity over 9 years at 15%	(\$ 19MM)
Lost linerboard production	(\$ 3MM)

Net incremental cost	\$36.0MM

ECONOMIC IMPACT ON OTHER SOURCES

Kiln ESP

The kiln ESP was installed in 1977. Performance has fallen off somewhat as wires have failed in the unit. Corrosion is not as large a problem as in recovery, because the kiln ESP operates at higher temperatures. The kiln ESP should last 25 years easily (year 2002).

Two economic cases are shown for the kiln ESP. The first case looks at the impact of the proposed 0.035 contingency limit. The second case looks at the impact of the recommended 0.045 grain loading limit.

Replace kiln ESP in 1998 (based on Longview cost of new ESP in 1986 of \$2.7MM and 4% inflation)	\$ 4.3MM
Lost opportunity over 4 years at 15%	(\$ 2.6MM)
Capital savings due to inflation at 4%/yr	\$ 0.7MM
Net incremental cost of 0.035 grains kiln	\$ 2MM

The economic impact of a 0.045 grain loading limit would be lower; but any tighter limit than the current 0.15 grain loading limit would decrease the life of the kiln ESP. The impact of an 0.045 grain loading limit would possibly be half that of 0.035 grains.

Replace kiln ESP in 2000	\$ 4.5MM
Lost opportunity over 4 years at 15%	(\$ 1.3MM)
Capital savings due to inflation at 4%/yr	\$ 0.3MM
Net incremental cost of 0.045 grains kiln	\$ 1MM

Dissolving Tank Vents

There would be no economic impact on #3 DT vent assuming source test data agrees with historical sodium ion method data.

Useful life on the existing scrubbers should be much longer than ESPs. In this analysis we estimate the impact of the contingency plan to reduce the life of #4 DT venturi scrubber by 10 years.

Replace #4 DT scrubber in 1998	\$ 0.7MM
Lost opportunity over 10 years at 15%	(\$ 1.0MM)
Capital savings due to inflation at 4%/yr	\$ 0.3MM
Net incremental cost of 0.12lb/TonBLS 4DT	\$ 0.7MM

The economic impact of the recommended 0.171b/TonBLS limit on #4 DT scrubber would be less, but any reduction in emission limits will reduce the useful life of the scrubber. Assuming the recommended limit would halve the economics, the results are as follows:

Replace #4 DT scrubber in 2003	\$ 0.9MM
Lost opportunity over 10 years at 15%	(\$ 0.7MM)
Capital savings due to inflation at 4%/yr	\$ 0.2MM
	<hr/>
Net incremental cost of 0.171b/TonBLS 4DT	\$ 0.5MM



September 26, 1991

Reply To
Attn Of: AT-082

Donald R. Arkell
Director, Lane Regional Air Pollution Authority
225 North Fifth, Suite 501
Springfield, Oregon 97477

Dear Mr. Arkell:

Thank you for the opportunity to review LRAPA's draft State Implementation Plan (SIP) amendment and, in particular, the purposed contingency measures.

The Air Programs Development Section has finished its review of the above material and has several comments to offer. Two general comments follow and detailed comments regarding Title 38 are included as Enclosure 1.

General Comment #1

The memorandum to Interested Parties dated July 19, 1991, states that "Otherwise, BACT must be part of the contingency plan that is implemented automatically in areas that fail to attain the PM-10 standard by the December 31, 1994, deadline". This statement is somewhat misleading. BACT and BACM measures are not necessarily required to be part of a contingency plan. However; nothing precludes an agency from developing contingency measures that represent BACT. In fact, there are two reasons why an agency may want to include BACM and BACT in their measures.

First; should an area fail to attain the standard by December 31, 1994, and be reclassified as serious, poor air quality could continue for an additional fifty-four months until BACM & BACT measures as required by the Clean Air Act are implemented.

Secondly; "...EPA believes it may be reasonable, in some circumstances, for states to consider the consistency of RACM and RACT with the BACM and BACT that will ultimately be implemented under the serious area plans for those areas".¹ Should an area fail to attain and RACT/RACM measures are in the contingency

¹Memorandum dated April 2, 1991, from John Calcagni to Directors EPA regarding PM-10 Moderate Area SIP Guidance: Final Staff Work Product, page 14.

plan, they must be implemented. Since the area would be reclassified as serious, BACT/BACM measures must then be implemented in the future.

General Comment #2

The amount of emission reductions expected to be achieved by implementing the contingency measures is not included. Even though Section 172(c) of the Clean Air Act does not specify the number of contingency measures to be adopted or the magnitude of emission reductions to be achieved, the measures "...should be a portion of the actual emission reductions required by the SIP control strategy to bring about attainment. Therefore, the contingency emission reductions should be approximately equal to the emission reductions necessary to demonstrate RFP (Reasonable Further Progress) for one year".² EPA recommends that the reductions equal 25 percent of the total reduction in actual emissions in the SIP control strategy. Please provide us with a quantitative analysis of the expected emission reductions.

If you have any questions, please contact Rindy Ramos at (206) 553-6510.

Sincerely,



David S. Kircher, Chief
Air Programs Development Section

Enclosure

cc: John Kowalczyk, ODEQ
Ken Brooks, OOO
George Abel, ARB

²Memorandum dated August 20, 1991, from Fred H. Renner to Chief, Air Branch, Regions I-X regarding Questions and Answers (Q&A's) for Particulate Matter, Sulfur Dioxide (SO₂), and Lead (Pb), page 7.

Enclosure 1

Section 39-020 (1)(F)

We are quite concerned that sources can have up to forty-eight months to demonstrate compliance with the contingency requirements. We are unable to find a specific statutory, regulatory or guidance reference to the length of time a source could have to implement a contingency measure reduction. However, forty-eight months appears to us to be an overly generous timeframe.

As you know, the Clean Air Act requires that an area designated as a moderate area upon enactment of the 1990 amendments, must attain the ambient standard as expeditiously as practicable but no later than December 31, 1994. The purpose of a contingency measure is to serve as an intermediate control strategy to reduce emissions upon an areas' failure to attain and during development of a serious area SIP. Should an area fail to attain the standard by the 1994 deadline, it still must make an attempt to do so as expeditiously as practicable. A lengthy compliance schedule would circumvent the intent of the contingency measure requirement. As written, the measures will meet the requirements of section 172 (c)(9) and will take effect without further action by LRAPA or the Administrator (EPA). However, due to the lengthy compliance schedule, it is possible for PM-10 violations to continue for an additional four years.

Subpart N-Compliance Schedules of 40 CFR Part 51 outlines EPA's requirements to grant compliance extensions beyond one year. The rule as written satisfies this requirement, however; we strongly recommend that the schedule be shortened to at least no more than thirty months. The thirty month timeframe would be consistent with the timeframe granted for implementation of BACT/BACM measures. The eighteen months granted for development of an serious area SIP, including BACT/BACM planning, is not applicable to contingency measures because the contingency measure planning phase is to be completed by the November 15, 1991 moderate area SIP submittal date.

Section 39-025 (2)(A)

For clarification, EPA suggests that the words 'of PM-10' be inserted between the words emissions and to.

Section 39-025 (2)(B)

This provision indicates that opacity limits can be changed without EPA approval which is considered 'director discretion'. Director discretion is not allowed under the Clean Air Act. Also, in order for the limit to be federally enforceable, a SIP revision on a source by source basis would have to be submitted.

Solution: Since LRAPA's New Source Review program is currently federally enforceable, add a sentence to indicate that 'specific opacity limits shall be included in the ACD permit'.

Section 39-025 (2)(C)

This provision indicates Emission Reduction Credits will be calculated based on the difference between the PSEL limit of .03 gr/dscf and the LAER limit. Prior to the Clean Air Act Amendments of 1990, allowable emissions could be used to determine emission credits. Section 173 of the Clean Air Act as Amended now requires offsets to be based on actual emissions regardless of whether the strategy uses allowables.

A revision is not needed at this time. This issue can be addressed when EPA has finalized its NSR guidance and you update your regulations. However, you need to be aware of this change.

Section 39-030 (1)

As written, the design opacity limitation is unenforceable because it does not have an averaging time or test method.

Solution

After several discussion with DEQ concerning the enforceability issue, they have decided to delete this limitation. EPA recommends that you do the same.

Section 39-030 (2)

Average operating opacity needs to be defined. The definition should be consistent with the one proposed by DEQ.

Section 39-030 (3)

It is unclear what benefit this provision will provide as a contingency measure. A source could be allowed to operate at the existing 20% opacity should it be able to meet the emission limits in subsections 4 through 7. However, the provision can be submitted.

In order to make it approvable (enforceable), 1) reference needs to be made that the ACD permit will be revised to reflect the 'tested' opacity limit, 2) maximum opacity needs to be defined (DEQ's definition is acceptable), and 3) the exemption for uncombined water could be deleted provided the definition of maximum opacity includes reference to EPA method 9. Method 9 addresses measurement of a wet plume therefore the exemption is not needed.

Section 39-030 (6) & (7)

These provisions do not include an enforceable methodology or averaging time specified for determining fuel moisture content.

Solution

1) Include definitions for "Fuel Moisture Content by Weight Greater Than 20 Percent" and "Fuel Moisture Content by Weight Less Than 20 Percent". Make these definitions identical to those purposed by DEQ.

Section 39-050

This section needs to indicate whether the 3 tons per year applicability criteria is based on actual or potential emissions.

LCOG Lane Council of Governments

September 17, 1991

Mr. Donald Arkell
Lane Regional Air Pollution Authority
225 North 5th, Suite 501
Springfield OR 97477

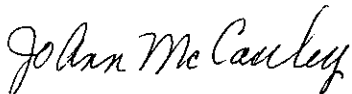
Dear Mr. Arkell:

SUBJECT: AREAWIDE CLEARINGHOUSE REVIEW

TITLE: Proposed Rules Affecting Oregon State Implementation Plan Revision,
Eugene/Springfield AQMA for TSP

The Lane Council of Governments has received the above referenced proposal for review. It has been determined that no clearinghouse comment needs to be made. Nevertheless, thank you for the opportunity.

Sincerely,



JoAnn McCauley
Information Coordinator

JM:OA

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LANE REGIONAL AIR POLLUTION AUTHORITY

H-33

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 23, 1991

TO: Environmental Quality Commission

FROM: Fred Hansen, Director 

SUBJECT: November 8, 1991 Meeting, Overview of PM₁₀ Agenda Items

The five PM₁₀ control strategies and three related rule agenda items are proposed for adoption to meet requirements of the new Clean Air Act. This brief overview will help you identify the issues and guide your actions.

HEARING TESTIMONY

Public Hearings were held on the entire PM₁₀ control strategy/rule package in the Grants Pass, Medford, Klamath Falls and La Grande PM₁₀ nonattainment areas and in Portland. The Lane Regional Air Pollution Authority held hearings on behalf of the EQC in Eugene on the Eugene/Springfield PM₁₀ control strategy amendment. Your hearings officer has summarized and categorized testimony by agenda item topic. You will find a complete summary of all pertinent testimony in the hearing officer reports included as attachment H in each agenda item. Detailed responses by the Department to the issues identified by the hearings officer are contained in attachment I in each agenda item. Major issues have been repeated in the staff reports along with Department responses. All original written testimony is attached to this memo in case the Commission wishes to review certain original testimony.

MAJOR ISSUES

The following summary of major issues and Department responses is provided in order to highlight some of the points the Commission should focus on.

Agenda Item I, Industrial Rules

1. RACT/BACT Requirement - The Department's original proposal to combine the Clean Air Act requirements for application of Reasonably Available Control Technology (RACT) and Best Available Control Technology (BACT) into one emission limit and compliance time in the PM₁₀ contingency plan was strongly objected to by industry, government and many members of the public. The Department is now proposing to follow the specific Clean Air Act/EPA minimum requirement of establishing RACT emission limits now as part of the industrial contingency plan and delaying

establishment of BACT until the 18 month period following the time EPA may redesignate an area as a "serious" PM₁₀ nonattainment area for failure to meet the attainment deadline. This requirement primarily affects industry in the Eugene/Springfield and Klamath Falls areas as industry in other PM₁₀ nonattainment areas meet or will meet RACT requirements by the PM₁₀ attainment date.

2. Plywood Veneer Average Opacity Limit - The Department originally proposed to address EPA's concern about the enforceability of the 10% average opacity limit by specifying that three visible emission readings be taken on three different days to determine compliance. Industry objected to this proposal on the grounds that the three days could be consecutive and thus the emission limit would be more stringent than the original intent of the rule which was a long term average. The Department is now proposing three opacity readings separated by at least 30 days each to address both EPA and industry concerns about the 10% average opacity requirement. The present 20% maximum opacity limit would be maintained in order to provide an enforcement tool to immediately address excessive emissions.

3. Industrial Dual Fuel Study Requirements - There was mixed testimony on whether the industrial dual fuel feasibility study for the Medford area should be done in the period before or after the attainment date. Also, some testimony favored implementing the use of cleaner fuels as part of the attainment strategy. The Department is proposing to maintain the requirement that the study be completed prior to potential triggering of the contingency plan to insure that the requirement could be implemented as soon as possible after triggering of the contingency plan, if found feasible and needed by the Commission. Criteria has been added to insure study credibility.

Agenda Item J, Residential Woodheating Rules

No major issues were raised in hearings that necessitate consideration of revisions.

Agenda Item K, Rogue Valley Open Burning Rules

Orchardists objected to the Department's proposed tightening of the ventilation criteria used to allow open burning. Jackson County in its local ordinance has recently provided some additional flexibility for burning orchard prunings in February of 1992 and 1993. The Department is proposing to follow Jackson County's action which will still provide some further protection (safety margin for the attainment strategy) of PM₁₀ air quality in the critical winter months when PM₁₀ standards are most likely to be exceeded.

Agenda Item L, La Grande PM₁₀ Control Strategy

After revising the attainment demonstration calculations per EPA comment, the Department found a shortfall in the control strategy's ability to bring the area into attainment. This has required the Department to propose moving the industrial RACT requirement from the contingency plan to the attainment strategy per Clean Air Act/EPA, requirements and requiring the State Highway Department to increase their road sanding dust control program from a 10% to 36% control efficiency level. The one industry affected and the State Highway Division have agreed to these new requirements.

Agenda Item M, Grants Pass PM₁₀ Control Strategy

The major issue raised at the hearing dealt with the industrial RACT/BACT and Veneer Dryer average opacity requirements which have been addressed in agenda item I.

Agenda Item N, Klamath Falls PM₁₀ Control Strategy

The major issue raised at the hearing dealt with the industrial RACT/BACT issue which has been addressed in agenda item I. EPA requested some changes to the attainment demonstration calculations. These changes did not affect the ability to demonstrate attainment with the proposed control strategy.

Agenda Item O, Medford Area PM₁₀ Control Strategy

1. Including Phoenix and Talent in the Mandatory Curtailment Program - Some testimony favored including Phoenix and Talent in the Medford area mandatory curtailment program. The Department has concluded that mandatory curtailment in the Phoenix and Talent area is not required to demonstrate attainment even though it is desirable from a strategy safety margin and regional consistency basis. However, if the area fails to meet the attainment deadline, the Department views the Clean Air Act as requiring mandatory curtailment throughout the entire PM₁₀ nonattainment area (including Phoenix and Talent) at that time.

2. Industrial Enforcement - Some concern was raised about the adequacy of enforcement of industrial rules. The Department points out that the PM₁₀ control strategy is on track; that is, improvements in PM₁₀ air quality have occurred as projected. Additionally, in the future, new requirements for continuous emission monitoring, implementation of the federal operating permit program and expected new field staff supported from new emission fees all will help to improve the industrial compliance program.

Agenda Item P, Eugene/Springfield PM₁₀ Control Strategy

The major issue raised related to the combined industrial RACT/BACT requirement. The LRAPA Board adopted the separated RACT/BACT approach now being proposed by the Department. If the Commission were to adopt something more stringent, LRAPA would have to further revise their PM₁₀ control strategy to conform to Oregon Statutes that require regional authority programs to be no less stringent than state rules. This could cause LRAPA to miss the plan submission deadline in the Act unless they take some action within the week between the Commission meeting and the Act deadline of November 15, 1991 for plan submission.

FOREST SLASH BURNING

Significant public comments were made on the issue of providing greater protection from forest slash burning smoke to PM₁₀ nonattainment areas. The present Department of Forestry Smoke Management Plan, which is a part of the State Implementation Plan, meets the minimum requirements of the Clean Air Act. The Department feels that greater protection is necessary because of past and potential future smoke impacts from forestry burning practices near PM₁₀ nonattainment areas. The Department should reach agreement with the Department of Forestry on a new and improved plan by the November 8 Commission meeting. It may be useful to have staff make a presentation on this new plan at the meeting to demonstrate, particularly to the people in the Medford area, that slash burning smoke is being further addressed even though nothing new is proposed in the PM₁₀ control strategies. A revised smoke management plan is expected to be taken to hearing and proposed for adoption by the Commission in the near future.

The draft revised smoke management plan currently being negotiated with the Department of Forestry is attached to this memo for your information. The major provisions of this new plan are expected to include curtailment of any slash burning within a 20 mile boundary of the PM₁₀ nonattainment areas during woodstove curtailment days and a prohibition on such burning during the entire November through February period as a contingency plan in any area that fails to meet the attainment deadline of the Act (and slash burning impacts continue to be significant).

RESOURCES FOR IMPLEMENTING CONTROL STRATEGIES

State and local government resources to implement PM₁₀ control strategies, particularly the residential woodheating elements, are considered adequate for at least the next year or two. Uncertainty of future local government resources because of measure 5 and reductions in timber taxes as well as potential

Memo to: Environmental Quality Commission
October 23, 1991
Page 5

reductions in future federal air grants raises concern about the long-term ability to adequately fund critical control strategy efforts, particularly operation of curtailment programs. Adequate funding for financial incentive programs to insure a reasonable replacement rate of uncertified woodstoves is also an issue. The cordwood emission fee proposed but not adopted in HB 2175 would have adequately addressed the long term resource needs to insure continued effective implementation of residential woodheating control strategies. The Department will continue to explore funding options and may propose new legislation to address this need.

EPA APPROVABILITY

The Department has gone to extra lengths to insure EPA approvability of the PM₁₀ package. Pre-hearing authorization, hearing, and proposed adoption drafts of each agenda item have been provided to EPA Region X for comment. EPA region X staff have intensively reviewed drafts at each of the three steps in the process with the objective of trying to insure the package will be found approvable by EPA headquarters when it is officially submitted. The Department has revised drafts as necessary and believes that the package before the Commission will meet all requirements of the Clean Air Act and will be approved by EPA.

TIMING OF COMMISSION ACTION

The three related PM₁₀ rules dealing with industry, open burning and woodheating are integral parts of the PM₁₀ control strategies. Any changes in these rules made by the Commission at the adoption meeting will need to be reflected in the control strategy documents. Therefore, the Commission should take action on these rules before considering adopting the control strategies. The agenda item listing has been structured accordingly.

If the Commission identifies an issue that cannot be easily resolved at the Commission meeting, scheduling has been planned to allow a week for resolving the matter. A Commission conference call could be held by November 15, 1991 to adopt any final loose ends and still allow the state to meet the plan submittal deadline of the Clean Air Act. The Department does not foresee any issues falling into this situation and would not encourage the Commission to exercise this option unless there is absolutely no alternative.

Attachments: Draft revised Slash Smoke Management Plan Provisions
Hearings Testimony (Provided to Commission Only)

DRAFT

Smoke Management Plan Revisions (September 16, 1991)

Department of Environmental Quality Air Quality Division & Oregon Department of Forest

I. Current Plan

* No special protection afforded to PM-10 Nonattainment areas.

II. DEQ\DOF Proposed Revisions

A. Base Program Improvements (maintains all current program elements)

1. Establishes SPZs with 20 mile boundaries of NAA between Nov. 15 & Feb. 15th.

- Burning within SPZ allowed only if there is no chance of impact;

- No burning on Red days during December through February 15th

- Landowners to monitor burns for 2 days following ignition; mop-up required where needed to prevent smoke impacts; waivers provided when storm events would extinguish smoldering residues.

- No pile burns if a chance of significant smoke after 2 days following ignition;

- Establishes voluntary smoke management programs around Klamath Falls and La Grande organized by ODOF;

- Five year program review cycle rather than 3 years

- SPZs implemented for Klamath Falls, Medford and Oakridge as of January 1, 1992; Eugene, Grants Pass and La Grande on November 15, 1993.

- SPZ's to apply to all new PM₁₀ nonattainment areas as they are designated by EPA and deleted around areas that are redesignated by EPA to attainment.

2. Revises audit program to specify 1% of burn day and pre-burn audits, totalled.

B. Contingency Measures:

1. SPZ boundaries to be expanded to include the area within which burning can potentially have a significant impact on the nonattainment area during the nonattainment period. The analysis is to be based on modeling analysis per EPA BACM guidance. Note: this provision is currently included in EPA's BACM Guidance.

2. Burning would be prohibited within the expanded SPZ boundary between Dec. 1 to Feb. 1 if an impact of 5 to 10 $\mu\text{g}/\text{m}^3$ is demonstrated by air quality monitoring.
3. Burning will be prohibited within the expanded SPZ during Nov. 1 to March 1 if an impact of 10 $\mu\text{g}/\text{m}^3$ or more is demonstrated by air monitoring.
4. SPZs will apply Nov. 1 to March 1 for all area except Klamath Falls which will apply Nov. 1 to April 1.
5. Klamath Falls and La Grande as well as all future PM_{10} nonattainment areas subject to these contingency measures will have mandatory smoke management programs during the period of time within which SPZ's restrictions are in effect. Each new nonattainment area will be set aside as a Designated Area under the smoke management plan.

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